



The Alternative Source

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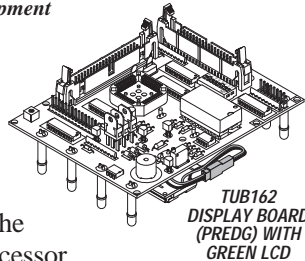
More New Parts to Fit Tuttnauer "E" Series Units ... And Service Tips Too!

By Chris Jacobs, RPI Product Development

We already carry a vast array of parts to fit the Tuttnauer "E" series, ranging from heating elements to temperature sensors, and now we are introducing even more parts to fit these autoclaves! RPI is pleased to bring you more of the parts you have asked us for including pc boards, keypads, displays and more.

RPI now offers the PREDG Boards (RPI Part #TUB161 & #TUB162) that sit behind the keypad, and houses the main processor chip for these machines. In keeping with the OEM's

offering, our PC board will be supplied **without** the main processor chip. The socketed microprocessor chip (PLCC) can be removed from your old board to use in your new PC Board. Removal of this chip is easy when using the new RPI Chip Extractor (RPI Part #RPT962) compared to a regular IC extractor since



Continued on page 7

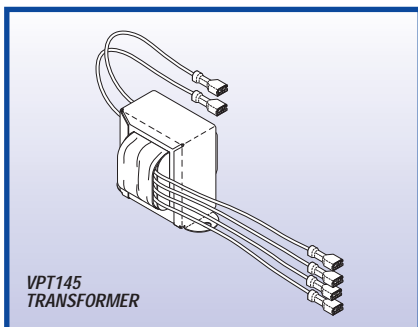
Even More New Parts to Fit Dental Vacuum Units

By Mark Micucci, RPI Product Development

Proud to announce another set of parts for Dental Vacuum Units, RPI introduces this latest group that covers the electrical parts needed to maintain your customers' Dry and Wet-Ring vacuum units. The following parts fit Air Techniques, DentalEZ, Apollo, Matrix, Midmark and Tech West systems.

First up are six new Transformers (RPI Part #VPT142 through #VPT147). These transformers have primaries of 120/240VAC with a 24VAC secondary.

What's more, all RPI transformers are designed specifically with the same mounting "footprint" for each of the corresponding OEM models listed. This ensures they will easily mount into the electrical boxes. For quick connections to the device, these transformers are either hard-wired, or include a wiring kit. This allows configuration for multiple OEM models. For example, carrying one RPI Part



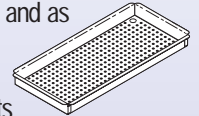
VPT145 TRANSFORMER

Continued on the back page

Racks & Trays ... Now Available To Fit Midmark M9 & M11 Sterilizers

By Phil Goldstein, RPI Product Development

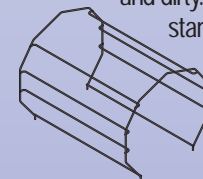
Instrument tray and rack assemblies are now available from RPI to fit Midmark M9 and M11 sterilizers – all models, and all serial numbers. RPI offers the trays and racks as complete kits and as separately sold items.



The Rack and Tray Kits (RPI Part #MIK204 to fit the M9 and RPI Part #MIK209 to fit the M11) consist of the tray plate, one wire rack, two small instrument trays, and two large instrument trays. In addition, all items in these kits are also sold separately. (See page 4 for details.)

RPI racks and trays are durable. Our tray racks are manufactured from 304 stainless steel and then electro polished. And, the instrument trays are manufactured from 316 stainless steel and the tray plates are manufactured from 304 stainless steel.

In addition, we purposely chose the wire rack design over the flat metal design for two reasons. First, the .125" diameter stainless steel rod is much sturdier and easier to remove and install than the flat, stamped style rack. And second, the wire rack has less surface area so it does not collect debris, and tarnish making it look old and dirty. As opposed to the flat, stamped rack where it doesn't take too long for that design to collect debris and look unsightly.



For **Service Tips** on how to keep these trays and racks at their peak performance, as well as cleaning the M9, M11 and other sterilizer units, please see page 7.



Ira Lapidès
CEO & President
Replacement Parts Industries, Inc.

FROM THE DESK OF THE PRESIDENT

In Celebration of RPI's 45th Anniversary!

It is challenging to look back on 45 years of RPI's history to single out a few highlights. I could point to the introduction of specific parts or initiating the support of certain pieces of equipment. I could easily point to the foundation that my parents set for RPI with our systems and culture. I could even point to some marketing that we have done over the years, like the introduction of our website way back in 1996, or our adoption of ISO9000 and certification to that quality management system standard.

