

CHAPTER 14

PORTABLE DENTAL EQUIPMENT

There are well over two thousand dental manufacturers and distributors in the United States. This represents the majority of dental manufacturers in the world. Most large dental manufacturers and suppliers in the U.S. have foreign representatives who sell their products worldwide. But only a few deal in portable equipment because the demand is so small in the United States and abroad. The armed services are probably the largest potential customers for portable dental equipment. Yet each branch of service has its own set of specific criteria to fit their specific needs for air, sea, or land use. Portable equipment should be lightweight, compact and easily transported by hand. This chapter will give you a basic overview of some of the truly portable equipment available. The military website that evaluates dental equipment and supplies would be well worth your time at <https://decs.nhgl.med.navy.mil>.

One dental team arrived in a Southeast Asian country without problems, but when trying to leave were told they could not take all of the "heavy equipment" because it exceeded the airline limitations. Flying in was okay, but because of the altitude and thinner air, lifting off the ground on take off was critical to the aircraft weight and amount of fuel they put on board for the return flight. They ended up paying extra for the overweight baggage and had to weigh each bag, each carry on, and each person to calculate the weight of the plane and fuel. It cost them over \$600 to take their equipment back with them. They had no choice but to pay the price. The size and weight of your equipment is important.

General Categories of Specific Portable Equipment

- | | |
|---|------------|
| A. Chairs and Chair Assemblies (Even Do It Yourself Chairs) | (Page 143) |
| B. Dental Drill Units (Size, Weight, Criteria) | (Page 169) |
| C. Compressors (Electric, Gasoline) | (Page 201) |
| D. Water Source (Pressure Tank, Gravity Feed, Municipal Source) | (Page 215) |
| E. Evacuator System (Electric, Air Pressure, Water) | (Page 221) |
| F. Lights (Flashlight, Rolex, Top Spot, Fiber Optic, AC, DC, Sun) | (Page 231) |
| G. X-ray Systems | (Page 245) |
| H. Portable Dark Rooms | (Page 257) |
| I. Lap Top Imaging Portable | (Page 261) |
| J. Portable Electric Drills, Curing Lights, Ultrasonic | (Page 263) |
| K. Portable Generators | (Page 271) |
| L. NASA Developments (X-Ray, Air Bladder, Compressor) | (Page 271) |
| M. Cases for Transport of Portable Equipment and Supplies | (Page 271) |
| N. Miscellaneous Portable Equipment | (Page 283) |
| O. Autoclaves and Sterilization Techniques | (Page 285) |



TYPICAL PORTABLE DENTAL CHAIR

Portable Dental Chairs



There are times when it sure would
be nice to have a portable dental chair.

A. PATIENT DENTAL CHAIR (CRITERIA FOR A PORTABLE CHAIR)

1. A portable dental chair must be lightweight and durable, yet easily folded down to a dimension that makes it easy to carry and transport to the location of service. Airlines have a maximum size and weight allowable for luggage. Presently that is 50 pounds and maximum total dimension (H+W+L) of 62 inches.
2. A portable dental chair should deliver the patient to the dentist in a manner that is easy for the dentist to have good access and lighting for the procedure he is performing.
3. A portable dental chair should have a thin narrow back and be fully adjustable for the comfort of the operator and patient.
4. There should be a good headrest and arm support for the comfort of your patient. It is almost impossible for patients to hold their heads still without a good head support.
5. A portable dental chair must be adjustable for various procedures including both stand up and sit down dentistry to suit the operator. The adjustments should be conveniently located and easy to operate.
6. A dental chair must be stable while in use and not subject to tipping over with the patient.
7. A portable dental chair must be easily cleaned for a wide variety of circumstances. Its frame and upholstery should be made of materials which can be wiped with germicides and not deteriorate.

EXAMPLES OF PORTABLE DENTAL CHAIRS

1. A•dec Portable Dental Chair Called a Porta-Chair 3460

The first thing to consider in a portable dental chair is size and weight for your specific transportation mode. Some of these chairs exceed the maximum dimensions that airlines will carry for you. Remember the total width, length, and height must not total over 62". Also, the weight must not exceed 50 pounds for U.S. carriers, but may be as little as 45 pounds for some foreign airlines. This chair would exceed some airline dimension limitations for travel. **Know Before You Go** about your transportation regulations. The Porta-Chair weighs 65 pounds, so together with its carrying case, it is way over the maximum weight for airline travel. The upholstery is padded, heavy-duty vinyl for long durable use and is easily cleaned. There is a choice of three colors for the chair and accessories.

The Porta-Chair has been around for many years and evolved through a number of model changes. Earlier models were too large and difficult to adjust the height. If a patient was in the chair, they had to get out while you flipped the chair on its side and adjusted the scissors legs. Current models are very nice to use. They have rollers on one pair of legs and a screw adjustment between the scissors legs for easy adjustment while the patient is still in the chair. The new models are lighter and more compact. A•dec has continued to refine and add features to this chair that make it second to none for portable dentistry. Current models are very nice to use and high on my recommend list.

Note in the "Accessory" description that the dimensions are 20" x 10-1/2" x 43". The total of height, width, and length are 73-1/2" for this chair in its travel case. So these total dimensions are 11-1/2" more than the 62" airline standard. Sometimes airline carriers in the United States would still allow you to take this dental chair as checked luggage, but there is no guarantee that a connecting foreign carrier will permit the oversized chair without excess size and weight charge. The cost of overweight and excess limits can be considerable on foreign airlines. **Know Before You Go.**

Porta-Chair

- Adjustable chair height
- Adjustable backrest tilts 85° from horizontal position
- Removable, U-shaped, adjustable headrest with Velcro
- Vinyl upholstery
- Height-adjustment crank
- Field-adjustment right or left operation
- Quick-disconnect toeboard
- Arm slings
- Powder-coat painted frame



a-dec®
 (800) 547-1883
 (503) 538-7478
www.a-dec.com

2. Aseptico Portable Dental Chair called an AseptiChair ADC-01

The first things to consider in a portable dental chair are size and weight for your specific transportation mode. Remember that the total weight of your chair in its case is critical for airline travel and should not exceed 50 pounds. This portable chair is easily within the weight limitation at a mere 30 pounds. The total height, width and length are exactly 65" for airline transportation. This chair is designed for airline travel and convenience on the field. The flexible carrying case makes it easy to pack extra 2x2 gauze, patient bibs or clothing in with the AseptiChair on your way to the mission. The case is also a good place to pack some extra supplies or souvenirs on the way back from your mission.

The upholstery is padded Naugahyde for long durable use and easily cleaned. The adjustable patient headrest pad is an extra comfort feature for the patient along with padded elbow rests. The steel frame is more than adequate for any sized patient. Adjustment pins in the legs have to be set to proper height before the patient is seated. Yet due to the lightweight of the chair, this adjustment is quick and easy. This chair is rated for patients who weigh up to 500 pounds. The companion AseptiStool is available for a doctor or assistant stool. The stool, ADC-08, is well padded, weighs only 15 pounds and folds neatly into its own carrying case to travel with the AseptiChair.

This is a very good portable dental chair. The only feature, which could be inconvenient, is when performing stand up dentistry such as extractions. The AseptiChair does not sit the patient high enough to work comfortably for extended periods of time. Yet, it is perfect for sit down dentistry and ideal if you do all your procedures sitting down. The new model of AseptiChair is truly designed for portable dentistry.



People involved in portable dentistry praise this chair. Lightweight but very sturdy. Comfortable and safe for up to 500 pounds. High strength steel construction. Back adjusts, with patient in chair, from full upright to supine position. Adjustable seat height from 8" to 22". Can be used as standard sit-up chair.

Folded dimensions: 23" x 34" x 8"

Weights 30 lbs. Comes in strong padded case
Manufactured in the USA

AseptiChair Model ADC-01



Portable Operator Stools Item ADC-08



Portable stool to go with ADC-01 AseptiChair. It folds neatly into included carrying case.

Features include padded back and seat, casters and adjustable height.

www.aseptico.com
800-426-5913
425-487-3157

ASEPTICHAIR

ADC - 01
SPECIFICATIONS

The AseptiChair is a simple, yet sophisticated, all-purpose chair for the positioning of dental patients. It is designed for portability, comfort, versatility, economy and safety.

It is constructed of high strength D.O.M. steel. Brown, powder coated to prevent chipping. Covered with tough Naugahyde upholstery. Tested safe to over 500 pounds.

Set-up in less than a minute. Simply remove chair from vinyl carrying case and set on floor. Raise chair set to desired height and insert pin in hole of outside legs on each side of seat at desired height. Highly stable.

The footrest may be used to support the legs and feet in a horizontal position, or may fold down, so patient can be in a normal sitting position.

The backrest is adjustable to any position from straight upright to full supine. It has convenient elbow rests when in supine position.

A strong vinyl carrying case comes standard with the AseptiChair. The case protects the chair and is designed to be conveniently carried.

STANDARD FEATURES

- ** Fully adjustable back, from full upright to full horizontal and anywhere in between.
- ** Adjustable seat height from 11" to 22"
- ** Adjustable headrest pad.
- ** Elbow supports.
- ** Fold down footrest so it can be used as a chair.
- ** Naugahyde padded replaceable upholstery.
- ** Weighs only 30 pounds including case.
- ** Vinyl carrying case included.
- ** Folded dimensions: 34" x 23" x 8"

ASEPTISTOOL

ADC - 08
SPECIFICATIONS

This operator's portable stool is unique. It has a hinged, padded back and seat, adjustable legs with casters, and folds up quickly and neatly into a vinyl carrying case. Set up in seconds.

It is constructed of high strength DOM steel and aluminum. Frame has excellent concentricity, good tolerances and surface finish. Durable chip-resistant powder coated brown finish.

The back and seat are comfortably padded and covered with a tough Naugahyde upholstery. Stool weight capacity is 300 pounds.

The stool is portable, convenient, lightweight and comfortable. The combination of Aseptico's ADC-01,

AseptiChair, ALU-29 or ALU-27 AseptiLight and the stool makes an excellent set up for examinations, screenings, backup operatory. This highly portable, yet useful stool is a member of the most comprehensive family of portable dental products available. Take top quality dentistry anywhere, with Aseptico equipment.

STANDARD FEATURES

- ** Push button telescoping legs.
- ** Adjustable seat height from 17" to 22".
- ** Hinged back for easy packing.
- ** Folded dimensions: 22 long x 18" wide x 8"
- ** Weighs only 15 pounds, including case.
- ** Casters for easy mobility.
- ** Vinyl carrying case included.



94-D, blvd. des Entreprises
Boisbriand, Qc, Ca. J7G 2T3
Tel: (450) 433-5754
Canada & US : 1-888-541-8930
Fax : (450) 433-5987
sales@safaridental.com
www.safaridental.com



COMPACT CHAIR 1395 \$ US

SAF-100

Frame construction: All aluminum
Easy to assemble, no need for tools
Tested to support 500 lbs (227kg)
Height adjustment: 17" to 22" (43 to 56 cm)
Removable headrest: Adjustable
Removable footrest for added versatility
Backrest adjustability: Fully adjustable 90 to 180 degree
Full length arm rest: Both retractable
Front, right or left patient entry
Pedodontic version: Without headrest and footrest
Replaceable padded upholstery: Blue naugahyde
Aseptic wipe down, easy to clean
Light / Tray demale bracket R & L: Standard
Seat height adjustment 18" to 24" (46 to 54 cm)
Fully extended dimensions without headrest:
53" x 20" (135 x 20 cm)
Folded dimensions (length x width x height):
8" x 21" x 20" (20 x 54 x 51 cm)
Weight including cushion: 21 lbs (9.55 kg)
One year warrenty on manufacturing defects

OPTIONS

- Compact Patient Chair carry bag: SAF-100B US \$142
- Over patient double articulated tray: SAF-110 US \$450
- Pedo version (no headrest/footrest): US \$250
- Custom color upholstery: US \$65
- Cuspidor: SAF-805 US \$95
- Foldable hand truck with 6 inch wheels: SAF-996 US \$89
- Operatory light
- Side delivery 2HP control unit SAF-510
- Double articulated headrest: SAF-100-121 US \$240
- Triple articulated headrest: SAF-100-122 US \$435
- Soft headrest cushion: SAF-100-124 US \$86





94-D, blvd. des Entreprises
Boisbriand, Qc. Ca. J7G 2T3
Tel: (450) 433-5754
Canada & US : 1-888-541-8930
Fax : (450) 433-5987
sales@safaridental.com
www.safaridental.com



SAF-200

DOCTOR STOOL

US\$ 400

Features

- Removable quick fit backrest
- Round seat cover with Naugahyde
- Pneumatic cylinder for seat height adjustment
- Quick release points for easy disassembly
- Folds easily into a compact carrying bag
- Five-leg dual wheel base for stability and easy movement
- One year warranty on manufacturing defects

Specifications

- Seat height adjustment: 16 ½" to 21" (42 to 54 cm)
- Round seat: 15" (38.1 cm) diameter
- Weight: 11 lbs (5 kg)
- Folded dimensions: 20" x 20" x 7" (51 x 51 x 18 cm)
- Color: Blue (Sky Blue US 516)
- Material: Steel and Nylon

Options

- Custom color upholstery US\$ 45
- Carry bag SAF-200B US\$ 95



3. I-TEC Backpack Chair



Setting a new world standard in truly portable dentistry, the I-TEC PDS is a compact 33-pound package that includes a folding dental chair with headrest and handrails, instrument tray and a handpiece* with LED headlamp, AC/DC charger and solar panel. Constructed of anodized aluminum tubing and engineering plastics, the chair sets up in less than two minutes, supports up to 300 lbs. and is exceptionally stable. The handpiece includes a well-balanced 2,000-25,000 rpm dental handpiece, state-of-the-art electronic controller, low-battery indicator, reversing switch, air operated foot pedal and headlamp.

Chair Dimensions

Chair folded 24" x 21.25" x 7.75"

Chair folded with Utility Case & Backpack Kit
28" x 21.25" x 8.75"

Weights 23 to 33 lbs, depending upon options

I-TEC, Inc - 10575 SW 147th Cir - Dunnellon, FL 34432 - Ph: 352-465-4545 - Fax - 815-377-3694 - jesse@itecusa.org

4. DNTLworks™ Equipment Corporation Portable Dental Chair called a DNTL 4020

The first thing to consider for a portable dental chair is its size and weight with case. The weight of this beautiful chair is 42 pounds and the folded dimension of this chair is 53" L x 22" W x 9" D, which totals 84". Airlines normally do not permit cartons over 62" without special permission. So if you plan to fly with this chair it may cause you great difficulty on international flights. The total weight is good provided your case is light. This is a very nice portable chair that comes with an optional hydraulic base. This is a dream chair for a dentist doing portable dentistry. It has everything you or the patient could want.

DNTLworks™ Equipment Corporation has a complete line of compressors, chairs, stools and accessories. The DNTL 4025 model is the hydraulic base dental chair. The chair seat folds into an optional bag and weighs approximately 40 pounds. The hydraulic chair base weighs an additional 28 pounds and has a carrying handle. The lightweight of this chair and hydraulic base are a true luxury, but again, if you plan on international travel, be sure of your total dimensions and airline regulations.



ULTRALITE™

Patient Chair with Scissor Base



ECONOMY, PORTABILITY, AND BASIC DESIGN WERE THE GOALS DNTLworks EQUIPMENT CORPORATION ACHIEVED WHEN THE ULTRALITE™ PATIENT CHAIR WAS CREATED.

The UltraLite is manufactured with a light-weight frame and reinforced steel hinges. This chair features an adjustable knee break and a backrest that can be manually positioned from 70° upright to 180° supine. The seat height may also be changed for convenience prior to admitting the patient. Set-up and fold-down are achieved quickly and easily.

The UltraLite is ideal for the most rugged environments. They include missionary work, field hospitals, clinics, private home care, nursing homes, military, and many other field applications.

Options include armrest slings for elbow support, and a headrest cushion. A soft-sided carrying case is also available for convenient storage and transportation.

FEATURES INCLUDE:

- ♥ *Light-weight frame*
- ♥ *Comfortable rolled cushioning*
- ♥ *Easy-to-clean, smooth upholstery*
- ♥ *Knee-break*
- ♥ *Easy set-up/fold down*
- ♥ *Manual backrest and seat adjustment*
- ♥ *Optional armrest slings, headrest cushion, and soft-sided carrying case*

UltraLite is a trademark of
DNTLworks Equipment Corporation © 1998



SPECIFICATIONS

- ♥ *Weight: 23 lbs (10.5 Kg)*
- ♥ *Folded Dimensions: 18.5" x 33.5" x 6.5"*
(47 cm x 85.1 cm x 16.5 cm)
- ♥ *Seat Adjustment: 17" to 22"*
(43.2 cm to 55.9 cm)
- ♥ *Backrest: 70° upright to 180° supine*

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com



PORTABLE DENTAL STOOLS



DNTLworks™
Equipment Corporation

FIELD STOOL

A lightweight, basic stool designed for field use. Scissor legs provide stability on uneven terrain. Seat cushion swivels 360°.



Operator's stool shown assembled.

Assistant's stool shown disassembled in durable, canvas carrying bag.

SPECIFICATIONS

ASSISTANT'S STOOL

Color: Gray vinyl, standard
Height Adjustment: 25" to 34" (63.5 cm to 86.4 cm)
Round seat: 15" (38.1 cm) diameter
Folded dimensions: 21" (53.3 cm) L x 21" (53.3 cm) W x 7" (17.8cm) D
Weight: 24 lbs. (10.9 Kg)

OPERATOR'S STOOL

Color: Gray vinyl, standard
Height Adjustment: 18" to 23" (45.7 cm to 58.4 cm)
Round seat: 15" (38.1 cm) diameter
Folded dimensions: 21" (53.3 cm) L x 21" (53.3 cm) W x 7" (17.8cm) D
Weight: 18 lbs. (8.2 Kg)

FIELD STOOL

Color: Gray vinyl, standard
Height Adjustment: 18" (45.7 cm)
Round seat: 15" (38.1 cm) diameter
Folded dimensions: 22.5" (57.2 cm) L x 15" (38.1 cm) W x 6" (15.2 cm) D
Weight: 10.5 lbs. (4.7 Kg)

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com



ProLite PDC Portable Dental Chair



The newest and lightest addition to our variety of portable patient chairs. Show with optional, detachable chair cushions, model #4007. ProLite PDC even has a backpack version available, model #4006. this chair sets up easily and quickly, offers superior patient comfort and provides the durability needed for rugged use.



DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com



MDEC

mobile dental equipment corp

This portable chair is designed for versatility, comfort and portability. Constructed from high strength aluminum, the chair has been safety tested to hold over 500 pounds.

Eminently useful in any treatment situation where portability is a must, this chair brings the comforts of the office to the field.



CHAIR FEATURES

- Fully adjustable back, from full horizontal and anywhere in between.
- Adjustable seat height from 8" to 22"
- Adjustable headrest pad
- Fold down foot rest so it can be used as a chair
- Naugahyde padded replaceable upholstery
- Weighs only 30 pounds including carrying case
- Padded nylon carrying case included
- Folded dimensions: 30" L x 23" W x 8" D

STOOL FEATURES

- Padded back and seat
- Adjustable height
- Naugahyde upholstery
- Padded nylon carrying case included

M-DEC
1330 SE 30th Street
Suite 101
Bellevue WA 98005

800-321-6332
425-747-5424
www.portabledentistry.com

4. Portable Lawn Chairs or Deck Chairs

A much cheaper alternative to the manufactured portable dental chair would be a department store or mail order deck chair. Dental hygiene and rural dental education programs have used them successfully for many years. The low cost, lightweight, and availability make them an attractive option. It is very likely that you could purchase some of these chairs in the country you visit, use them, and give them away when finished. You would save the hassle of purchasing them here, then packing, and transporting them back and forth. There also is a good possibility that this type of chair would be cheaper to purchase in the host country. One of our teams carried two deck chairs with us to Cambodia. When we got to the missionary host's home, they had four of the exact folding chairs in their family room.

It is important to use chairs that are very adjustable and adaptable for dental use. Some deck chairs will not lie all the way back for sit down dentistry. Before you purchase, be sure to compare all of your options. Another consideration with deck chairs would be their stability when fully reclined. Some have a tendency to tip over.

The two Italian manufactured chairs that we use only weigh a total of 42 pounds when both are packed in the travel case. We add 2 x 2's and other lightweight supplies in the travel case to bring its total weight up to 50 pounds. The cost of one deck chair was \$85.00 and the custom made plastic case cost \$105.00. So the total investment for two chairs and a case were \$275.00.

Recently we purchased three Timberline canvas lounge chairs from Wal-Mart for \$18 each. This model had the high back and a foot rest extension, which we removed. Three of these tubular frame fold down chairs went easily into a military duffle bag with many of our supplies. They work great for standup dentistry (extractions). At this price, the chairs can be given away periodically to other dental professionals in the countries where we work. For the value and convenience, they become almost disposable compared to the cost of a manufactured portable dental chair from the United States.



Inexpensive deck chair has same features as expensive dental chair.



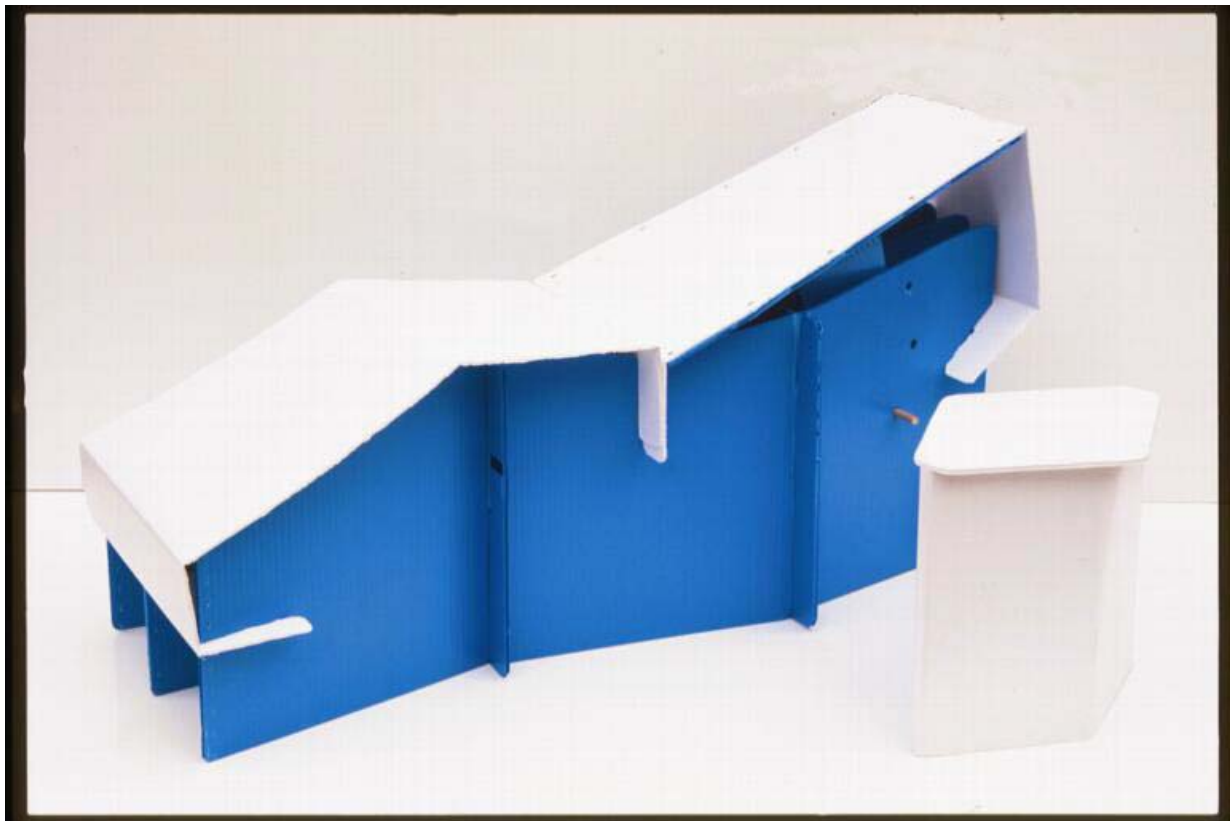
Two deck chairs in a lightweight carton weigh only 39 pounds.

5. Cardboard Dental Chair

Even cardboard can be used to construct a dental chair. Several years ago the plans were available through JADA, so the students at Oral Roberts University made one for the Spatford Clinic in Jerusalem. It was used for a number of years by visiting dentists to treat patients.

The cardboard dental chair can be made simple and easy if you have some time to cut it out and assemble. We made several out of corrugated plastic, like the post office uses for their letter trays. The plastic sheets make a much stronger chair than cardboard and it can be wiped down with surface disinfectants

The plastic chair is lightweight, durable, aseptic, adjustable, and cheap. The **Christian Dental Society** www.christiandental.org has several that go with their members on trips overseas. They are not adjustable but work quite well. Total weight is about 26 pounds. It will not rust, decay, mold, or soil. I used one for two weeks in Viet Nam and know that it works very well. They also have the chairs available for purchase at 563-578-8887.



Example of corrugated, cut-out dental chair (diagram page 165)



Working in Mexico against a cement wall is difficult.



Working in India against a wood wall is just as difficult.



Phone: 800-426-5913 • 425-487-3157 • Fax: 360-668-8722

High strength DOM steel frame with quality replaceable vinyl covering.
Fully adjustable height & back from full upright to supine position.

Functions as standard sit-up chair.

Easy quick set-up and take down.

Adjustable pillow headrest.

Includes both hard and soft carrying cases.

Dimensions:
39" x 30" x 16.5",
11.17 Cu.Ft.



ADC-01CS

Command Air Portable Dental Chair

NSN: 6520-01-446-3783

www.aseptico.com
800-426-5913
425-487-3157

6. Military Special Order Portable Dental Chair

When you have your own trucks, planes, helicopters, or Leer jet to transport equipment, then size and weight are not so critical to your portable dental equipment. These are examples of very nice portable military units that make the practice of dentistry in “MASH” units almost like being in your own dental office. The size and weight of this equipment is greater than would be permitted on a commercial airliner, but there is also a much greater convenience factor once it is set up in the field.

This equipment is impractical for most missionary dentists because of size, weight and cost unless advance shipment to the location can be arranged. That takes a lot of preplanning, time, and someone on location to store it until you arrive. We did that very thing with portable equipment for a clinic in Colombia, South America. It gave us the latitude of using the equipment in a permanent clinic on a daily basis or picking it up and taking it to a rural setting. The options for utilizing this type of equipment in another country are just fantastic once transportation considerations to the country are resolved.

Many times military equipment of this type can be obtained quite reasonably from Army surplus, civil defense, or during the refurbishing of military dental installations. This is the best in portable equipment, but be careful of its size and weight.

As a civilian on commercial aircraft, you are limited to two suitcases and a carry-on bag. The suitcases cannot exceed 62” when you add the height, length and width. The weight cannot exceed 50 pounds for each of the two check-on cases. So bear this in mind for air travel.

Something again worth noting is that the military has a testing program for dental equipment. There is a website which has evaluations of the dental equipment they have tested. You may want to review their assessments and comments about what is good and what is not so good at <https://decs.nhgl.med.navy.mil/>.

High Backed Chairs – Any high backed chair that offers head support, can be used for doing exams and extractions. If you can put the front two legs evenly on bricks, it will give the chair some inclination. Actually a rocking chair works better than a high backed chair because you can adjust the inclination of the back of the rocking chair by adjusting the position of your two bricks under the runners. Placing your chair near a wall can provide a headrest for the patient if you do not have an assistant or headrest to hold the patient's head. Note pictures of rural work in India using this technique. One difficulty working up against a wall is that you cannot work in a convenient position if you need to be behind the patient. In those situations, it may be necessary to swing the patient around and cradle their head in your free arm and work, but that is very inconvenient. There is usually a better way if you use your ingenuity. I worked four days like this until someone remembered that there was a huge hand carved dental chair in a clinic not far from us. That huge wooden chair was the answer to my aching back.



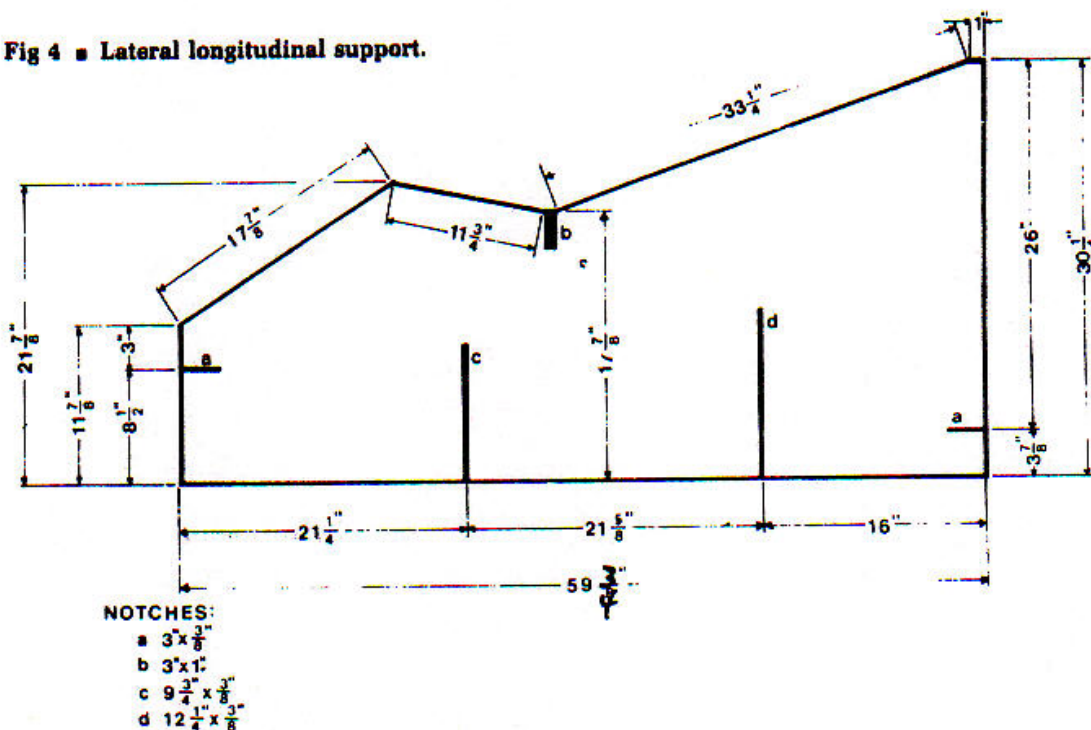
A wooden dental chair saved my back in India.

9. Other Options

Ironing Board Dental Chair - Even a small ironing board can be used effectively as a dental chair in certain situations where you have a bedfast patient, who is immobile. A hospital bed, or any kind of bed, is nearly impossible to work beside and do restorative dentistry. Yet, a small ironing board can be modified to your own likes, slid under the torso of the bedfast patient and swung around to serve as a thin, narrow platform like a dental chair. Their head would go on the tapered end of the board to give you more convenient access for dental work. A small towel can be rolled up and shaped like a donut to cradle their head on the board. This is a much better technique than trying to lean over the hospital bed and break your back during a long restorative procedure.

Construct Your Own Dental Chair – Every country you visit will have material from which a dental chair can be made. It will give some craftsman a unique challenge and maybe create an opportunity for him to develop a small trade for himself. It will be up to you to communicate what you need by pictures or diagrams. I have seen many chairs made by craftsmen in other countries of bamboo, wood, iron, aluminum, wicker, cardboard and plastic. Don't limit yourself from lack of imagination.

Fig 4 ■ Lateral longitudinal support.



NOTES



Dr. Mundy using the I-Tec Portable Dental Chair in Patagonia



Dr. Moussalli picture on the right using 2 upside down trashcans and a piece of plywood for a dental chair.



Eight Pound Operator
Discontinued
Manufactured for World Dental Relief from 1992 to 2003

PORTABLE DENTAL DRILL UNITS



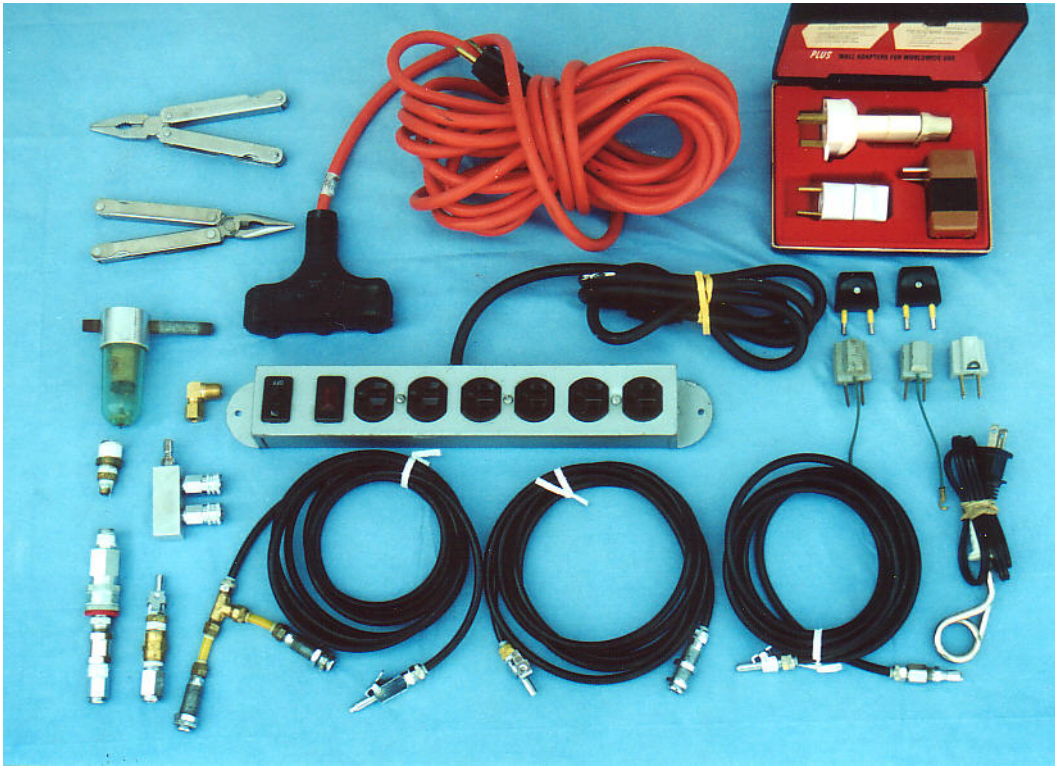
When a patient really needs a tooth filled rather than an extraction, wouldn't it be nice to have a portable dental drill?

B. Portable Dental Drill Units (CRITERIA TO LOOK FOR IN A UNIT)

1. Unit should be lightweight, compact, and dependable. As with the dental chair, its weight and the external dimensions of the carrying case are important for air travel. The weight cannot exceed 50 pounds and total of its three dimensions should not exceed 62" for height, weight, and length.
2. You need a high-speed handpiece for rapid reduction; preferably with a thumb pressure bur release rather than a separate bur tool, which can be lost. One operator lost his bur tool the first day of a one-week trip and had to use the same 557 bur on every patient that week. These little bur changer tools are easy to lose in transportation or during clean up by inexperienced help in the work area.
3. You need a slow-speed handpiece on a separate hose so you do not have to change back and forth on the same handpiece tubing for the high-speed and low-speed. You should have various contra-angle and straight attachments on the slow-speed to suit your needs. Also, prophyl-angles should be included in your supplies, if you intend to clean teeth.
4. You need an air/water syringe or three-way syringe to perform any restorative work. Disposable tips are now available with new models. But metal, autoclavable, interchangeable tips may be more practical so you can sterilize and reuse them indefinitely.
5. A high volume Venturi suction should connect directly onto the dental unit and work with air pressure. These are very efficient and have enough volume for surgery. The collection bottles are plastic, which eliminates potential glass breakage problems. These suctions do require a compressor that can provide good continuous airflow to maintain the high volume suction.
6. Stability is important for the portable dental unit so it does not tip over when in use. There are times when the floor of a rural clinic may be dirt, gravel or compressed dung. I have set up under trees on level ground and out in the open with people crowded around us watching our dental work. There are many styles and designs of equipment, but durability, dependability, and stability are top priorities.
7. Easy maintenance and repair should also be considerations. The design must be simple, accessible, and easy to repair. It is not likely that you will carry tools and parts along for repairs. Most portable units have standard parts and can be worked on with tools found in any country. Stay away

from complicated, unique equipment or old equipment for which parts may no longer be available.