But the real highlights, as they should be with any business, start with hiring the right people. James Collins wrote about the importance of this for any successful business in his excellent 2001 book, "Good to Great". Over the years, we have been fortunate to hire some excellent people who have contributed greatly to the enduring success of RPI.

I will start with our hiring of Phil Goldstein in 1981 as our first Product Engineer. Prior to that time, my father had been doing all of the engineering for the parts that we produced, and the time arrived where he needed additional help. Phil is the son of a former customer (please see Sherry's column about Al Goldstein), who helped teach my father many things about medical equipment parts and repair. Phil was working as a stereo salesman back then, but was an eager learner, and dove into his new profession with incredible desire and enthusiasm. Over the years he has developed countless parts and provided technical support to thousands of customers. Phil is truly one of the most knowledgeable people in the country regarding certain types of equipment and part manufacturing processes, and is still an enthusiastic learner.

Our next critical hire was Joan Woodlock in 1992, whom my parents hired from American Express to head our marketing department. Over the years, Joan became our Vice President of Marketing and Customer Service, helping to refine our excellent Customer Service Department. Joan's marketing expertise has taken RPI to the next level, but still in keeping with my parent's goal from 45 years ago of focusing on our customers as our top priority. Joan also developed a strong marketing identity for RPI with the introduction of our website, shopping cart, YouTube tech service videos, PM posters, and marketing materials including our "bright yellow" binder catalog, yellow flyers, and many other recognizable features of RPI. In addition, Joan oversees our ISO9000 program, and she has become an information systems expert for us, helping to manage our software, including the big transition we went through last year.

Andy Sandelski was another critical hire for us back in the early 1990's, as he was our first biomedical engineer in Product Development. Andy pushed and pulled us into supporting more hospital based equipment which has evolved into a large portion of our business. He was another great learner, enthusiastically providing technical support for our customers until his untimely passing in 2003. Andy is remembered fondly by all as "just a great all-around kind of guy."

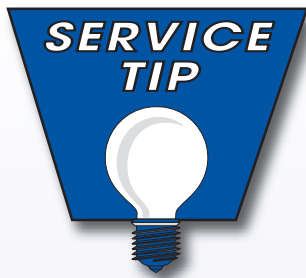
Dora Aguirre is probably the most conscientious person that I have ever met. My mom hired her in 1993 to assist her with accounts receivables. In no time, we recognized that one of Dora's many strengths was working with our international customers, so we moved her to our customer service depart-

ment, and eventually promoted her to manager of that department where she has done an outstanding job. Throughout the years, Dora has introduced many new processes that have made our customer service even stronger and better. In addition, Dora is our in-house expert for all of our computer hardware and software and anything else mechanical at our company. She is truly multi-talented.

Jim Wisniewski was another critical hire for us in 1996. Coming from many years of experience in the dental industry, Jim really kick-started our dental product line and soon became the manager of our Product Development Department, doing an excellent job there keeping new parts constantly in the pipeline. Jim also has a great knack for taking a part and making a change to it so that it offers added value and greater benefit to our customers. What's more, he has a unique talent for designing one-of-a-kind tools that helps to make the job easier and saves time.

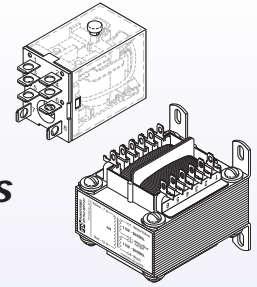
We have had many others over the years, such as Lisa Jensen, who has been the bedrock of our warehouse, assembling and packaging parts for more than 27 years, and Marion Hoffman doing the same for nearly 10 years. Lolita Jones, Cathy Murillo, and Lorena Barrios have been the core of our Customer Service Department for many years. Lara Karaguezian has held down the fort in our Purchasing Department for more than 16 years after starting there as an assistant. Neil Blagman and Mark Micucci were also critical additions to Product Development and are tech support gurus. Ray Martinez has been our QC Manager, helping to ensure the high quality of our parts for more than 11 years. Randy Hunt has been our draftsman for longer than I can remember as an outside contractor until we finally brought him on board in 2000. And Blanca Miramontes has worked in just about every department at RPI over the years. Another enthusiastic learner, Blanca went back to school, learned drafting, and has been supporting Product Development in our drafting department for many years now.

There is not room enough for everyone, and as we have grown over the past few years we have several new hires that I am confident will be with us for many years to come, providing the foundation for more success and growth. We could not have made it 45 years without good people, and I am very proud to be able to work with them here every day.