8. Extra air line tubing may be a concern if you have a noisy source of air (compressor). I sometimes carry several twelve-foot extensions, so I can put the compressor outside of my operating area. Even 50 feet of 1/2" air line hose is cheap and easy to carry.
9. An electric extension cord made of 12 or 14 gauge wire is recommended, with multiple outlets on the end to power your auxiliary equipment. A multiple outlet (six place) with a breaker for overload is a good investment to save your equipment from power fluctuations. Be aware of the electric supply whether it is 220V or 110V, 60 or 50 cycle, before hooking up. You may need a step down transformer to convert 220V to 110V. For more information about electricity, refer to Chapter Ten.
10. Electric and solar powered drill units will be considered separately, later in this chapter under Miscellaneous Section.



**Air line hose extensions, extension cords,
adaptors and converters**

Examples of Portable Drill Units

Since there are more than fifty different styles of dental units for portable use, it would be difficult to critique each one and give you an evaluation based on what I look for in a unit. Your needs will be uniquely different from those that I may have. The next few pages will give you an idea of the wide variety of portable delivery systems available to you. It is up to you to evaluate your own needs and select a unit that best satisfies your style of practice. Hopefully by now, you have a better idea about what you need for portable dental practice.



These dental students are placing fillings on Quechua Indians in the high remote Andes Mountains of South America. The dental equipment was run off a 2000-watt generator outside the building.



International
Dental Supply

8205 West 20th Avenue | FL 33014 | Ph. [305] 817-2800 | F. [305] 817-2333
800-437-6455

Portable Unit (Travel Hard Case)

This is a one of a kind machine.
Must be seen to be believed.
All in one machine.
Lightweight: 20 lbs
Inside this innocent case is a complete dental office!

This unit runs:
High Speed Handpiece
Low Speed Handpiece
Air/Water Syringe (included)
Low Speed and High Speed share connection. Just turn
water OFF for a Low speed.
Cuspider system
Fully operation vacuum and compressor
Tube exits all waste. No internal bottle changing needed
Compressor. Great running, can handle an entire days work load.
Easy to carry.



30 day money back guarantee
1 year warranty

www.idsdental.com



**Transport II
Deluxe
Portable Electric
Dental System
Model AEU-425
Model AEU-425FO**

Aseptico's Transport II is a fully self-contained electric dental system. Quick and easy to set up and operate. Ready for travel. Available with optional piezo ultrasonic scaler and fiber optic handpiece configurations



Features include:

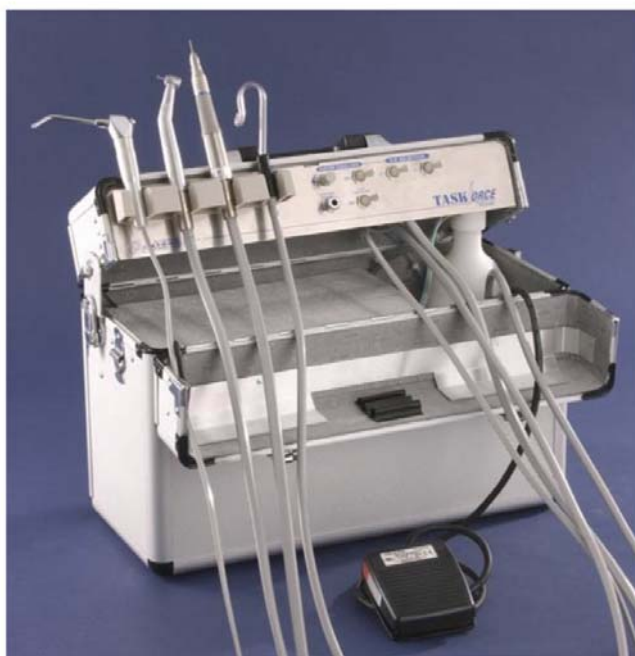
- 3-Way Air/Water Syringe
- Autoclavable 30k Motor
- Accepts All E-Type Handpieces
- High and Low Volume Evacuation
- Self Contained Water Supply
- Self Contained Air Compressor
- On/Off Foot Switch
- Easily Transported With Pull-Out Handle and Wheels
- Weights 54 to 60 lbs depending on configuration
- 110V or 220V Compatible!
- Optional ASC-10 Piezo Ultrasonic Scaler
- Optional Motor with light for fiber optic handpieces



**www.aseptico.com
800-426-5913
425-487-3157**



**ADU-12 Taskforce
& ADU-12DCE Taskforce Deluxe
Portable Dental Systems**



Features:

Dual handpiece control - High and low speed

3-way air-water syringe

**Powerful saliva ejector suction.
New optional A-12HVE adapter,
pictured at left, gives high
volume evacuation**

**Internal, high-powered oilless air
compressor provides over 32 psi
to handpieces**

One-liter water reservoir. 950 ml waste container

**All system components pack into the rugged
aluminum carrying case for easy transport.
Case has integrated combination lock for
added security**

**The ADU-12D Taskforce Deluxe model adds
Cavitron connection & improved handpiece
and coolant controls.**

**Available with either four hole Midwest
or 3 hole Borden style connections**

Dual voltage switch (110V and 220V)

**Dimensions: 12.5" x 17.5" x 7.5"
(31.8 cm x 44.5 cm x 19.1 cm)**

Weighs only 28.5 lbs (12.8 kg)

Handpieces sold separately.

**From the world leader in
portable dental equipment comes
Taskforce & Taskforce Deluxe.
These fully self-contained,
economical dental systems
run high and lowspeed handpieces
and accessories from an
on-board oilless compressor**

**www.aseptico.com
800-426-5913
425-487-3157**

ADU-04ST Portable Air System

The ADU-04ST comes mounted on its sturdy, fold away tripod. Soft sided, padded case included for ease of transport.

Features include:

3-way syringe

1 high speed and 1 low speed handpiece with manual control

Individual handpiece pressure adjustments

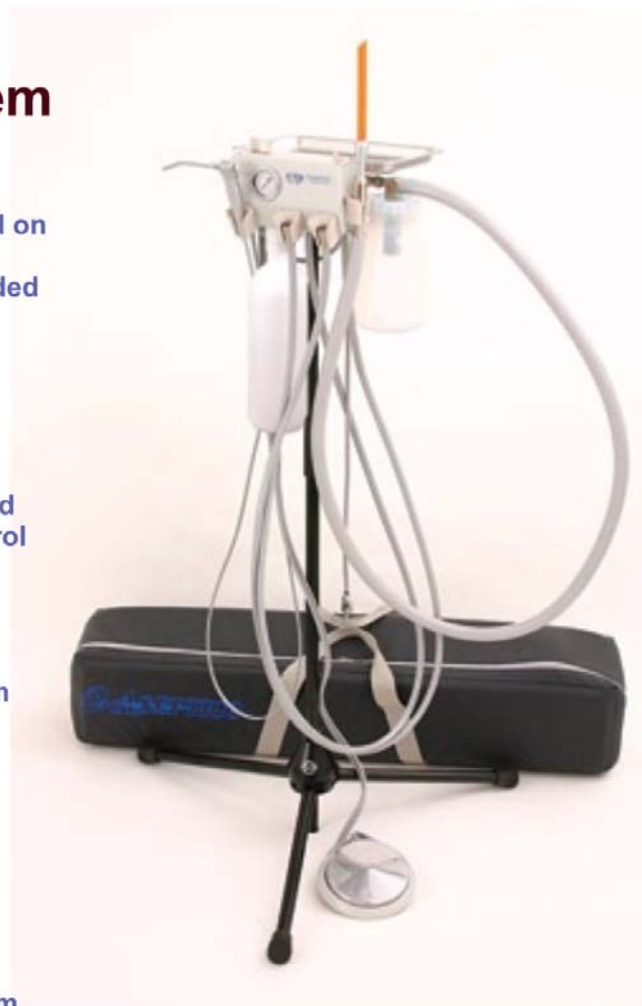
Self contained water system

6" X 10" stainless steel accessory tray

25 ft. extension air line with 1/4" quick disconnect

Disc type foot control

Optional High Volume Vacuum (Shown) Item AA-21ST



www.aseptico.com
800-426-5913
425-487-3157



**AseptiMini
Portable Dental Unit
Model ADU-10**

Aseptico portable unit continues to be the doctor's choice. Preferred above all similar mobile systems (Adec, Mdec, DNTL, etc.) because of size, weight, convenience and durability



Features Include:

Aseptic control box, tubing and holders.

Autoclavable water container, syringe tips and vacuum container.

Wet/dry foot control.

Automatic high and low speed handpiece controls.

Easily quick couples to air compressor.

Size: 11-3/4" x 14-3/4" x 13-3/4" , weighs just 24 lbs.

Optional: Either or both high and low volume vacuums (pictured).

Operates off of air - no vacuum pump needed.

**www.aseptico.com
800-426-5913
425-487-3157**



94D Des Entreprises Boul.
Boisbriand, QC J7G 2T3

Canada & US: 1 800 567 0013
Phone: 450 433 5754
Fax: 450 433 5987

Email: sales@safaridental.com
http://www.safaridental.com



SAF-400-110

Traveller

Complete Self-contained dental unit

\$4,335 USD (110V / 60Hz)

\$4,790 USD* (220V / 50Hz)

TIG welded aluminium case

- Heavy duty wheels (6" x 1.5")
- Retractable handle
- Front cover act as instrument tray
- 12.5" x 10" (32 x 25 cm)
- Instrumentation support at working height
- Double AC outlets for auxiliaries
- External air quick connect for auxiliaries
- External water quick connect for auxiliaries

Two handpieces control including

- Individual handpiece pressure adjustment
- 3-way syringe with Quick Change tip
- Aseptic tubing. Autoclavable instrument
- Quick disconnect facilities
- Round air driven variable speed control

Oilless compressor

- Rocking piston pump
- 2.5 litre (0.6 gal) steel air tank
- Maximum pressure: 100 PSI (8 bar)
- Air displacement 2.6 CFM (60L/min)

Independent Vacuum Pump (1.3 CFM)

- With 1L waste collection jar

Self-contained clean water system (1 litre)

- With pressure regulator

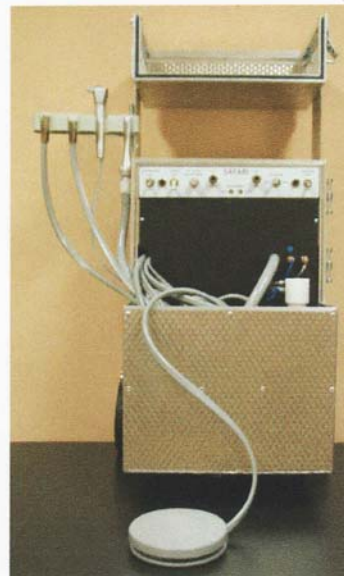
Noise level: 48 Db Vacuum; 40 Db Compressor

Weight: 57 lbs (26 kg)

Dimensions: 13 ¾ x 12 ½ x 19 ¼ (35 x 32 x 50 cm)

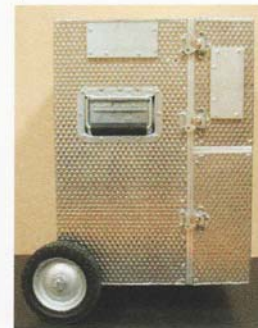
Note: Air flow decrease 17% on 220V / 50Hz

One year warranty on manufacturing defects



Options

- Storage cabinet SAF-400S: US\$ 575
- Handpiece illumination system (1): US\$ 270
- Handpiece illumination system (2): US\$ 550
- Ultrasonic scaler (piezo or stack): US\$ 890
- Add-on curing light: US\$ 400
- 3 handpieces automatic: US\$ 300
- Built-in piezo scaler: US\$ 1295
- Add-on piezo scaler: US\$ 1100
- Both handpiece wet: US\$ 49
- Handpiece flush system: US\$ 140
- Extra syringe tip: US\$5



(Version 1.0 June 1st, 2007)

94-D, Boulevard des Entreprises, Boisbriand, Québec, Canada J7G 2T3
Tel: (450) 433-5754 Toll Free: 1-800-567-0013



94D Des Entreprises Boul.
Boisbriand, QC J7G 2T3

Canada & US: 1 800 567 0013
Phone: 450 433 5754
Fax: 450 433 5987

Email: sales@safaridental.com
http://www.safaridental.com



SAF-500

Explorer V

US \$ 1330

Required external clean air source

TIG welded aluminium case

- Self-contained design
- Front cover act as instrument tray
- 10" x 10" (25 x 25 cm)
- Instrumentation support at working height

Floor unit

- Control for 2 handpieces
- Individual handpiece pressure adjustment
- Non-retraction water coolant
- Handpiece water flow control adjustment
- Round air driven variable speed foot control
- 1/4" male air quick disconnect with 6" tubing

Self-contained clean water system (1 litre)

- With pressure regulator

3-way Air/Water syringe with Quick Change tip

Autoclavable instrument and asepsis tubing

1/4" female quick disconnect for add-on compressor

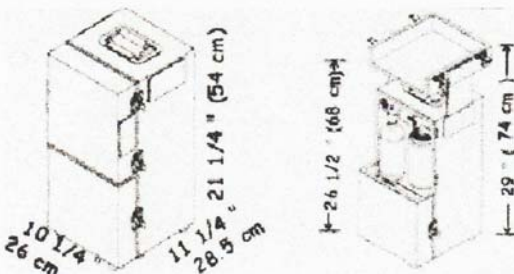
Weight: 18 lbs (8.2 kg)

Dimensions: 21 1/4 x 11 1/4 x 10 1/2 (54 x 28.5 x 26 cm)



Built-in Option

- Air venturi suction with 1 litre waste collection jar – US \$260 (SAF-500V)
- Extra syringe tip – US \$5



One year warranty on manufacturing defects

94-D, Boulevard des Entreprises, Boisbriand, Québec, Canada J7G 2T3

Tel: (450) 433-5754 Toll Free: 1-800-567-0013

PROQUEST™

Portable Delivery System



DNTLworks™
Equipment Corporation

THE PROQUEST I™ AND II™ PORTABLE DENTAL DELIVERY SYSTEMS FROM DNTLworks EQUIPMENT CORPORATION REDEFINE THE STANDARD FOR POWERFUL PERFORMANCE AND SELF-CONTAINED FEATURES.

Configured in a single, lightweight carrying case with a top-mounted control box, the ProQuest is easy to use with quick assembly and disassembly.

This state-of-the-art delivery system includes a full-function electric handpiece with water and speed adjustments; a powerful and quiet oil-free vacuum motor with dual hose design; large waste container; internal water supply; air/water syringe; plus an oil-free compressor to pressurize the water source to the syringe and handpiece. Integrated fiber optics are available in the ProQuest II.

A light curing wand and piezo-electric scaler are options for both systems.

The control box, vacuum tubing, and accessories are conveniently packed inside the ProQuest's impact resistant carrying case.

The system incorporates built-in wheels and a retractable handle to facilitate transportation.



FEATURES INCLUDE:

- ☛ Electric handpiece with water and speed adjustments
- ☛ Powerful, quiet vacuum pump with dual hoses for HVE and saliva ejector
- ☛ Integrated, non-retracting water source with air/water syringe for irrigation and drying
- ☛ Large waste container with automatic overflow shutoff
- ☛ Lightweight, one-piece design
- ☛ Made with pride in the USA

*Powerful
Complete
Lightweight
Easy to Set-up & Use*



ProQuest is a trademark of
DNTLworks Equipment Corporation
© 1998

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com

PROQUEST™

Portable Delivery System



DNTLworks™
Equipment Corporation

SPECIFICATIONS

DIMENSIONS/WEIGHT

Length: 21.9" (55.6 cm)
Width: 8.4" (21.3 cm)
Height: 18" (45.7 cm)
Weight: 43 lbs (19.5 kg)

VACUUM MOTOR

Power: 1/3 hp
Vacuum Strength: 0" to 21" Hg
(adjustable)
Vacuum Flow: 4.6 cfm
Waste Receptacle: 1200 ml
Sound Level: 46 dB
Automatic Overflow Shutoff Valve

ELECTRICAL

Power Supply: 115 vac or 220 vac
Frequency: 50 or 60 Hz
Circuit Breaker: 15 amps
Hospital Grade Wiring: NEMA Type
5-15P Plug

HANDPIECE

Speed: 0 - 160,000 rpm
Power: 6 amps, 150 watts
ISO E-type attachment
Forward and reverse control
Variable speed foot control
Internal triple-spray water source

OPTIONAL EQUIPMENT

Piezo electric scaler
Light curing wand
Fiber optics for handpiece (ProQuest II)
Additional handpieces, various speeds



DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com

FEATURES INCLUDE:

- ☛ Lightweight, one-piece design
- ☛ Impact-resistant case with built-in wheels and retractable handle
- ☛ Electric handpiece with water and speed adjustment
- ☛ Top-mounted control box for all unit functions
- ☛ Powerful vacuum pump with dual bose design accommodates many brands of HVE and saliva ejector tips
- ☛ Non-retracting water source with air/water syringe
- ☛ Hospital grade wiring with 15 amp circuit breaker protection
- ☛ Optional fiber optics for handpiece (ProQuest II)
- ☛ Attached, ergonomic carrying handle
- ☛ Convenient size for storage
- ☛ Easy access through side door
- ☛ Optional light curing wand, and piezo electric scaler



PROSOLOTM

Dental Delivery Unit



DESIGNED FOR SIMPLICITY, THE COMPACT PROSOLOTM DENTAL DELIVERY UNIT MEETS THE REQUIREMENTS OF PROFESSIONALS TO PERFORM ROUTINE DENTAL PROCEDURES.

FEATURES INCLUDE:

- ☛ *Compact, lightweight design telescopes to provide multiple height adjustments.*
- ☛ *Strong, Delrin and aluminum construction for demanding field environments.*
- ☛ *Top-mounted manual controls for two handpiece operation.*
- ☛ *Detachable air venturi suction system with large capacity waste container available.*
- ☛ *Three-way syringe.*
- ☛ *Couples easily with any clean compressed air source to create a complete dental system.*



Perfect for those occasions where basic treatment and lightweight portability are required. The ProSolo's compact size makes it easy to pack and transport.

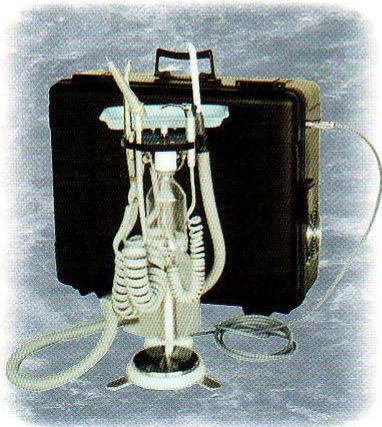
ProSolo is a registered trademark of
DNTLworks Equipment Corporation © 1997

PROSOLOTM

Dental Delivery Unit



DNTLworksTM
Equipment Corporation



*ProSoloTM Dental Delivery Unit
shown with optional ProAirTM
Portable Compressor and
Instrument Tray.*



*ProSoloTM Dental Delivery Unit
shown packed in optional
padded carrying bag.*

SPECIFICATIONS

DIMENSIONS / WEIGHT

Top: 6" round (15.2 cm)
Base: 7" x 5" (17.8cm x 12.7cm)
Height: 15" to 25" (adjustable)
(38.1 cm to 63.5 cm)
Weight: 8 lbs (3.6 Kg)

HANDPIECE DELIVERY SYSTEM

Highspeed: 4-hole connection with water
Lowspeed: 4-hole connection
2 or 3 hole connection available
Adjustable air pressure
Adjustable water flow

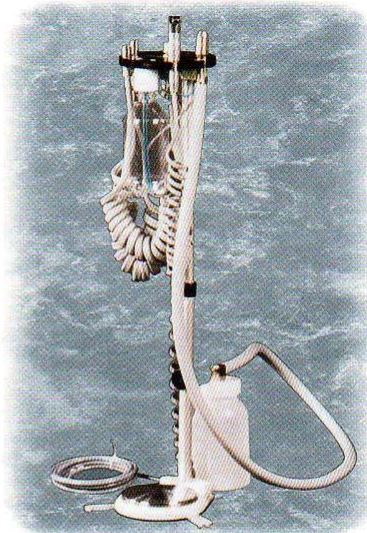
AIR VENTURI VACUUM SYSTEM

Vacuum flow: 4 scfm @ 50 psi
Air consumption: 1.25 scfm @ 50 psi
Waste receptacle: 946 ml

WATER SYSTEM

Water reservoir: 300 ml (standard)
1.5 liter (optional)
Pressurized system: 30-40 psi
Non-retracting water coolant

- Accommodates most brands of handpieces
- Non-retracting handpiece water coolant
- Adjustable controls for handpiece coolant and drive air
- Self-contained water system
- 1 quart (946 ml) waste container
- Optional padded carrying bag or impact resistant case.



*ProSoloTM shown in extended
operational height.*

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com



PROPAK™

Portable Delivery Units



THE VERSATILE AND ECONOMICAL PROPAK SERIES OF PORTABLE DELIVERY UNITS HAS A SLEEK DESIGN IN A DURABLE, LIGHTWEIGHT CARRYING CASE.

GENERAL FEATURES INCLUDE:

- 🌿 *Lightweight, strong case with padded carrying handle.*
- 🌿 *Easily assembled, all components fit into case with room to store additional supplies.*
- 🌿 *Unique, pull-out design of control panel makes unit easy to clean.*
- 🌿 *Easy to operate, color-coded controls.*
- 🌿 *Coiled or straight handpiece tubing.*
- 🌿 *Air/water syringe.*
- 🌿 *Self-contained water supply.*
- 🌿 *1.5 liter waste container.*
- 🌿 *Adjustable, built-in AVS suction system in ProPak II.*

ProPak I, ProPak II, ProAir and DNTLworks are trademarks of DNTLworks Equipment Corporation © 1997



The ProPak series of delivery units allow the dental professional to easily service many sectors, as well as to back-up traditional operatories in case of emergencies.

PROPAK™

Portable Delivery Units



DNTLworks™
Equipment Corporation

SPECIFICATIONS

Designed for use in the field, ProPak™ operatories allow the dental professional to easily service home-bound patients, nursing home residents, hospitals, missionary trips, veterinary clinics, as well as school-based sealant programs.

ProPak units can utilize air supplied by quiet, lightweight DNTLworks ProAir compressors, bottled gas, or can be hooked up to hospital air supplies.

The ProPak I incorporates an internal water supply with two handpiece connections - ideal for applications which do not require suction.

The ProPak II has the additional feature of suction and a waste collection system.

DIMENSIONS/WEIGHT

ProPak I™

Case Size: 17.8" x 12.8" x 6.8"
Weight: 16 lbs

Containers:

Water: 500 ml (standard)
1.5 liters (optional)

ProPak II™

Case Size: 17.8" x 12.8" x 6.8"
Weight: 18 lbs

Containers:

Water: 500 ml (standard)
1.5 liters (optional)

Waste: 2 liters

COMPONENTS/ACCESSORIES

Handpiece

Tubing: 2 non-retracting four-hole connections, with flush system

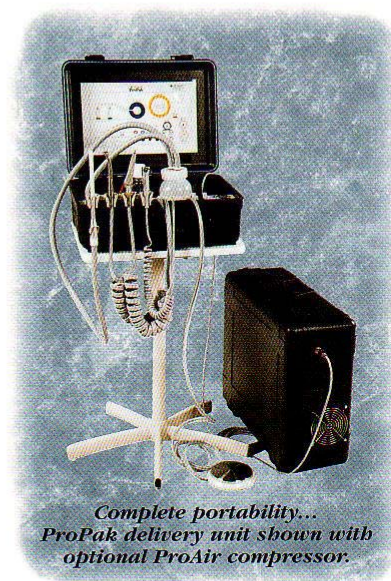
Water: Three-way syringe
Pressure: Adjustable from 0 to 60 psi

Included Accessories:

Tool and repair kit

Optional Accessories:

Shoulder strap
Combination lock



*Complete portability...
ProPak delivery unit shown with
optional ProAir compressor.*

- Manual controls for one or two handpieces.
- Accommodates most brands of handpieces.
- Non-retracting water coolant system with 500 ml reservoir.
- Automatic handpiece flush system.
- Color-coded controls for easy identification, training and utilization.
- Lockable, ABS/Polycarbonate or ATA 300 rated cases.

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com

PROCARETM

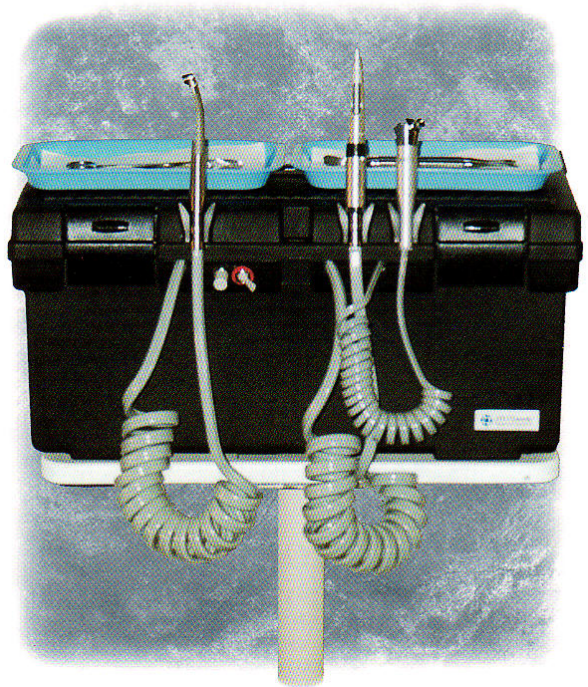
Portable Delivery Unit



THE PROCARETM COMPACT SELF-CONTAINED PORTABLE DELIVERY UNIT IS THE ANSWER WHEN EASE OF TRANSPORTATION IS IMPORTANT TO PROVIDING BASIC DENTAL CARE.

FEATURES INCLUDE:

- ☛ *Quiet, 1/3 hp oil-free compressor, with air filter.*
- ☛ *Two-handpiece selection with manual control for one highspeed and one lowspeed handpiece.*
- ☛ *Integrated water supply to highspeed handpiece.*
- ☛ *Coiled asepsis tubing accommodates most brands of handpieces.*
- ☛ *Non-retracting water relay.*
- ☛ *Three-way syringe.*
- ☛ *Electric foot switch.*
- ☛ *Durable instrument tray.*
- ☛ *External handpiece hangers.*
- ☛ *Lockable, lightweight, impact resistant case with handle.*
- ☛ *Smooth design for easy cleaning.*
- ☛ *15 amp circuit protection.*
- ☛ *Proudly 100% made in USA.*



*Portable
Compact
Lightweight
Complete*

ProCare is a registered trademark of
DNTLworks Equipment Corporation © 1997

ProCare™

Portable Delivery Unit



DNTLworks™
Equipment Corporation

From the highest mountain village to an outpost in the densest jungle, the ProCare compact self-contained portable delivery unit is the answer when ease of transportation is important to providing complete dental care.

This latest addition to DNTLworks' family of portable dental equipment incorporates the latest technology into a compact, lightweight design no larger than a tool box.

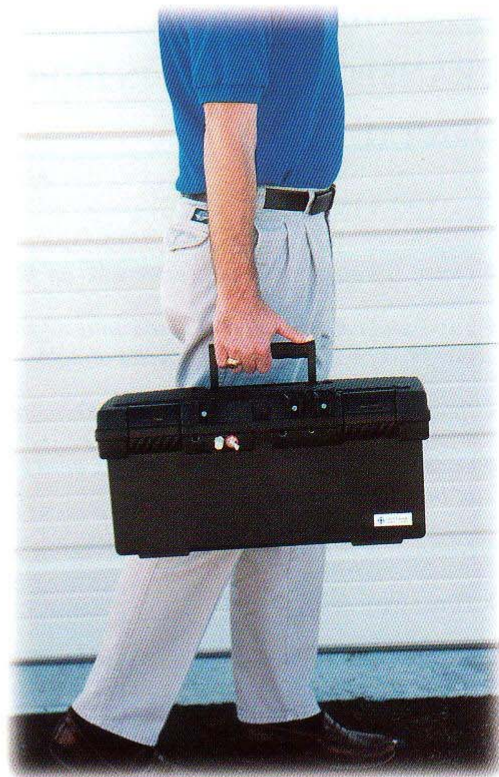
The ProCare is ideal for dentists who participate in humanitarian work, such as missionary trips, secular voluntary foreign aid organizations, government public health programs, home-bound patients, nursing homes and orphanages, hospitals, military or disaster relief.

The internal, powerful compressor and ample water/air reservoir eliminate the need for additional air sources or dependence on municipal water supplies.

The ProCare is the perfect way for the dental practitioner to stay productive in an emergency or while a central compressor or traditional delivery unit is being serviced.

During transport, all handpiece tubes and power cords are safely stored inside the case. With its compact size, the ProCare can easily be stored in a vehicle or cabinet.

Quality construction and low price makes ProCare one of the best overall values.



SPECIFICATIONS

Case Size (L/W/D):	20" x 10.1" x 9.3" (50.8 cm x 25.7 cm x 23.6 cm)
Case Type:	Polypropylene
Weight:	25 lbs. (11.4 Kg)
Sound Level:	46 dB
Working Pressure:	25 psi
Horsepower:	1/3 hp
Air/Water Reservoir:	500 ml
Power Supply:	115 vac or 220 vac
Current:	3.3 amps
Wattage:	380
Frequency:	60 Hz or 50 Hz
Type:	Oil-free diaphragm

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com



PRO CARE II™

Portable Delivery Unit with Saliva Ejector Suction



QUALITY CONSTRUCTION, INTEGRATED COMPONENTS, AND LOW PRICE MAKE THE PRO CARE II™ ONE OF THE BEST OVERALL VALUES AVAILABLE.

The ProCare II is ideal for missionary work, remote clinics, private home care, nursing homes, military, and many other basic applications.

As a basic portable dental delivery unit, the ProCare II features two handpiece connections, an air/water syringe and saliva ejector suction.

The quiet, internal compressor, separate suction pump (not a venturi), and 500 ml water/air reservoir eliminate dependence on local air and water sources. A contoured case with nylon shoulder strap makes the ProCare II unit convenient to carry.

All handpiece and suction tubing, as well as the hospital-grade power cord are safely stored inside the case during transport. The ProCare II fits easily inside a vehicle or cabinet.



*Complete
Portable
Lightweight
Compact*

FEATURES INCLUDE:

- ☛ *Quiet, 1/3 HP oil-free compressor*
- ☛ *Two-handpiece connections with manual selection for one highspeed and one lowspeed handpiece*
- ☛ *Integrated water supply to highspeed handpiece*
- ☛ *Coiled asepsis tubing accommodates most brands of handpieces*
- ☛ *Separate, internal saliva ejector suction pump (not a venturi)*
- ☛ *Non-retracting water relay*
- ☛ *Air/Water syringe*
- ☛ *Electric foot switch*
- ☛ *Built-in instrument tray/storage bin*
- ☛ *Lockable, lightweight, impact resistant case with handle and nylon carrying strap*
- ☛ *Proudly 100% made in USA*

ProCare II is a trademark of
DNTLworks Equipment Corporation © 1998



ProCare IITM

Portable Delivery Unit with Saliva Ejector Suction



DNTLworksTM
Equipment Corporation



SPECIFICATIONS

Case Size (L/W/D): 22.5" x 13.5" x 12.25"
(57.2 cm x 34.3 cm x 31.1 cm)

Case Type: Polypropylene

Weight: 35 lbs (15.9 kg)

Sound Level: 46 dB

Working Pressure: 25 psi

Horsepower: 1/3 hp

Air/water Reservoir: 500 ml

Power Supply: 115 vac or 220 vac

Current: 3.3 amps

Wattage: 380

Frequency: 60 Hz or 50 Hz

Compressor Type: Oil-free, diaphragm

Vacuum Type: Peristaltic pump

Waste Container: 1 Quart (946 ml)

ProCare II is a trademark of
DNTLworks Equipment Corporation © 1998

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com



PROCARD I™

SELF-CONTAINED PORTABLE OPERATORY



THE PROCARD I™ OFFERS POWERFUL PERFORMANCE IN A SELF-CONTAINED DENTAL OPERATORY SYSTEM, MAKING IT A SYSTEM OF CHOICE FOR TODAY'S DENTAL PROFESSIONALS.

Introducing the new generation ProCard I Model 2600 from DNTLworks Equipment Corporation.

Suitable for use in-office, nursing homes, hospitals, or wherever on-site dentistry is required, the ProCard I combines a powerful air compressor and separate vacuum pump for actual "four-handed" capability.

The ProCard I is a truly portable system. It offers exceptional performance and can easily disassemble into small carrying cases. The air, water, and waste management are all contained inside the unit. Compatible with most common brands of handpieces, the ProCard I will also accommodate fiber optics.

It is also available in simple cart form, Model 2500, without the compressor/vacuum module.

ProCard I is a trademark of
DNTLworks Equipment Corporation © 1998



FEATURES INCLUDE:

- Oil-free 1/3 hp compressor
- Strong 1/3 hp vacuum motor
- Convenient two-piece design for portability
- Dual hose design for HVE and saliva ejector use
- Front mounted valve holders and controls for convenience
- Large waste container with automatic overflow shut-off
- 15 amp circuit protection
- Proudly made in the USA

Portable
Self-contained
Lightweight
Easy to transport



PRO CART I™

SELF-CONTAINED PORTABLE OPERATORY



DNTLworks™
Equipment Corporation

SPECIFICATIONS

DIMENSIONS/WEIGHT

Treatment Cart

Base: 23" x 23" (58.4 cm x 58.4 cm)
Top: 15.5" x 14.5" (39.4 cm x 36.8 cm)
Height: 32" to 42" (adjustable)
(81.3 cm to 106.7 cm)
Weight: 38 lbs (17.3 kg)

Compressor/Vacuum/Water Module

Size: 11" D x 19" W x 10" H
(27.9 cm x 48.3 cm x 25.4 cm)

Built-in carrying handles

Quickly attaches to Treatment Cart

Weight: 48 lbs (21.8 kg)

ELECTRICAL

Power Supply: 115 vac, 60 Hz
220 vac, 50 Hz

Circuit Breaker: 15 amps

Hospital Grade Wiring: NEMA Type
5-15P Plug

COMPRESSOR/VACUUM/ WATER MODULE

Compressor Motor: 1/3 hp, oil-free
Working Pressure: 56 psi
Flow Rate: 1.2 cfm @ 40 psi
Sound Level: 51 dB

Vacuum Motor: 1/3 hp, oil-free
Vacuum: 15" Hg
Vacuum Flow: 2.5 cfm
Waste receptacle: 2 qt (1.9 liters)

Water Reservoir: 16.9 oz (500 ml)

Pressurized System: 40 psi

Non-retracting Water System

Handpiece flush system



FEATURES INCLUDE:

- ✔ Wet/dry foot control
- ✔ Automatic controls for one, two and three handpieces
- ✔ Accommodates many brands of handpieces and fiber optics
- ✔ Non-retracting handpiece water coolant system
- ✔ Automatic handpiece flush system
- ✔ Air/water syringe
- ✔ Adjustable high volume suction
- ✔ Adjustable saliva ejector
- ✔ Smooth-design chassis and handpiece holders
- ✔ Side mounted controls
- ✔ Easily assembled, adjustable-height stand with lockable casters
- ✔ Powder-coated, scratch resistant finish
- ✔ Air-filter moisture separator
- ✔ Self-contained water supply with 16.9 oz. (500 ml) reservoir
- ✔ 2 quart (1.9 liters) waste container
- ✔ Repair/Tool kit
- ✔ Built-in carrying handles on Compressor Module
- ✔ Treatment Cart folds down into compact, easily transportable package
- ✔ Rugged carrying cases available

ProCart I is a trademark of
DNTLworks Equipment Corporation © 1998

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com



Dental Equipment Parts 586-759-2868 - 800-422-3520



PORTADENT (counter top dental unit)



- " Totally self contained
- " Virtually soundless Air compressor
- " Two handpiece automatic control
- " Individual handpiece pressure adjustment
- " Three way air/water syringe
- " Variable speed foot control
- " Built-in water system
- " On/off control for water system
- " Line pressure gauge with adjustable Air regulator
- " Water quick disconnect for ultrasonic scaler hook up

MOBILE DENTAL STATION



- " Full Function Dental care unit
- " Totally self contained
- " Silent air compressor system
- " Two handpiece Automatic control
- " Individual handpiece pressure adjustment
- " Three way air/water syringe
- " Variable speed foot control
- " Built-in water system
- " On/off control for water system
- " Line pressure gauge with adjustment
- " Air regulator
- " Telescoping height adjustment from 22" to 34"
- " Formica work area 22" x 16"

Pac 1 Field Unit

- Steril-Vac assistant's instrumentation
- Adjustable height tripod
- Tool kit
- Carrying case 20" x 14.25" x 12.5" (508 mm x 362 mm x 318 mm)
- Manual control system for two handpieces
- Four individual holders
- Oil collection system
- Autoclavable syringe
- Wet/dry foot control with 4.5' (1372 mm) tubing
- Field repair kit
- Self-contained water system
- Anodized aluminum top
- Air filter regulator with moisture separator
- Washable tray holder pad
- Stainless steel instrument tray, 9.345" x 12.5" (248 mm x 343 mm)



a|dec®
 (800) 547-1883
 (503) 538-7478
www.a-dec.com

MDEC

mobile dental equipment corp

The Port-Op III is a 22-function portable dental operator that enables you to provide complete dental care in any location. At just 44 pounds and 1.1 cubic feet the unit is light and compact, having the highest function/cost and function/weight ratio available.