RPI Basic Electronics 101 For Transformers and Relays

... Plus Service Tips and Helpful Hints



By Mark Micucci, RPI Product Development

Below you will find basic information, or as I like to call it, "Basic Electronics 101" for both transformers and relays. In this article, I provide a brief overall of these devices as well as service tips when working with them.

TRANSFORMERS

A transformer is a device that transfers electrical energy from one circuit to another by electromagnetic induction (transformer action). This electrical energy is always transferred without a change in frequency, but may involve changes in magnitudes of voltage and current.

In its basic form, a transformer consists of the following:

- A primary coil that usually is the input supply voltage.
- A secondary coil that is usually the output voltage.

There are three basic types of transformers you will find in most dental and medical equipment:

- **Step Up Transformers**
Increases the output voltage.
Typical example is 24VAC input with a 240VAC output (high voltage).
- **Step Down Transformers**
Decreases the output voltage.
Typical example is 120/240VAC input with a 24VAC output (low voltage).
- **Isolation Transformers**
Produces the same amount of voltage as the input voltage, but will isolate the circuit from any sudden voltage spikes.

The easiest way to check a transformer, and to see if it needs to be replaced, is with power supplied to the transformer while it is under load and properly grounded as explained in the next two paragraphs. (Be sure to take all precautions when working around live power.)

Step #1. Determine what your primary supply voltage should be, and then using a multimeter, check the input wires to the primary coil for that voltage. If the primary voltage is 120VAC, you should see 120VAC on the primary coil leads. If you do not, then you need to look upstream on your electrical schematic and see where you are losing your input supply voltage.

Step #2. Determine what your secondary or output voltage should be. Most dental compressor and dental vacuum units use step down transformers. If the secondary is rated 24VAC, use a multimeter to check the secondary wires for voltage. If you do not see the correct secondary output voltage then you need to replace your transformer.

RELAYS (ELECTRICAL CONTACTORS)

Relays (Electrical Contactors) are used to remotely switch electrical power. The coil-actuated switch operates exactly like a solenoid, but pulls in a contactor that typically switches higher amperage than the coil/plunger mechanism itself. The coil consists of a strand of wire wrapped many times around a core. This is called the windings.

Once current is applied to the coil, a movable solenoid plunger is electrically pulled down to connect a set of spring-loaded discs. These discs are called the contacts. When the coil is energized, the solenoid plunger pushes against the spring and closes the contacts. When the coil voltage is removed, the force of the spring returns the contacts to their normal open position.

Typically the contacts, two each to a switch circuit, are identified as the line and terminal. The line, or L, is the voltage feed; and the terminal, or T, is connected to the electrical device being controlled.

Contactors can have many sets of contacts also known as poles.

The easiest way to check a relay, and to see if it needs to be replaced, is with power supplied to the relay as explained in **Steps #1-3** below. (Be sure to take all precautions when working around live power.)

Step #1. When you apply power to your relay, do you hear it click? Do you see the coil pull the plunger down and make connection of the contacts? If you do not hear or see your plunger being pulled down, you need to check your coil supply voltage.

Step #2. Determine what your coil supply voltage should be and then using a multimeter, check the input wires to the coil for that voltage. If the primary voltage is 24VAC, you should see 24VAC on the primary coil leads. If you do not, then you need to look upstream on your electrical schematic and see where you are losing your coil input supply voltage. If you see 24VAC on your coil leads and the plunger is not being pulled down you need to replace your relay.

Step #3. Determine what your line voltage should be. When your coil pulls your plunger down, the contacts close and your line voltage at L1 & L2 is 240VAC, you should see 240VAC on your terminal lines T1 & T2. If not, your contacts may be pitted or burnt and you should replace your relay.

These are just the basics, plus some service tips and helpful hints from us here at RPI. If you would like more information, please give our tech support team a call at (800) 221-9723 option 5 or extension 135. Also if there is any that you would like to share with us, you can always email us at techsupport@rpi.com. We look forward to hearing from you.