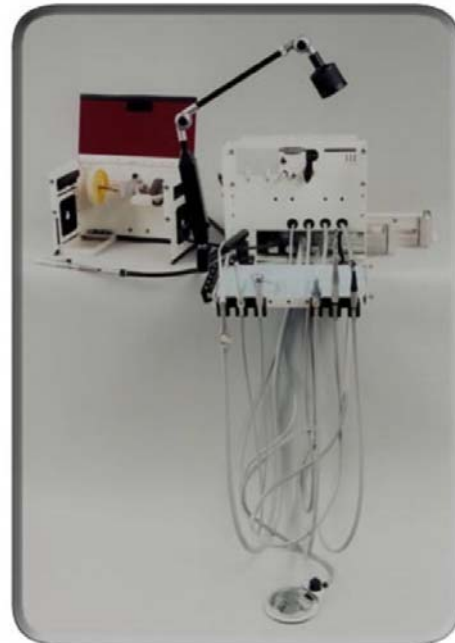
Because it has a built-in compressor, set up takes less than five minutes. All you need is a 110 or 220 volt power source or a 1 kW generator. The Port-Op gives you the same high-quality equipment you use in your office -- but with the durability to meet the demands of a mobile dental practice.

The built-in 1/2 hp compressor delivers 2.4 CFM and can maintain 40+ PSI for optimal hand piece torque. All hoses and attachments store conveniently in the unit. An airline moisture separator keeps air dry to preserve handpiece turbines. The pressurized water bottle with check valve and water filter and the large capacity vacuum reservoir hold enough water for a full day of restorative procedures.

The front face folds out to form a work shelf that holds tray set ups securely. Auxiliary hanger brackets attach to the work shelf and provide a convenient location for hand pieces

The Port-Op III is the only portable operator with a built-in dental laboratory containing a cable driven hand piece, amalgamator, buff wheel with arbor and removable tool rest. The laboratory also converts quickly to a portable darkroom. The Port-Op III dental operator is part of the M-DEC Integrated Portable Dental System which consists of the Port-Op, Port-XD portable dental X-ray and M-DEC Instrument/Supple Case.

PORT-OP III



M-DEC
1330 SE 30th Street
Suite 101
Bellevue WA 98005

800-321-6332
425-747-5424
www.portabledentistry.com





Model AEU-425CF
NSN: 6520-01-508-9583



- 3-way autoclavable syringe
- Autoclavable 30,000 RPM motor
- Accepts all E-type handpieces
- High & low volume evacuation
- Self contained water supply
- Self contained air compressor
- On/off foot switch
- High impact case
- Four ratio settings: 5/1, 1/1, 1/4, 1/16
- Piezo ultrasonic scaler
- Accepts 110V or 220V power source
- Optional power inverter with NATO connector allows Transport MDS to be operated from 24 volt military vehicle's power generation
- Optional version AEU-425CFH includes five handpieces

Aseptico's new lightweight Transport MDS Electric Military Field Dental System is a result of years of analysis, design, engineering and testing. The Transport MDS provides for a broad range of dental procedures to be performed in the field including general dentistry, oral surgery, endodontics and general hygiene.

www.aseptico.com
800-426-5913
425-487-3157



Model AEU-14CF



- AHP-72MBFO 5/1 Fiber-Optic Increaser Handpiece
- AHP-101 1/1 Straight Handpiece Handpiece irrigation system
- AE-200-30 30,000 rpm autoclavable micromotor with light & irrigation
- 3-way air/water syringe
- Integrated compressor for irrigation & syringe
- Operates from rechargeable battery packs, AC outlets, 12 or 24 V vehicle battery
- Battery packs recharged via solar panel (included), vehicle battery, or AC power source
- 120/220 V dual voltage
- Weighs under 25 lbs
- Dimensions: 16.2" x 12.7" x 6.5"
- Noise Level: 64 dB
- Water Reservoir: 16 fl. oz.
- Air Reservoir: 16 fl. oz.

In response to the Military's demand for an ultra lightweight emergency dental unit, Aseptico has developed the AEU-14CF Expedition Field Dental System.

Weighing under 25 pounds, the Expedition is light and compact enough to be carried in a backpack and deployed into the field of operation along with the medical support team.

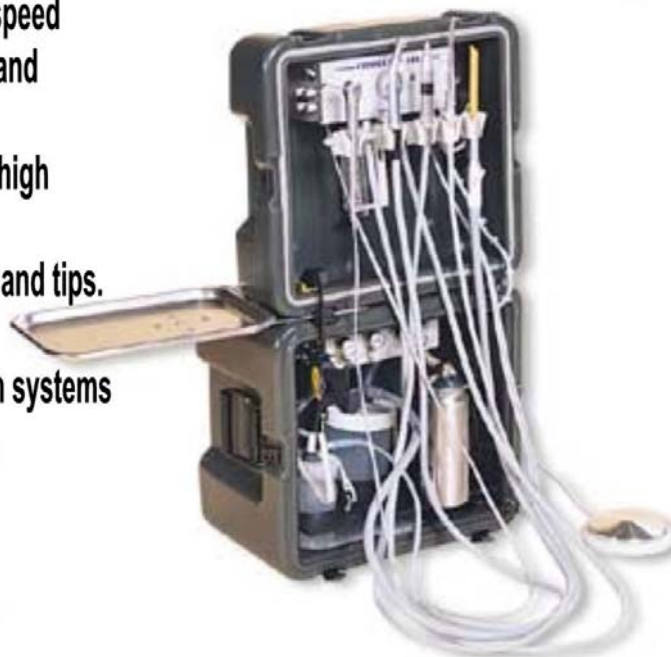
This unique electric dental system can be powered via AC power source, 12 or 24V vehicle battery, or from its two rechargeable battery packs. For maximum flexibility in the field, the battery packs may be recharged using the included solar panel, vehicle battery, or AC power source. Each battery pack provides power for approximately 20 patient procedures.

www.aseptico.com
800-426-5913
425-487-3157



**ADU-10CF
Command Air
Portable Dental Unit**

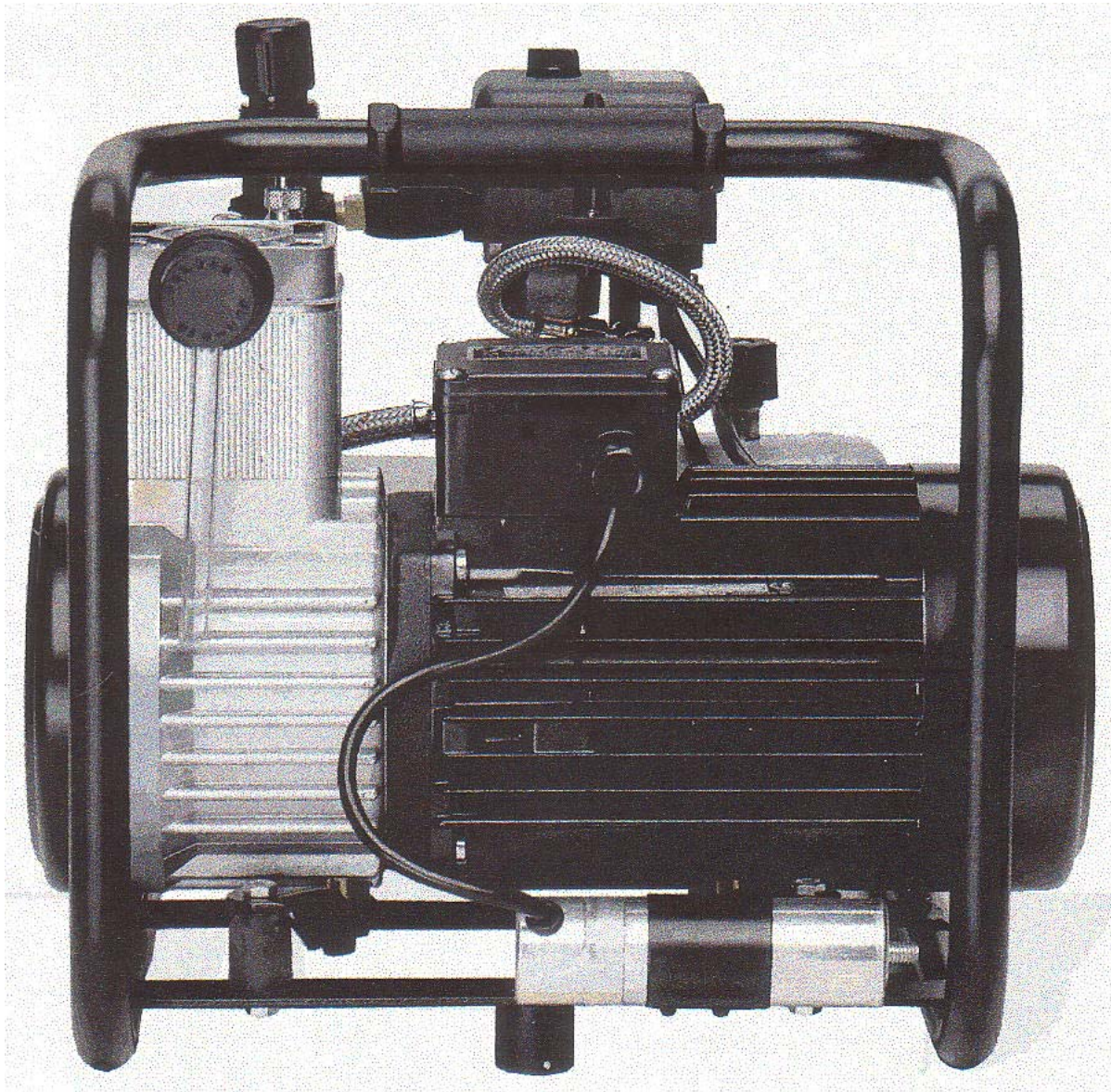
- Portable dental unit includes high & low speed handpiece controls with individual water and air coolant controls.
- KaVo Fiber Optic illumination system for high speed handpiece control.
- Three-way air/water autoclavable syringe and tips.
- Self contained water system.
- Automatic HVE and saliva ejector vacuum systems with auto float shut-offs.
- Removable stainless steel tray.
- Weight: 39 Lbs.
- Dimensions: 17.5" x 16" x 17", 2.75 Cu.Ft



***ADU-10CF Dental Unit and
AA-75CF Compressor have
been designed to function
as a complete system.
NSN: 6520-01-456-7170***

**www.aseptico.com
800-426-5913
425-487-3157**

NOTES



JunAir 600-4B portable oil-less compressor

B. COMPRESSORS (CRITERIA TO LOOK FOR IN A PORTABLE COMPRESSOR UNIT)

1. Your compressor should be lightweight, durable, and dependable. Its size and weight are important considerations if you are taking it on commercial airlines. The external dimensions of the carrying case cannot exceed 62" (H+W+L) unless you get special permission from the airline. For U.S. carriers total weight cannot exceed 50 pounds and compressors cannot contain oil for air transport. So, **Know Before You Go.**
2. The speed of recovery (SCFM) of the air volume to drive your dental unit is critical to your efficiency. The size of your motor and diameter of the compression piston or pistons are in direct relation to that recovery volume. You must have sufficient continuous air pressure at so many pounds per square inch (PSI) to drive your dental unit. (Altitude will affect your compressor.)
3. Tank size or residual air volume helps your compressor work more efficiently. A larger tank volume is helpful with smaller SCFM compressors so they cut on and off less frequently. A dentist uses his handpiece about 10% of the time. So, if you have a good-sized tank to store the air, the compressor can store air the other 90% of the time. Additional air volume can be added with in-line plastic bottles.
4. Quiet operation is certainly a factor if the compressor will be in the same room with you. You may need to carry an extension air line to set a noisy compressor outside the room or outside the building for quieter operation. Oil-less compressors are generally noisy.
5. The voltage of electricity needed to operate your compressor may be a factor. Compressors can be ordered in either 220V or 110V to match the current source. A few compressors will run on both 220V and 110V by flipping a switch or by changing the wiring diagram internally.
6. Be sure that your compressor has a heat protector switch to automatically cut it off. Fluctuation in the electric current can overheat the motor and ruin your compressor if it does not have this feature. Also, the multi-breaker protection will guard against low voltage or overload. The reset switch has been a valuable safeguard for us on many occasions where our electric power was not sufficient.
7. The carrying case for your compressor can be insulated to help reduce the noise. But heat buildup within the case is a concern if there is not enough venting for air to circulate.
8. Remember that compressors have a surge capacity to get them started. It takes more current to initially start them turning than to continue their operation. More than once we have found the electricity in other countries so weak it would not operate our compressor. Our lights would operate, but the compressor would not turn over to get started. If you use a generator for your source of electricity, be sure it is large enough to pull the load that your compressor will demand.

EXAMPLES OF PORTABLE COMPRESSORS

There are a number of portable compressors available on the market today for a wide variety of uses. Portable dental compressors are made for this specific purpose, but other small commercial compressors can also be used successfully. I have included some examples of dental compressors available through your dental supplier. These examples should give you a good idea of the specifications you should consider before purchasing your compressor. These examples are normally only large enough to supply one dental unit. If you plan to run two, three, or four portable operatories, a larger compressor would be needed. Otherwise a small portable compressor for each drill unit becomes necessary.

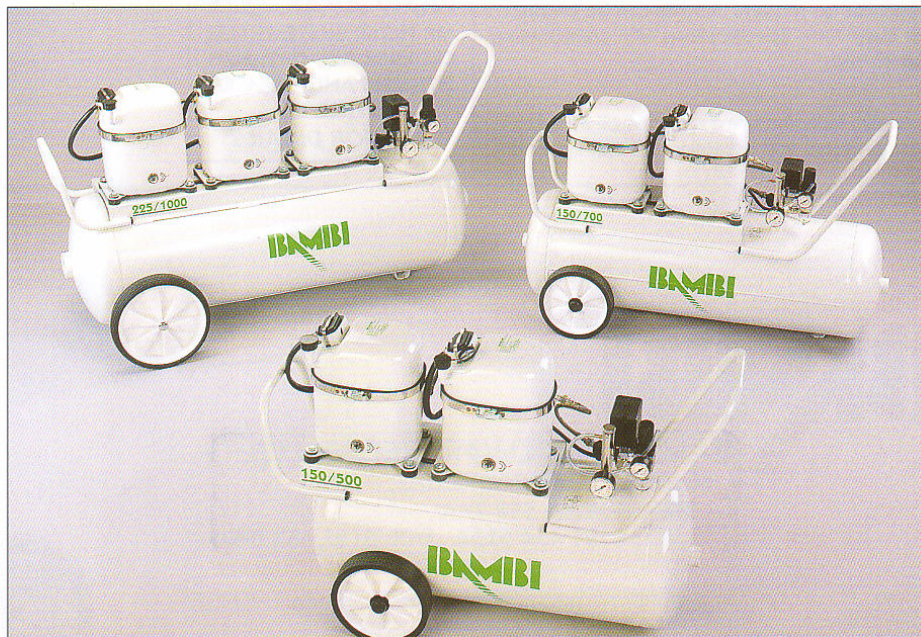
In the past I used an oil-less Aseptico $\frac{3}{4}$ -horse compressor in its own carrying case, with an air tank and pressure gauge built inside the case. They weigh about 35 pounds and pull 12.5 amps at 110V to run one operatory quite well. The compressor air line for the operatory unit, alligator clips into the female receiver on the side of the case. The pressure gauge is mounted on the compressor case near the female air hookup so that you can see the air pressure in the tanks. There is a water bleed-off valve, which should be used to drain your compressor tank periodically, especially in high humidity climates. Letting water build up inside the tank can cut down the air volume and add more weight to the compressor. Aluminum tanks are lighter and do not rust. Oil-less compressors are noisier to operate, but have a much longer duty cycle to build up air pressure than compressors with oil. Remember airlines will not permit a compressor with oil.

There are many compressor options on the market around the world. It would be advisable to check the electric current available in the country where you wish to work and match the compressor with the electric available there. Some countries have so much vacillation in the electric current, that it overheats the windings of the motor and will burn up a U.S. manufactured compressor. Sometimes the electric cycles are different (50 cycle versus 60 cycle). Also, know the amp draw of your compressor for the building you will work in. More than once we have not been able to run our portable compressors due to low amperage in the municipal electric lines. A standard breaker for homes in the US is 20 amp. It may vary in other countries especially if they use 220v current for all of their electric.



MEDICAL / DENTAL COMPRESSORS

- Ultra quiet in operation
- The only compressors of this type fitted with piston rings ensuring minimal oil carry-over
- Total reliability and quality
- Thermal and electrical cut-outs (safeguards)
- Fully guaranteed
- Easy to use
- No exposed moving parts

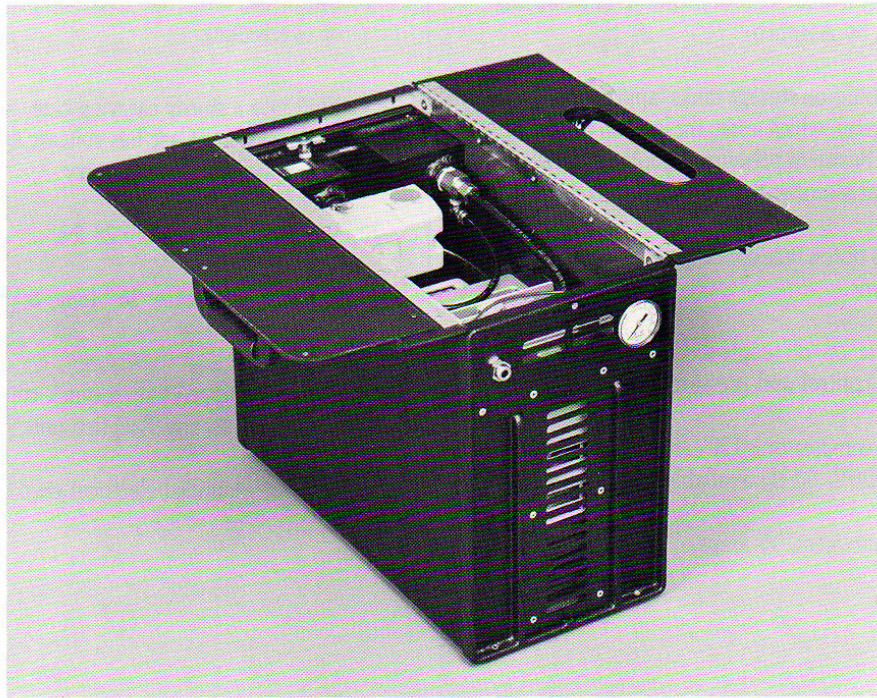


www.bambi-air.co.uk



AIRPAC COMPRESSOR

AA-74



OILLESS PISTON COMPRESSOR IN CONVENIENT CARRY CASE ONLY 28 LBS
IDEAL FOR OPERATING ASEPTICO PORTABLE UNITS

A STEP AHEAD

AIRPAC COMPRESSOR

AA-74
SPECIFICATIONS

1. The compressor motor is manufactured in the U.S. by a large compressor company. Parts and service are readily available. Modifications and housing prepared by Aseptico.
2. Includes built-on storage tanks (approximately .6 gal. capacity), which lessen the load on the motor, provide consistent pressure, smooth air flow and assure that motor will not be running constantly.
3. An oilless piston type compressor, driven by a 1/2 H.P. motor.
4. Automatic on/off control; automatic pressure recovery control and pressure switch.
5. Standard compressor is 120V, 60 Hz, 10 amps, 725 Watts. (220V, 50 Hz available upon request.)
6. Fuse requirement, 15 amps.
7. Air output is 2.2 CFM at 50 psi.
8. Motor has a thermal overload protector in case of overheating.
9. Built into a sturdy carrying case, which is a part of the system. Case has suitcase type handle on top, making it easy to carry.
10. Weight approximately 28 lbs.
11. Dimensions of case: 16" long, 8" wide and 14" high.
12. System equipped with a quick-coupler, for easy connection to any Aseptico unit.
13. Six foot grounded electrical cord supplied.



P.O. Box 3209
Kirkland, WA 98083 U.S.A.
Phone 206 881 3388
Telex 634412INTR



**Airpac II
Compressor
Model AA-98**

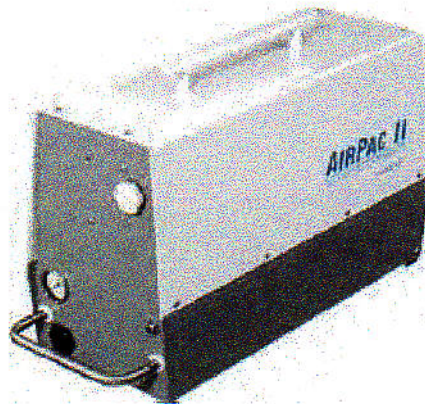
Oilless 3/4 horsepower piston compressor built into sturdy aluminum chassis. All the air delivery of the original Airpac compressor with improved cooling, air storage capacity, and lower noise level.

Integrated pull handle and wheels.

Dimensions:
8.5" x 12.75" x 21.5"
(22cm x 32cm x 55cm)

Weight: 41 lbs. (18.5 kg)

120V or 220V available (specify).

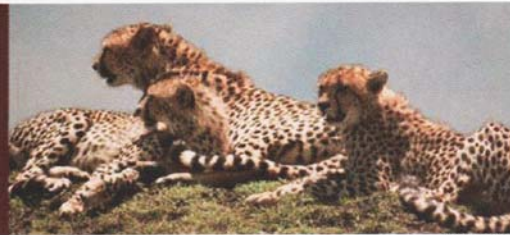




94D Des Entreprises Boul.
Boisbriand, QC J7G 2T3

Canada & US: 1 800 567 0013
Phone: 450 433 5754
Fax: 450 433 5987

Email: sales@safaridental.com
<http://www.safaridental.com>



SAF-700

COMPACT COMPRESSOR

(115 volts / 60 Hz) 1,995 \$ US
(220 volts / 50 Hz) 2,295 \$ US

Compact assembled hard case

Oilless pump, four stage pump

Air filter

Quick connect facilities

Ultra quiet silent pump

No noise even at proximity

Maximum pressure: 100 psi (7 bar)

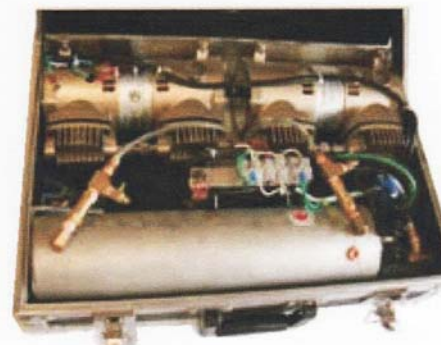
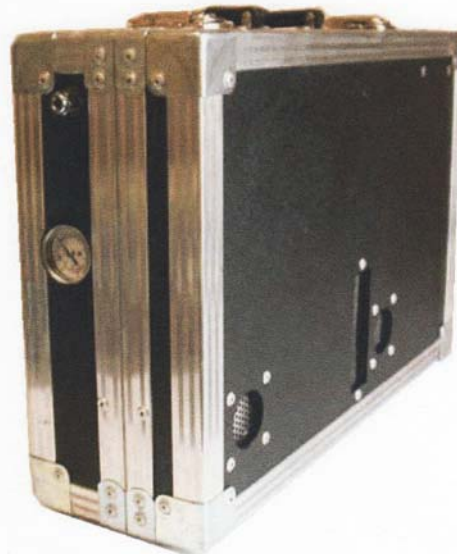
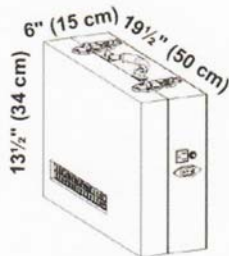
Flow: 3.2 CFM (90 L/min)

Noise level: 42Db

Air tank: 2.5 liters

Weight: 32 lbs (14.5 kg)

Dimension: 13.5" x 6" x 19.5" (34 x 15 x 50 cm)



BUILT-IN OPTIONS

Foldable hand truck with 6" (15 cm) wheels: 250 \$

One year warrantee on manufacturing defects

94-D, Boulevard des Entreprises, Boisbriand, Québec, Canada J7G 2T3

Tel: (450) 433-5754 Toll Free: 1-800-567-0013

PROAIR™

Portable Air Compressors

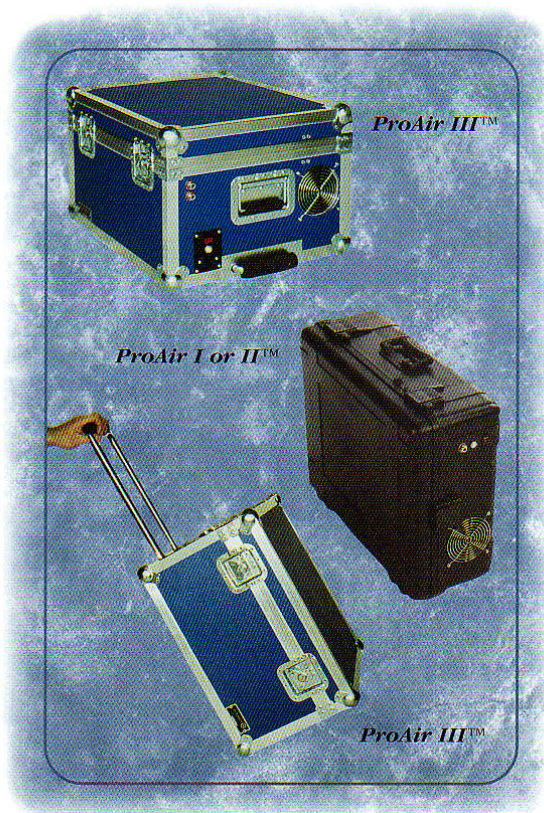


THE PROAIR SERIES OF PORTABLE AIR COMPRESSORS PROVIDES SOPHISTICATED AIR FLOW TECHNOLOGY AND INNOVATIVE DESIGNS IN SMALL, LIGHTWEIGHT CARRYING CASES.

FEATURES INCLUDE:

- ♥ *Rugged ABS/Polycarbonate and ATA style cases with padded carrying handles.*
- ♥ *Smooth-design cases for easy cleaning.*
- ♥ *Clean air supply that is moisture and oil-free.*
- ♥ *Quiet operation.*
- ♥ *Color-coded connections for easy identification, training and utilization.*
- ♥ *Hospital grade wiring.
NEMA type 5-15P plug.*
- ♥ *15 amp circuit protection.*
- ♥ *Custom configurations are available.*

ProAir and DNTLworks are trademarks of
DNTLworks Equipment Corporation © 1997



ProAir compressors, combined with any of the DNTLworks™ portable delivery units, allow the dental professional to easily service many sectors, as well as to back-up traditional operatories in case of emergencies.

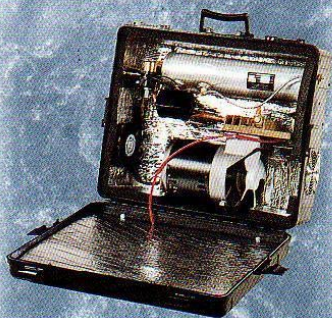
PROAIR™

Portable Air Compressors



DNTLworks™
Equipment Corporation

SPECIFICATIONS



*Low maintenance, oil-free
portable compressor.*



*ProAir compressor shown
with optional ProPak
delivery unit.*

ProAir I™

Case Size (L/W/D): 21.9" x 18" x 8.4"
Case Type: ABS Polycarbonate
Weight: 43 lbs
Sound Level: 52 dB
Working Pressure: 125 psi
Horsepower: 3/4 hp
Air Outlets: one
Flow Rate: 2.75 scfm
Air Reservoir: 1 gal
Power Supply: 115 vac or 220 vac
Current: 10.5 amps
Wattage: 830
Frequency: 60 HZ or 50 HZ
Type: Oil-free

ProAir II™

Case Size (L/W/D): 21.9" x 18" x 8.4"
Case Type: ABS Polycarbonate
Weight: 48 lbs
Sound Level: 40 dB
Working Pressure: 125 psi
Horsepower: 1/3 hp
Air Outlets: one
Flow Rate: 1.7 scfm
Air Reservoir: 1 gal
Power Supply: 115 vac or 220 vac
Current: 6.8 amps
Wattage: 825
Frequency: 60 HZ or 50 HZ
Type: Internally lubricated

ProAir III™

Case Size (L/W/D): 21" x 18" x 13"
Case Type: ATA
Weight: 55 lbs
Sound Level: 60 dB
Working Pressure: 125 psi
Horsepower: 3/4 hp
Air Outlets: two
Flow Rate: 2.75 scfm
Air Reservoir: 2.5 gal
Power Supply: 115 vac or 220 vac
Current: 10.5 amps
Wattage: 830
Frequency: 60 HZ or 50 HZ
Type: Oil-free

ProAir compressors, combined with ProPak™ delivery units allow the dental professional to easily service home-bound patients, nursing home residents, hospitals, missionary trips, veterinary clinics, as well as school-based sealant programs.

The ProAir I and ProAir III units have lightweight, oil-free compressors in rugged ATA style or ABS polycarbonate cases - ideal for applications where weight is an important consideration. ProAir II units have extremely quiet, internally lubricated compressors - ideal for applications where quiet operation is paramount.

Unlike other units, ProAir portable air compressors are specifically designed for dental applications. These provide clean, moisture and oil-free air, eliminating the worry of contamination.

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com

www.dntlworks.com



Scuba diving tanks can be used as a source of compressed air to run a dental operatory without electric.

ALTERNATE SOURCES OF COMPRESSED AIR

1. Compressed CO₂ will drive your portable dental unit just like a compressor, but without the noise. Note that you will need a special connector and regulator for the CO₂ bottle. A small "Charlie O" CO₂ bottle can be used for hospitals and nursing homes. It will drive your drill for a couple of hours on one small bottle. There have been teams who went to soft drink bottling companies in foreign countries and rented the large CO₂ cylinders that ran their drills for a week. The bottle should be upright so liquid CO₂ does not come through the lines. CO₂ is very cold when running a handpiece. It can create condensation and freeze up the handpiece in warm humid climates. Be cautioned, you cannot carry CO₂ bottles on an airplane.
2. A gasoline-powered compressor is an option when electricity is not available. One team purchased a new compressor in the country where they worked. They used it two weeks, then sold it before leaving for what they originally gave for it. For them, it was certainly not worth carrying a compressor overseas and back. A gasoline-powered compressor is very noisy just as a portable generator would be, so have a long extension air line to get it away from your operatory.
3. Maybe you can rent or borrow a compressor for the length of your stay in the country. This may be a cheaper alternative than purchasing a compressor. It is advisable to put an in-line filter on your air hose before it enters your dental unit to filter any potential oil or rust. A used or borrowed compressor may have contaminants in the tank that could ruin your handpieces. There are some very good, inexpensive air line filters available for \$18-\$35. Note the threads and size of orifice.
4. If you have a small compressor, but need more tank volume to give you necessary reserve, there are alternatives. Heavy plastic, 2-liter bottles (made by DCI) can be added along your air lines or a disposable 3 gallon aluminum Freon tank can be fitted to snap into the air line. There are any number of air tanks that can be added to your dental setup to increase the air volume available to your dental unit. Normally a dentist uses his handpiece 10% of the time, so by increasing the residual volume, you can run two operatories without overloading a small compressor.
5. Scuba tanks can be utilized to run your dental unit just like the CO₂ bottles, but a means of refilling the tanks should be convenient. One normally has to have a "SI" or Scuba International card to refill the tanks. Since the tanks are being used for other purposes, a "SI" card may not be necessary. You will need to purchase a special adaptor and high-pressure hose for your dental unit to fit the scuba tank.



Small CharlieO CO₂ tanks can run operator for two hours. They are ideal for treating one patient at hospitals or nursing homes.



Total system weighs less than 20 pounds.

MO 6910

Safari CO 2 Unit (carbon dioxide)

The alternative to electrical

Designed for ultra-light mobile dentistry
No need of: compressor
suction
electrical source

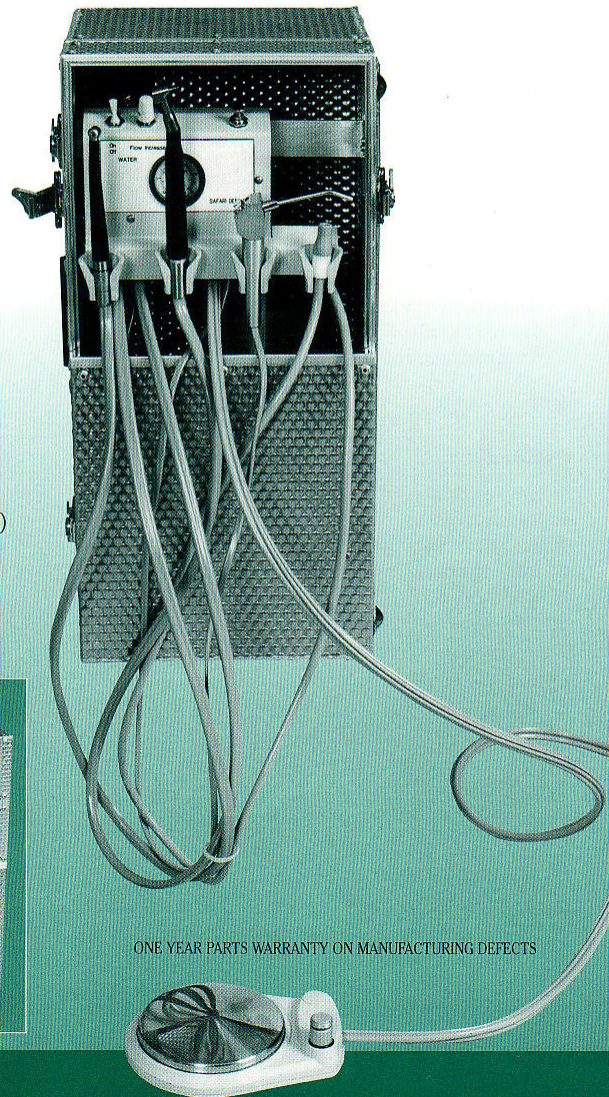
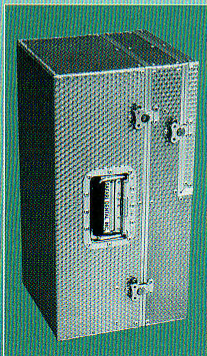
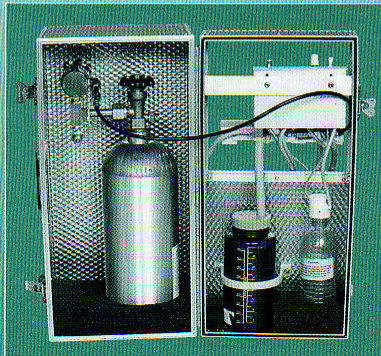
The Safari CO 2 unit is a self-contained portable dental unit that is powered by carbon dioxide.
The unit can also be used without the cylinder and connected to hospital air supply or linked to a small portable compressor.