WHAT'S NEW

The following new parts are now in stock,

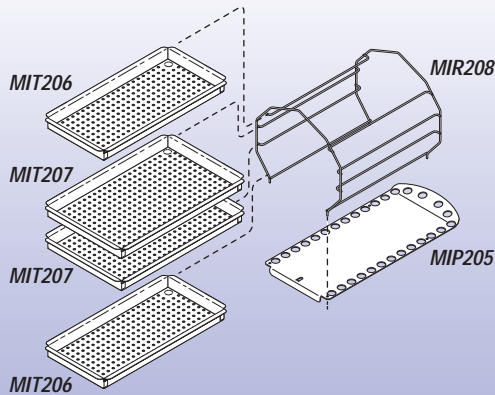


TABLE TOP STERILIZERS Parts to fit Midmark® • Ritter® UltraClave® M9 & M11 Sterilizers

Parts
To Fit

ULTRACLAVE® M9 (M9-001 thru -019 & M9-020 thru -022)

MIK204



RACK AND TRAY KIT

RPI Part #MIK204
OEM Part #030-0710-01/050-3691-00 (Tray Rack),
002-0253-00 (Instrument Tray (Small)), 002-0374-00 (Instrument Tray (Large)),
050-1773-00 (old style Tray Plate) & 050-3750-00 (New style Tray Plate)

TRAY RACK

RPI Part #MIR208
OEM Part #030-0710-01 &
050-3691-00

*Accommodates old and new
style Instrument Trays!*

INSTRUMENT TRAY (SMALL)

RPI Part #MIT206
OEM Part #002-0253-00
• Size: 6" x 12"

*Use with wire or sheet
metal style racks!*

INSTRUMENT TRAY (LARGE)

RPI Part #MIT207
OEM Part #002-0374-00
• Size: 7" x 12"

*Use with wire or sheet
metal style racks!*

TRAY PLATE

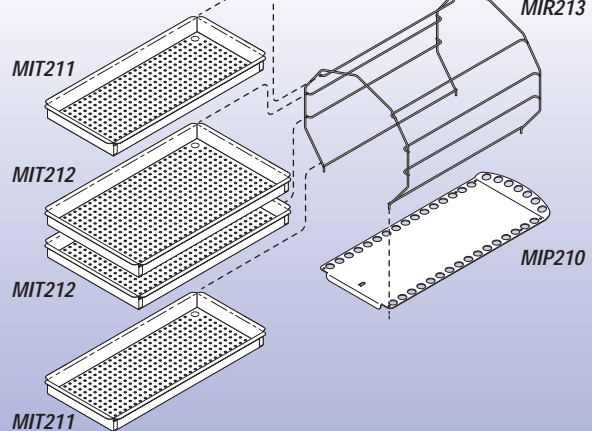
RPI Part #MIP205
OEM Part #050-1773-00 (Old style)
& 050-3750-00 (New style)

*Use with wire or sheet
metal style racks!*

Parts
To Fit

ULTRACLAVE® M11 (M11-001 thru -019 & M11-020 thru -022)

MIK209



RACK AND TRAY KIT

RPI Part #MIK209
OEM Part #030-0887-00/050-3920-00 (Tray Rack), 050-2644-00/050-
4260-00 (Instrument Tray (Small)), 050-2643-00/050-4259-00 (Instrument Tray
(Large)), 050-2600-00 (Old Style Tray Plate) & 050-3919-00 (New Style Tray Plate)

TRAY RACK

RPI Part #MIR213
OEM Part #030-0887-00 &
050-3920-00 (Tray Rack)

*Accommodates old and new
style Instrument Trays!*

INSTRUMENT TRAY (SMALL)

RPI Part #MIT211
OEM Part #050-2644-00 &
050-4260-00
• Size: 7" x 15"
• Does not fit older square rack Midmark Part #9A215001

*Use with wire or sheet
metal style racks!*

INSTRUMENT TRAY (LARGE)

RPI Part #MIT212
OEM Part #050-2643-00 &
050-4260-00
• Size: 9" x 15"
• Does not fit older square rack Midmark Part #9A215001

*Use with wire or sheet
metal style racks!*

TRAY PLATE

RPI Part #MIP210
OEM Part #050-2600-00 (Old Style)
& 050-3919-00 (New Style)

*Use with wire or sheet
metal style racks!*



PLUS! More Parts to fit Dental Vacuum Units!

The RPI new parts "yellow" flyer that includes details of all the new parts we offer for dental vacuum units is now available, or visit www.rpiparts.com

FROM RPI

ready to ship the day your order is received!

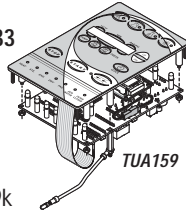


TABLE TOP STERILIZERS Parts to fit Tuttnauer Sterilizers

LCD DISPLAY ASSEMBLY (BLUE)

RPI Part #TUA159
OEM Part #CTP201-0133

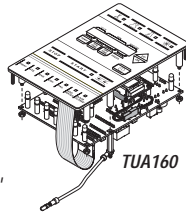
Models: 1730E/EK,
2340E/EA/EK/EKA,
2540E/EA/EK/EKA,
3850E/EA/EK/EKA,
3870E/EA/EK/EKA,
EZ10, EZ10k, EZ9 & EZ9k



LCD DISPLAY ASSEMBLY (GRAY)

RPI Part #TUA160
OEM Part #03700026

Models: 1730E/EK,
2340E/EA/EK/EKA,
2540E/EA/EK/EKA,
3850E/EA/EK/EKA,
3870E/EA/EK/EKA, EZ10,
EZ10k, EZ9 & EZ9k



DISPLAY BOARD (PREDG) WITH BLUE LCD

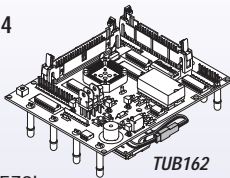
RPI Part #TUB161
OEM Part #CTP000-0133

Models: 1730E/EK, 2340E/EA/EK/EKA,
2540E/EA/EK/EKA, 3850E/EA/EK/EKA,
3870E/EA/EK/EKA, EZ10, EZ10k, EZ9 & EZ9k

DISPLAY BOARD (PREDG) WITH GREEN LCD

RPI Part #TUB162
OEM Part #03700024

Models: 1730E/EK,
2340E/EA/EK/EKA,
2540E/EA/EK/EKA,
3850E/EA/EK/EKA,
3870E/EA/EK/EKA,
EZ10, EZ10k, EZ9 & EZ9k



CAPACITOR (.47µF)

RPI Part #TUC138
OEM Part #ELC258-0004

Fits: Water Pump

Models: 1730E/EK, 2340E/EA/EK/EKA,
2540E/EA/EK/EKA, 3850E/EA/EK/EKA,
3870E/EA/EK/EKA, EZ10, EZ10k, EZ9 & EZ9k

RIBBON CABLE

RPI Part #TUC144
OEM Part #02830105

Models: 1730E/EK, 2340E/EA/EK/EKA,
2540E/EA/EK/EKA, 3850E/EA/EK/EKA,
3870E/EA/EK/EKA, EZ10, EZ10k, EZ9 & EZ9k

CONDENSATION COIL

RPI Part #TUC145
OEM Part #CMT387-0029 & CC836101
Models: 3850E/EA/M/MK & 3870E/EA/M/MK

LCD DISPLAY (BLUE)

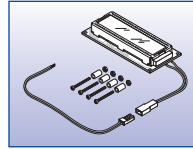
RPI Part #TUD152
OEM Part #CTP201-0168

• Includes RPI's quick disconnect wiring system for easy assembly and disassembly.
Models: 1730E/EK, 2340E/EA/EK/EKA,
2540E/EA/EK/EKA, 3850E/EA/EK/EKA,
3870E/EA/EK/EKA, EZ10, EZ10k, EZ9 & EZ9k

LCD DISPLAY (GREEN)

RPI Part #TUD153
OEM Part #4400317

• Includes RPI's quick disconnect wiring system for easy assembly and disassembly.
Models: 1730E/EK,
2340E/EA/EK/EKA,
2540E/EA/EK/EKA,
3850E/EA/EK/EKA,
3870E/EA/EK/EKA,
EZ10, EZ10k, EZ9 & EZ9k



HEATING ELEMENT

RPI Part #TUH147
OEM Part #HEA009-0008
Models: 3870E/EA/EKA/M/MK

HEATING ELEMENT

RPI Part #TUH148
OEM Part #HEA009-0007
Models: 3850E/EA/EK/EKA/M/MK

HEATER HARDWARE

RPI Part #TUH052
OEM Part # (No OEM Part # Available)

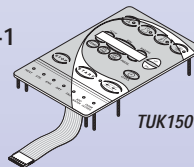
DOOR BELLOWS HOUSING

RPI Part #TUH158
OEM Part #CT241010
Models: Valueklave (1730MKV),
1730E/EK/M/MK, 2340E/EA/EK/EKA/M/MK,
2540E/EA/EK/EKA/M/MK/MKA,
3850E/EA/M/MK, 3870E/EA/M

KEYPAD (BLUE)

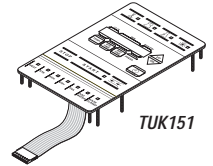
RPI Part #TUK150
OEM Part #03700027-1

Models: 1730E/EK,
2340E/EA/EK/EKA,
2540E/EA/EK/EKA,
3850E/EA/EK/EKA,
3870E/EA/EK/EKA,
EZ10, EZ10k, EZ9 & EZ9k



KEYPAD (GRAY)