Standard Features

- Heavy duty welded rigidized aluminum case
- Custom design
- 30 % lighter than laminated plywood
- 12 times more resistant to scratching and denting than flat aluminum
- Full TIG welded seams
- Mated aluminium valves complete with neoprene seal
- Recessed handles and latches
- Functionally designed cushioned interior
- Two handpiece control
 - adjustable air pressure
 - adjustable water flow
 - non-retracting; all aseptic tubing
- Air and water 3-way syringe with Q.D. autoclavable tip
- Clean water system – 16 oz (500 ml) clear reservoir
- Venturi suction with waste reservoir (1 Liter)
- 5 gal. CO 2 aluminum cylinder with "standard" CGA 320 valve
- Ultra-dry air
- Ultra high quality medical regulator
- Refill adaptor
- Dimensions: 9 1/4" x 10 5/8" x 19 3/4" (25.3 cm x 27 cm x 50 cm)
- Weight: 28.6 lbs (13 kg)

Optional

Extra cylinder with carrying case



ONE YEAR PARTS WARRANTY ON MANUFACTURING DEFECTS

SAFARI

Safari Dental Inc.

12265 Grenet St., Montreal, Quebec, Canada H4J 2J9
Tel.: (514) 336-1671 (1-800-567-0013 Canada and U.S.)
Fax: (514) 745-0217

NOTES

Water for Portable Dentistry



Doesn't every house have running water?





Multipurpose water sprayer tank for pressurized water source.



Umbilical lines to hookup water for three dental units.

D. WATER SOURCES FOR PORTABLE DENTISTRY (CRITERIA TO LOOK FOR IN YOUR WATER SOURCE)

1. Be sure that the tap water is safe to use where you set up the clinic and if not find a safe source of water. Most of the third world countries where we go do not have safe tap water, so we must obtain bottled water for our dental units. In the United States, we can hook up to any local municipal utility and be assured that the water is safe to use. But in third world countries, it may be necessary to boil the tap water before using it, due to contaminated municipal water systems. Rural areas may get their water from a well, the river, or even a pond. So ask if the water you have available is safe to drink or if it needs to be boiled.

We have set up clinics in countries where the people of the various communities could drink the water and not become ill, because their immune systems had adjusted to the microorganisms. Those villages believe their water is safe to drink and cannot understand Americans coming there and getting sick on the water. It is better to be safe than sorry.

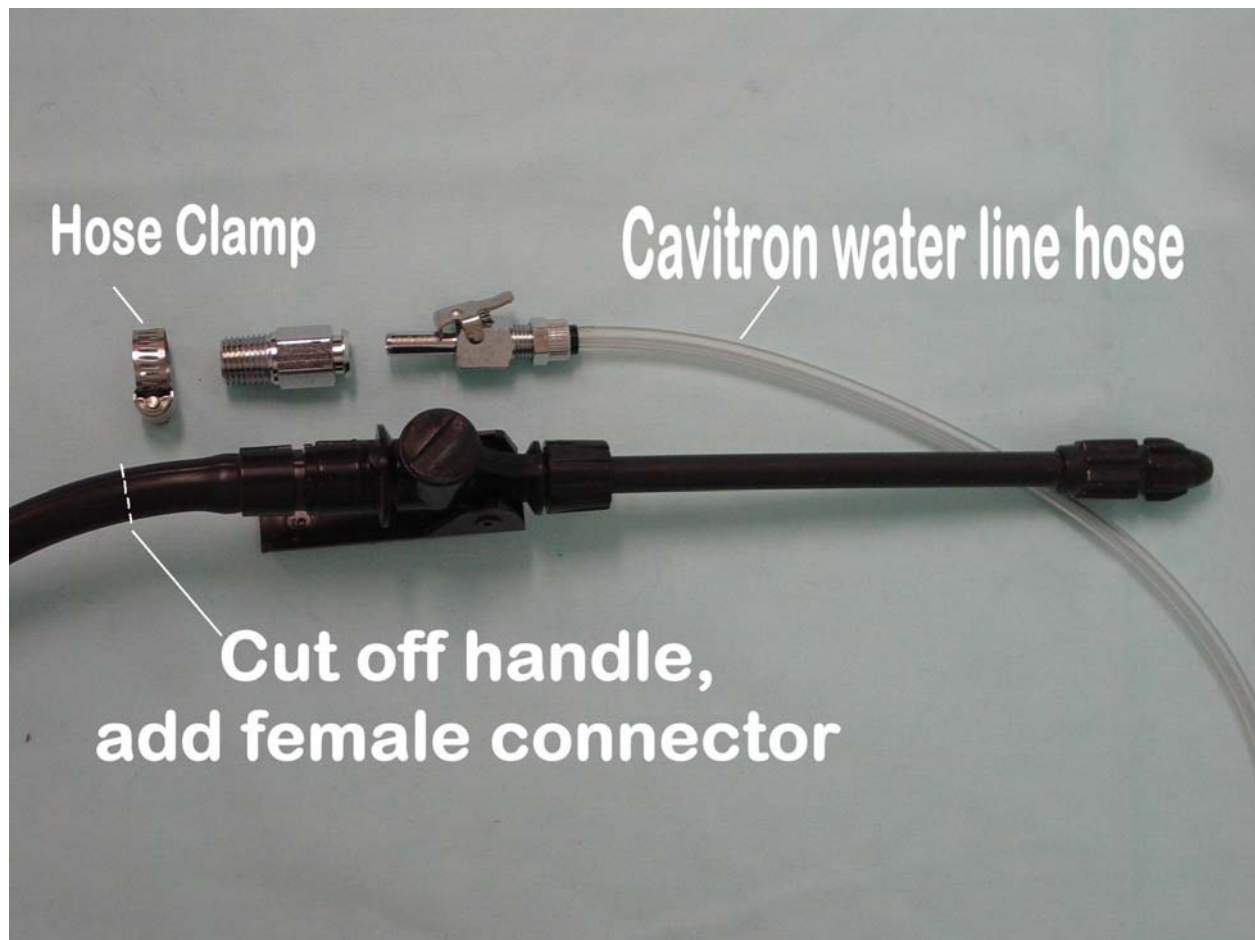
2. Use safe water in your portable dental unit water reservoir. Even though the local water could be used on the local people with no ill effects, your dental unit would be contaminated and need to be flushed and cleaned before using its water system again in another country on another project. For instance, the tuberculosis spore can remain dormant, but viable for three months. So always use safe, bottled, boiled or sterile water in your dental unit, which will not spread disease.
3. The tap water pressure must be adequate to use with your dental unit if it does not contain its own water system. Gravity flow systems (such as a water tank on the roof top) normally do not have enough pressure to be used effectively in the dental unit. Most portable units have a plastic or aluminum container for distilled water. The air pressure from your unit puts pressure (18-22 PSI) on that water reservoir for a pressurized source of water to the handpiece and three-way syringe. Be sure the pressurized container is sealed good after filling it each time with water.

4. Alternative sources of pressurized water can be used if your portable dental unit or Cavitron does not have its own water reservoir. A new plastic garden sprayer tank from any home and garden store will serve your purpose nicely. They come in one, two, three-gallon sizes but I would get the smallest size, so it is easy to pack. Just cut the spray handle off the end of its rubber water hose and push your specific dental quick disconnect fitting into the orifice of the rubber hose. Use a small hose clamp to secure the rubber hose around your dental fitting and screw it down snugly. This will give you safe pressurized water that will last for days. Simply pump the tank a few times and you will have plenty of water for your unit or Cavitron. Even a Volkswagen windshield wiper reservoir can be used and pumped up with a bicycle pump to provide the pressure. Many varied and innovative systems of pressurized water can be dreamed up. Just be sure that the containers are clean, free of any harmful substances, and that the water you use is safe.



INSTRUCTIONS FOR ATTACHING DENTAL FITTING TO SPRAYER

1. Cut rubber hose to remove handle with a nice right angle cut.
2. Slide small hose clamp onto rubber hose and leave loose.
3. Take female dental fitting and slide threaded end into hose.
4. Slide hose clamp down onto the end of the hose and over fitting.
5. Tighten hose clamp snugly over hose that covers threads.
6. There is no need for super glue or adhesive, hose clamp will seal it.
7. Add clean water to tank and pump up pressure.
8. Snap into dental unit or ultrasonic fitting.



NOTES

PORTABLE EVACUATOR UNITS



We forgot the portable evacuator – just spit on the ground.



Venturi suction system works on air pressure.
This suction weighs only 1½ pounds

E. EVACUATION SYSTEMS (CRITERIA TO LOOK FOR IN YOUR EVACUATION SYSTEM)

1. The simplest, high-volume portable evacuation system is the Venturi, which snaps into most good portable dental units. It has a plastic bottle that collects debris and fluids. The unit runs off of air pressure. Hampton Research manufactures this system, which is used on most portable dental units in the U.S.
2. Carrying a heavy electric motor driven suction unit around with you is not practical any more especially when you are trying to conserve weight and be efficient. I use to carry a fifteen-pound electric Pelvac with me everywhere in Mexico. But I switched long ago to the lightweight air driven Venturi system. Now Devilbis has a 4-pound, self-contained, electric suction that has its own battery pack inside the unit. It will recharge on 110V, 9V or 220V with an adaptor. The system will run approximately 3 hours on one charge. It takes 10-12 hours to recharge the unit.
3. When in dire need of a suction machine in a foreign country, you can build one from a vacuum cleaner or a shop vac. The principle is quite simple and depending on the suction of the vacuum cleaner, very powerful. You simply draw the vacuum through a large bottle that traps the debris and liquids. You need to obtain the proper hose to go from a collection bottle to patient with ends that are disposable or can be sterilized.



94-D, Blvd. des Entreprises
Boisbriand, Qc, Ca. J7G 2T3
Tel: (450) 433-5754
Canada & US : 1-888-541-8930
Fax : (450) 433-5987
sales@safaridental.com
www.safaridental.com



HVE Evacuator

699 US\$ (115V/60Hz)

749 US\$ (220V/50Hz)

Assembled aluminum case

Table top or floor unit

900 Watts vacuum power

Two stages

90 cfm / 22" Hg

Permanently lubricated bearing motor drive

Variable speed control (0 to 7.5 amps)

Asepsis tubing

One liter waste collection jar

Standard HVE valve with 5" tubing

Adaptor for saliva ejector

Noise level 69 Db

Weight: 16 lbs (7.27 kg)

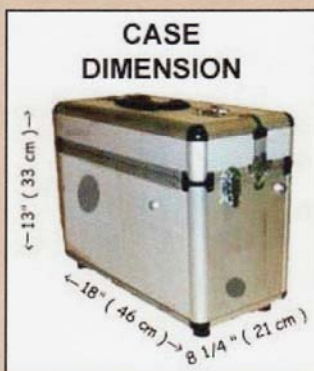
One year warranty on manufacturing defects.

Note: Air flow decrease 17% in 220 Volts / 50 Hz



BUILT-IN OPTIONS

- Over flow shutoff valve: 232 \$
- On-off foot-pedal: 115 \$
- Attached aluminum telescopic hand truck with 6" (15 cm) dia. wheels : 250\$





94-D, blvd. des Entreprises
Boisbriand, Qc, Ca, J7G 2T3
Tel: (450) 433-5754
Canada & US : 1-888-541-8930
Fax : (450) 433-5987
sales@safaridental.com
www.safaridental.com



PORTABLE HVE PUMP 2.6 CFM

(115 volts / 60 Hz) 1165 \$ US (Pilot case)
(115 volts / 60 Hz) 1115 \$ US (E case)

Assembled aluminium case with convertible chassis
Telescopic handle easy to remove
4 positions, height-adjustable handle for ease of use
Durable, rubberized wheels for easy rolling
Table top or floor unit
Oilless motor mounted rotary van
26.5" HG max. Vacuum, 2.6 CFM
3450 rpm (60 cycles)
2.2 amp
Waste receptacle: 1 liter
Valve and tubing: specify high or low volume
Low noise level: 46 Db
Weight: 22lbs (10kg)
One year warranty on manufacturing defects
Over flow shutoff valve

SAF-606 P or E



BUILT-IN OPTIONS

- On-off foot pedal: 115\$ US

Pilot Case



E Case: 9" x 10" x 14 1/2" (23 x 26 x 37 cm)



94-D, Boulevard des Entreprises, Boisbriand, Québec, Canada J7G 2T3

Tel: (450) 433-5754 Toll Free: 1-800-567-0013

PORTAVAC™

Portable Vacuum Unit



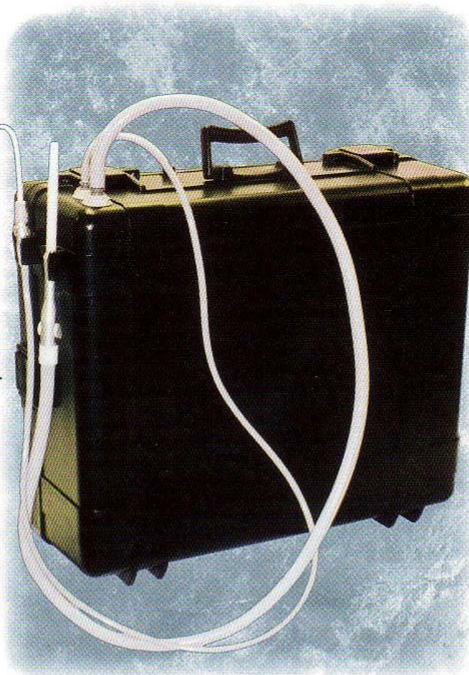
DNTLworks™
Equipment Corporation

THE PORTA VAC™ FROM DNTLworks EQUIPMENT CORPORATION PROVIDES A POWERFUL, QUIET, AND PORTABLE SOLUTION FOR EVACUATING WASTE MATERIAL DURING ANY DENTAL PROCEDURE.

In a world where portability is sometimes necessary, effective dental waste handling is essential, yet increasingly difficult. Asepsis concerns mandate proper waste collection and disposal, plus adequate power to aspirate all types of oral fluids and solids.

The Porta Vac from DNTLworks Equipment Corporation provides powerful suction capability in a compact, light-weight carrying case.

The Porta Vac is designed for rugged transport and is ideal for missionary work, hospitals, clinics, private home care, nursing homes, the military, and many more field applications.



FEATURES INCLUDE:

- ☛ Strong 1/3 hp vacuum motor
- ☛ Lightweight, one-piece design in impact-resistant case
- ☛ Dual hose design for H.V.E. and saliva ejector use
- ☛ Front mounted valve holders and controls for convenience
- ☛ Large waste container with automatic overflow shut-off
- ☛ 15 amp circuit protection
- ☛ Proudly made in the USA

Lightweight

Powerful

Easy to transport

Porta Vac is a trademark of
DNTLworks Equipment Corporation © 1998



DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com

PORTAVAC™

Portable Vacuum Unit



DNTLworks™
Equipment Corporation

SPECIFICATIONS

DIMENSIONS/WEIGHT

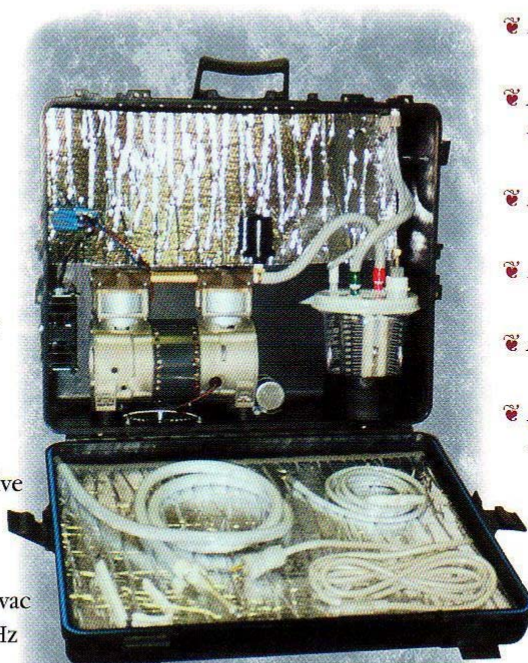
Length: 21.9" (55.6 cm)
Width: 8.4" (21.3 cm)
Height: 18" (45.7 cm)
Weight: 35 lbs (15.9 kg)

VACUUM MOTOR

Power: 1/3 hp
Vacuum Strength: 0" to 21" Hg
(adjustable)
Vacuum Flow: 4.6 cfm
Waste Receptacle: 1200 ml
Sound Level: 46 dB
Automatic Overflow Shutoff Valve

ELECTRICAL

Power Supply: 115 vac or 220 vac
Frequency: 60 Hz or 50 Hz
Circuit Breaker: 15 amps
Hospital Grade Wiring: NEMA Type
5-15P Plug



FEATURES INCLUDE:

- ♥ Hard shell integrated case
- ♥ Accommodates many brands of H.V.E. and saliva ejector tips
- ♥ Easy-reach front-mounted controls
- ♥ Large waste container
- ♥ Adjustable vacuum flow
- ♥ Hospital grade wiring with 15 amp circuit breaker protection
- ♥ Built-in carrying handle
- ♥ Small size for convenient storage
- ♥ Dual hose design
- ♥ Easy access through side door
- ♥ Automatic overflow shutoff
- ♥ Lightweight, but rugged

Lightweight

Powerful

Quick Set-up

Easy to Use

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com

PortaVac is a trademark of
DNTLworks Equipment Corporation © 1998





We have used a \$24.95 wet-dry utility shop vac for suction. They can be fitted with a plastic catch bottle, so liquids and solids do not come all the way back to the suction. It weighs 5 pounds and has awesome vacuum.