RPI Part #TUK151
OEM Part #3700027
Models: 1730E/EK,
2340E/EA/EK/EKA,
2540E/EA/EK/EKA,
3850E/EA/EK/EKA,
3870E/EA/EK/EKA,
EZ10, EZ10k, EZ9 & EZ9k



SIGNAL LIGHT (AMBER 220V)

RPI Part #TUL136
OEM Part #01910261
Models: 1730E/MK, 2340E/EA/EK/EKA/M/MK,
2540E/EA/EK/EKA/M/MK, 3850E/EA/M &
3870E/EA/M

SIGNAL LIGHT (GREEN 220V)

RPI Part #TUL137
OEM Part #01919262
Models: 1730E/MK, 2340E/EA/EK/EKA/M/MK,
2540E/EA/EK/EKA/M/MK, 3850E/EA/M &
3870E/EA/M

THERMOSTAT STOP PLATE

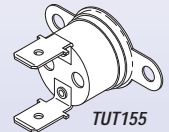
RPI Part #TUP062
OEM Part #CT910020
Models: 1730M/MK, 2340M/MK, 2540M/MK,
3850M/MK & 3870M/MK

DOOR SHIM

RPI Part #TUS146
OEM Part #SHIM
Models: 3850E/EA/EHS/M/MK &
3870E/EA/EHS/M/MK

OVERTEMP THERMOSTAT

RPI Part #TUT155
OEM Part #THE005-0012
Models:
Valueklave (1730MKV)
& 1730M/MK



TERMINAL TOOL KIT

RPI Part #RPK961
OEM Part # (No OEM Part # Available)

GROUNDING STRAP

RPI Part #RPS998
OEM Part # (No OEM Part # Available)

CHIP EXTRACTOR

RPI Part #RPT962
OEM Part # (No OEM Part # Available)



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

8 to 4
NO MORE

Recently RPI lost one of its best friends and consultants. So close a friend that he has his own coffee cup at RPI, with the words "The Other Al" on it. We still have that cup.

Al Goldstein, originally one of our earliest customers, and father of our product engineer, Phil Goldstein, passed away last month from Alzheimer's disease. Al was an aerospace engineer back in the 1970s when he got caught up in a defense industry downturn, was laid off and decided to open his own medical-dental service company. He had been servicing equipment on the side for a while. We had known him for quite a few years when Phil came to work at RPI in 1981.



Al Goldstein
Our friend, we will miss.

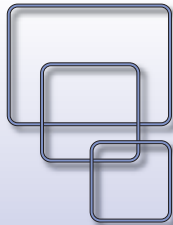
Al Goldstein lived and worked not far from the RPI offices in Chatsworth. Frequently he would drop by, grab a cup of coffee, chat with Phil and the other product engineers, giving them encouragement and advice, and then go to Al Lapidès' office to talk about parts, politics and the state of the world.

We will miss him, his inquiring and knowledgeable mind and his smiling face. The cup stays here.

They're Here ... New Door Gaskets to fit Getinge/Castle Bulk Sterilizers!

- **3 New Door Gaskets**
to fit the 400, 500 and 700 Series.
- **Improved Door Gaskets**
All RPI Door Gaskets to fit Getinge/Castle sterilizers are now custom formulated for greater lubricity!

The RPI new parts "yellow" flyer that includes details of these new gaskets is now available, or visit www.rpiparts.com



TECH TALK

By Chris Jacobs
RPI Product Development

ONE OF THE BEST TOOLS YOU ALREADY OWN!

Every technician has heard of the old adage, "You need the right tool for the job". Well what if one of the most important tools you could have, you already own? That's right, your cell phone! RPI offers free technical support over the phone. Our technical support team can help you with anything from ordering the correct part to ensuring proper installation of your parts when they arrive. But let's not forget that your phone has other uses besides just making a simple phone call. Phones today can access the internet, take and send photos, download PDF files, connect wirelessly to other devices and have huge application stores that contain apps for almost any purpose.



How is RPI helping you to get the most out of that great tool you carry every day? Well for starters, RPI has a great mobile website for you to access all our parts so you can see illustrations and full descriptions of the parts you want right on the job site. Working along with our mobile site is our shopping cart. So once you find the part you want you can order it from your phone and have it sent directly to the equipment's location. Did I mention that phones can download PDF's? Well on our mobile website, you can download PDF versions of all of our installation instructions, calibration instructions and troubleshooting guides that you can save to your phone to have available anytime you need.

Let's say you don't know what you're looking at or aren't sure which model machine that you are being asked to repair, take a picture and send it to us. Cell phones can take photos and send them either using your email or just standard text. Did you also know that you can send a photo using text messaging and send it to an email? That's right, just enter the email address in the "to" field just like you would a number or name from your contacts list and hit send. You can attach photos or part descriptions to your email and send it to technicalsupport@ripiparts.com to get advice, tips and part numbers for the equipment you're maintaining. The photos you send can help our tech support team help you to diagnose the problem.

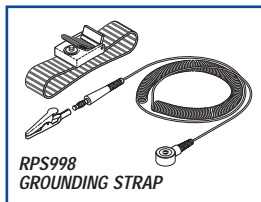
Your phone's handy ability to connect wirelessly to other devices can be exceptionally useful as well. For instance, you can connect wirelessly to a site's printer to print PM

Continued on the back page

More New Parts to Fit Tuttnauer "E" Series Units ... And Service Tips Too!

(Continued from front page)

RPI's extractor has very thin metal pins allowing you to reach into the small grooves that are located at opposite corners of the PLCC socket. Also note, that while removing these chips, it is incredibly important to observe electrostatic discharge precautions which is why RPI is now offering a wrist Grounding Strap (RPI Part #RPS998) so that you can safely remove and install the main processor chip.

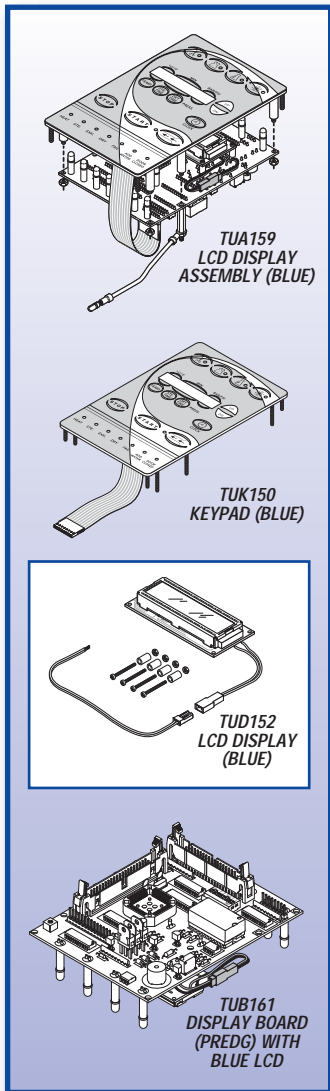


To go along with your new Grounding Strap, RPI is also offers the LCD Displays, in blue, and in green (RPI Part #TUD152 and #TUD153). The RPI LCD Displays come with our new "quick disconnect system" so that you won't have to mess around with soldering and unsoldering the display. All PREDG boards include this system as well as the display to make replacement a breeze.

In addition, RPI is now offering the Keypad in blue (RPI Part #TUK150) to fit the EZ units, and the gray Keypad (RPI Part #TUK151) that the newer Tuttnauer models require.

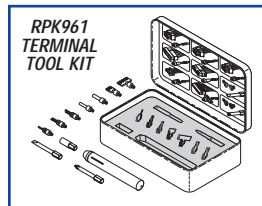
Don't forget, RPI also carries the Clock Chip (RPI Part #TUC107) for the PREDG boards. This is really a vital part for this device. Overall, clock chips can be responsible for several problems, and can be difficult to identify as the culprit. They should be

changed about every eight years. When faulty, they can cause symptoms such as lost custom cycle parameters, incorrect dates or times on the print out, flickering or dead spots in the display, valves closing too soon or staying open for too long. With a bad clock chip, it will almost never be just one problem, but two or more inconsistencies at once. In fact, the most consistent symptom of a bad clock chip is inconsistency.



Now RPI provides you with everything you need to replace any component in the electrical box with the introduction of the RPI Ribbon Cable (RPI Part #TUC144) to compliment our Power Supply Board (RPI Part #TUP106), Solid State Relays (RPI Part #TUR104 and #TUR105), Axial Fan (RPI Part #TUF071), Power Switch (RPI Part #TUS009), and Display Assemblies (RPI Part #TUA159 and TUA160). Plus we offer a Terminal Tool Kit (RPI Part #RPK961) to help you when in need of

removing terminal pins from one of the many connectors inside the electronics box. RPI is a l w a y s looking to make your job easier!



The RPI new parts "yellow" flyer that includes details of all the new parts we now offer to fit the Tuttnauer "E" series is now available.

SERVICE TIP



Keeping Sterilizers, Racks and Trays Clean and in Peak Performance

By Phil Goldstein
RPI Product Development

One of the best things you can do for the equipment you service is to keep it in peak performance, and looking like new. In the long run, your customers will appreciate it!

When servicing sterilizers in particular, it is very important to keep the unit – inside and out – clean and looking like new regardless of its age or usage. In fact, cleaning is an essential part of any device maintenance schedule as it can keep the equipment up-and-running longer than expected.

SERVICE TIP #1: To keep sterilizer racks and trays (like the ones included in the RPI Kits to fit the Midmark M9 and M11), at their utmost cleanliness, use a cleaner made especially for them, like the RPI Sci-Dry® (RPI Part #SCA054) drying and rinse agent. It's a true surfactant which repels the moisture and condensation that collects on top of the metal and will keep them looking new.

SERVICE TIP #2: Make cleaning part of your regular maintenance schedule for sterilizers, and a easy way to do that is to carry with you a "cleaning kit" that includes all of the tools needed. RPI offers this kind of kit, already stocked for you. The RPI Sterilizer Cleaning Kit (RPI Part #RPK791) includes five different styles of brushes – scrub brush, handle brush, small and large bottle brushes, and flexible tube brush to easily maneuver from tight spaces to cleaning trays and racks. The Kit also comes with a sponge, cleansing pad and sturdy canvas carrying case.



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One of the Best Tools You Already Own

(Continued from page 6)

checklists or the operator's scheduled maintenance guides located on our website. This can prove especially useful for a doctor's office that is unsure of when they should be performing regular maintenance to keep their machines running in peak condition.

So what about applications or just simply "apps"? Well as I mentioned earlier in this article, no matter the system you're using, there is an app store loaded with different apps to help you in your everyday routine, and far too many to name them all in this article.

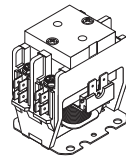
To point out some basic uses though, there are several apps that you can use to help you remember all the variations of Ohms Law or brush up on some of those lost basic electronic skills. There are even applications that can help you study for your CBET exam or turn your phone into a multimeter. With all the resources and programs available for your phone, the only disadvantage would be if you didn't utilize the most powerful tool you own.

So the next time you're feeling a little unsure of yourself, reach for that cell phone and you would be amazed at everything that your phone and RPI can do for you!

Even More New Parts to Fit Dental Vacuum Units

(Continued from front page)

#VPT142 fits five different Air Techniques transformers.



Next up are four Relays (Electrical Contactors) (RPI Part #VPR148 through #VPR151). These are 24VAC coils that switch 120VAC or 240VAC lines. All RPI Relays (Electrical Contactors) are designed specifically with the same mounting "footprint" for each of the corresponding OEM models listed, and they carry the proper or higher amp rating for the coils.

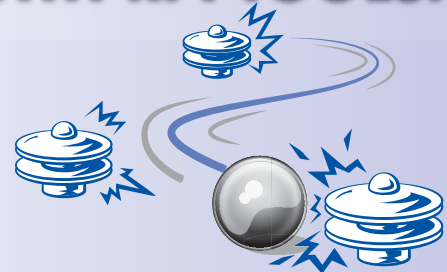
RPI has added ten new Run and Start Capacitors (RPI Part #VPC152 through #VPC161) to fit your Dry and Wet-Ring vacuum systems for the Air Techniques, Dental EZ, Apollo, Matrx, Midmark and Tech West systems.

Eight additional circuit breakers are now available, both Circuit Breaker/Power Switch (RPI Part #VPS170) and panel mounted styles (#VPB164 through #VPB169 and #VPB182), ranging from 1/4 Amp to 16 Amp. Three new On/Off and Door Limit Switches, five new Thermal Switches and Motor Start Switches are now also available. To fit the Midmark PowerVac and PowerVac G, RPI now offers the Fan (RPI Part #VPF181) and Fan Thermostat Control (RPI Part #VPT172). You will also find the Midmark 24V Relay (RPI Part #VPR162) and Socket (RPI Part #VPS163), along with an Hour Meter (RPI Part #VPM171) and panel mount Pilot Light (Green) (RPI Part #VPL180).

Toss in five new Fuse Holders (RPI Part #RPH988 through #RPH992) along with the proper fuse for the corresponding Dry or Wet-Ring vacuum units you have and as you can see RPI has the electrical parts you need.

SCORE BIG WITH RPI TOOLS!

Score Big with RPI Tools! is the theme of the RPI 2017 PM Poster. Its colorful design of a retro pinball machine is fully loaded with illustrations, descriptions and tips relating to some of the best RPI tools that help you save time and money when servicing healthcare equipment. It's available now.



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