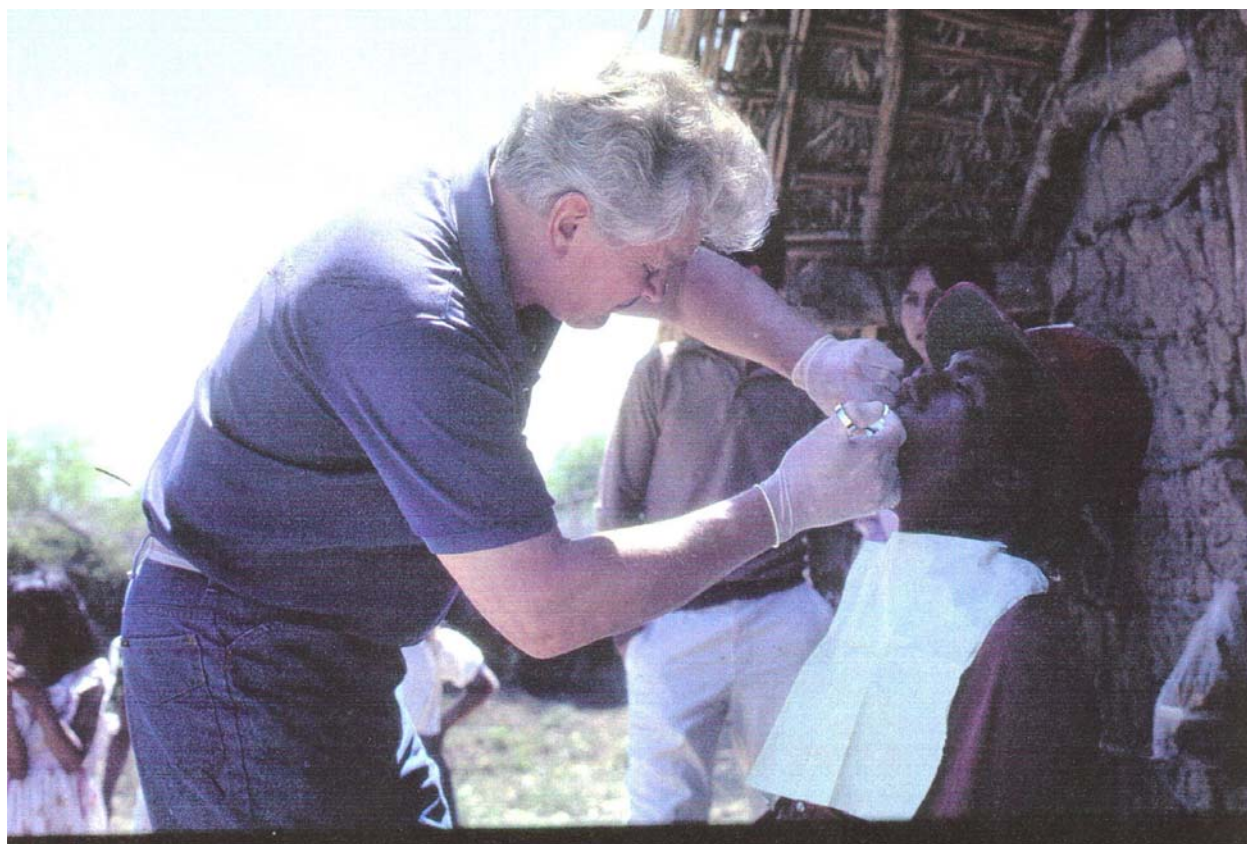
DeVilbiss portable suction unit with a dental evacuation hose.
DeVilbiss will run off 110V electric, auto plug or its own battery.
This self-contained portable suction weighs 8½ pounds.



American Dental Accessories Portable Vacuum

NOTES

PORTABLE DENTAL LIGHTS



And I thought if I worked in the sun I could see!
Now my aching neck is sunburned too.



Examples of various simple lighting systems.

F. Portable Operatory Lights

I have used most every light source you can imagine to do dentistry in remote locations. Adequate light is the first thing to look for, before starting to set up your portable dental equipment. Without adequate light, you cannot do your best. Always look for a window, door, skylight, or natural source of light if there is not good lighting in the building where you must work. On one trip it was necessary to pull several sheets of tin off the roof of the building where we worked to let light into the room. Many times we have worked outside in the open, because it was too dark in the mud huts of a village. Here is a list of some of the many portable light sources you can use, but certainly use your own judgment as to what you would prefer.

1. Portable operatory lights such as Aseptico have high intensity bulbs, fold down tripod stand, and case. These are great to work with. Note they come in 110 or 220 volt.
2. A Sunnex Gooseneck Dichromic Light is the operatory dental light we now carry with us. It comes in either 110V or 220V electric current and has several different configurations, depending on the country or type of portable operatory you use.
3. The Rolex portable light with flexible neck can attach by a hose clamp to your dental chair and it works well.
4. Goodlite and Aseptico Uniglo lights (110V) have a headband to hold them on your forehead. These lights focus and give good intensity. Some operators do not like the dangling wires or the necessity to position their head for the sake of the light. Most hunters' lights do not have a focus on them and the light is less intense with a dark spot in the middle of the beam.
5. The Top spot flashlight/headlamp with Krypton bulb works for three hours on 4 AA batteries. I carry these for my ace in the hole when I need an intense light for a root tip or really good focused light. The lens tilts and focuses the powerful small light. You can use it like a flashlight or unsnap the handle and use it around your head--which is the way I use it when I need both hands and a good light.
6. The Welch Allen battery powered DenLite mirror has been very convenient to use on the field. The rechargeable battery pack will go all day on one charge. It can be used with the disposable mirror or without the mirror as you would a penlight.

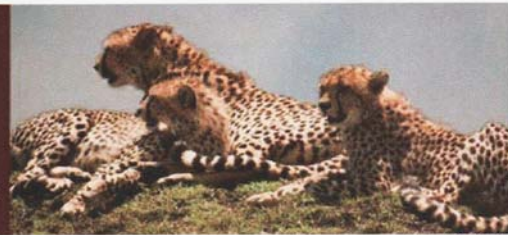
7. The Vortex light uses 4 AA batteries and has a krypton bulb. It is waterproof and is designed as a headlight in an unbreakable case. The Vortex gives a solid light in the center of its beam with a small focus knob adjustment.
8. Flashlights come in many shapes and sizes. We always pack several 2 D-cell flashlights with extra batteries and bulbs everywhere we go. I like flashlights that have a head that rotates 90°. It is much easier for your helper to hold.
9. Fiber optic light from your dental handpiece is good if you have a good stable source of electricity to do operative. It is not very practical to use for exams, extractions, and some other aspects of portable dentistry.
10. Reflected sunlight from a mirror helped me one time when my flashlight batteries were low and I needed good intense light into a socket. Position your assistant with a face mirror to reflect the sun's rays into the mouth—it's a trick. But, in a pinch it can bail you out of a tight spot. If the sun is too intense, you can adjust the surface of the mirror to lessen its efficiency and disperse the light rays to your satisfaction. Don't use this except in a special situation, because it could harm your eyes if the sun's intensity is too great.
11. Portable DC power lights and battery-operated lights, which can operate off of an automotive battery, are good. I have seen foreign dental units, which have an automotive headlight for the operative bulb. (You can make one quite easily also.) You can make your own operatory light in a foreign country with an auto headlight and its metal housing. Attach it to a flexible support and run automotive wire for the leads to a 12 Volt battery. You can also put an on/off switch in line near the light for convenience. (Be careful, they get hot!)
12. Butane, white gas, coal oil, or kerosene do not give a quality light or the good focus you need. But, in a pinch they can supplement a flashlight.



94D Des Entreprises Boul.
Boisbriand, QC J7G 2T3

Canada & US: 1 800 567 0013
Phone: 450 433 5754
Fax: 450 433 5987

Email: sales@safaridental.com
<http://www.safaridental.com>



SAF-330-110

Halogen Light

(110 volts / 60Hz) US \$ 355
(220 volts / 50hz) US \$ 380

- Hospital grade Halogen diagnostic light
- Easy on hand positioning
- Narrow beam of concentrated light
- 2" (5 cm) diameter
- 60% heat dissipation through the back of the lamp
- Double chamber reflector, fixed focus
- Bulb breakage protection (protection shield)
- Heavy duty flexible gooseneck
- Flexible 30" (76 cm) (adds to extension arm)
- Color temperature: 3000 degree Kelvin
- Illumination area: 2.5" (6cm) diameter at 24" (61 cm)
- 1100 foot candles intensity
- Low voltage transformer: 12 volts
- JC 12 volts 20 watts bulb
- Weight: 6.1 lbs (2.8 kg)

Options

- Replacement bulb: (SAF-300B) US\$ 20
(1000 hrs average)
- Aluminium carrying case: (SAF-300C) US\$ 40
5 lbs (2.27 kg)
- Mobile 5 wheel base: (SAF-320) US\$ 127
- Mobile base carrying bag: (SAF-320B) US\$ 95
20" x 20" x 4" (57 x 57 x 10.2 cm)

**One year warranty on manufacturing defects
(Bulb excluded)**

Note: The right & left supports are already mounted on Safari Compact Chair



20" x 20" x 4"
(57 x 57 x 10.2 cm)



13" (33 cm)
18" (46 cm)
5 3/4 (15 cm)



Luminaire size: 2 1/2 (6cm) diameter

94-D, Boulevard des Entreprises, Boisbriand, Québec, Canada J7G 2T3
Tel: (450) 433-5754 Toll Free: 1-800-567-0013

(Version 1.0 June 1st, 2007)



94D Des Entreprises Boul.
Boisbriand, QC J7G 2T3

Canada & US: 1 800 567 0013
Phone: 450 433 5754
Fax: 450 433 5987

Email: sales@safaridental.com
http://www.safaridental.com



SAF-300-110

Reflected Light

(110 volts / 60Hz) US \$ 695
(220 volts / 50hz) US \$ 725

Real reflected dental operatory light
Provides deep oral cavity viewing
Clinical performance 12 volts 55 watts
Dichroic coated glass reflector:
6 1/2" X 5" (17 x 13 cm)
Reflected light: 100% patient comfort
Glare free illumination
99% heat dissipation through the back of the lamp
Adjustable focus
Bulb breakage protection: Protection shield
Flexibility: Sleeved gooseneck
Drift-free positioning: Heavy duty gooseneck
Color temperature: 4500 degree Kelvin
Ideal color matching
Illumination area: 3 1/2" X 7" (9 x 18cm) at 28" (70cm)
Intensity: 24,000 LUX
Low voltage transformer: 12 volts
Bulb: H3 12 volts 55 watts
Weight: 7.5 lbs (3.4 kg)

Options

Replacement bulb: (SAF-300B) US\$ 20
13"x18"x8 1/4" (33x46x21)cm
Aluminium carrying case: (SAF-300C) US\$ 95
5 lbs (2.27 kg)
Mobile 5 wheel base: US\$ 127 (SAF-320)
Mobile base carrying bag: US\$ 95 (SAF-320B)



Note: The right & left supports are already mounted on Safari Compact Chair



20" x 20" x 4"
57 x 57 x 10.2 cm

**One year warranty on manufacturing defects
(Bulb excluded)**

94-D, Boulevard des Entreprises, Boisbriand, Québec, Canada J7G 2T3
Tel: (450) 433-5754 Toll Free: 1-800-567-0013

(Version 1.0 June 1st, 2007)

PROBRITE™

Dental Operator & Headband Lights



THE PROBRITE™ SERIES OF DENTAL OPERATOR AND HEADBAND LIGHTS COMBINES POWERFUL, LONG-LIFE HALOGEN BULBS IN A VARIETY OF STYLES AND MOUNTING CONFIGURATIONS.

ProBrite lights provide the healthcare professional with the perfect solution for difficult lighting requirements.

The ProBrite series includes direct-beam halogen bulb lights, fiber optic light transmission units and two types of headband lights.

FEATURES INCLUDE:

ProBrite Halogen Lights

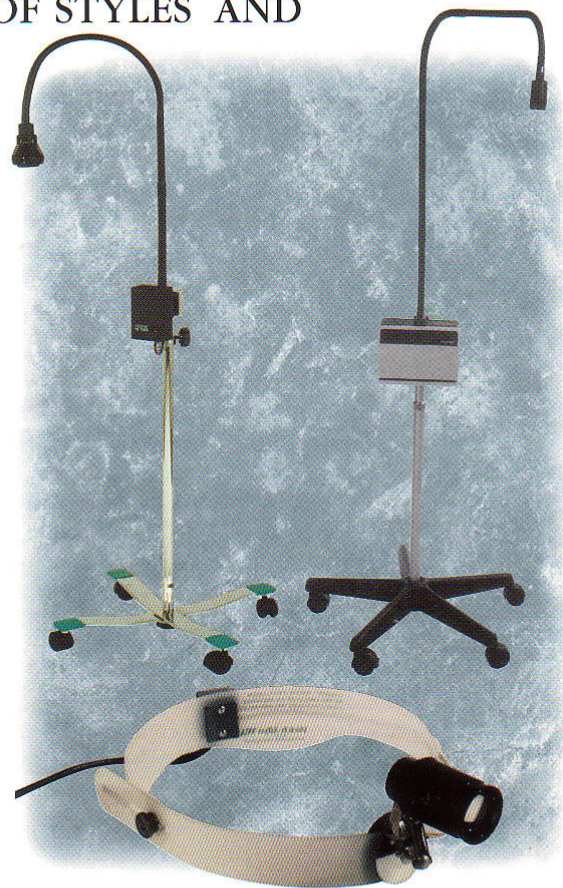
- ☛ *Strong, flexible arm remains stationary where required.*
- ☛ *Bright, even illumination.*
- ☛ *Unobstructed view of field.*

Fiber Optic Lights

- ☛ *Focusing, heat-free lamp.*
- ☛ *Slimline, adjustable head.*
- ☛ *Optional rugged, padded canvas carrying cases.*

Headband Lights

- ☛ *Wall plug-in or battery powered models.*
- ☛ *High quality, intense halogen illumination.*
- ☛ *Powerful, lightweight, comfortable, and easy-to-use.*



*Powerful
Lightweight
Packable
Transportable*

ProBrite is a registered trademark of
DNTLworks Equipment Corporation © 1997

PROBRITE™

Dental Operatory & Headband Lights

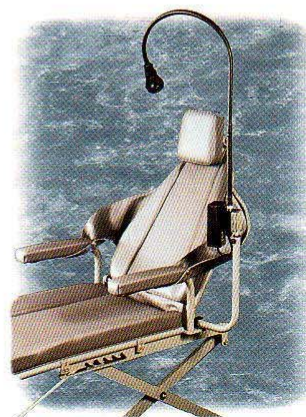


DNTLworks™
Equipment Corporation

SPECIFICATIONS

MOUNTING OPTIONS

- ☛ *Wheeled floorstand*
- ☛ *Chair-mount*
- ☛ *Tripod stand*
- ☛ *Surface mount*
- ☛ *Post mount*



HALOGEN

ProBrite™ Halogen Lights come with a high-quality 40 inch (101.6 cm) flexible gooseneck and 78 inch (198.1 cm) power cord. Lightweight construction, weighs 6 lbs (2.7 Kg).

FIBER OPTIC

ProBrite™ Fiber Optic Lights come with a high-quality 34 inch (86.4 cm) flexible gooseneck and 78 inch (198.1 cm) power cord. The focusing sleeve adjusts the spot size from 4 inches (10.2 cm) to 10 inches (25.4 cm) at a distance of 16 inches (40.6 cm).

HEADBAND

ProBrite™ Headband Lights have an adjustable focusing lens with an articulating mount on a comfortable, soft plastic, adjustable headband.

Headband lights come in battery operated or wall plug-in configurations.



Note: All lights are available in either 110 volt or 220 volt models and include various plug options for international electrical requirements.

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com





ASEPTILIGHT

ALU-29

2000 Candle power Halogen light



*Free standing, post, ceiling or wall mount available upon request
Stand model comes in convenient carrying case. Excellent unit for all portable situations.*

A STEP AHEAD

ASEPTILIGHT

ALU-29

SPECIFICATIONS

Supplied standard for 120V use. Available also for 220V; upon request.

Utilizes widely available standard long-life, 2000 foot candle FHX halogen, projector type bulb, that is easily replaced.

Operated by a single on/off switch, plus variable light intensity control.

For added safety, an easily replaceable 5 x 20 mm, 0.5 Amp fuse is used.

Standard ALU-29 is of floor stand type. The nonstandard mountings are available upon request. Following specifications apply to the floor stand model specifically, but also generally apply to the other types:

- **Telescoping main stem adjusts lamp height from 39 inches (99 cm) to 66 inches (168 cm).
- **"Horizontal" segment, which may be tilted to any angle and fixed in position, has an adjustable lateral reach of 11 inches (28 cm) to 21 inches (53 cm).
- **Top "horizontal" segment rotates fully and freely on main stem.
- **Gooseneck conduit permits light to be aimed in any direction desired.
- **Lamp lights an area about 8 inches (23 cm) in diameter at a range approximately 24 inches (61 cm).

The floor stand light folds compactly in seconds, fitting into its zippered vinyl carrying case, which is 44 inches (112 cm) long. The unit, in its case, weighs about 13 pounds (under 6 kg).



P.O. Box 3209
Kirkland, WA 98083 U.S.A.
Phone 206 881 3388
Telex 634412INTR



DIRECT-A-BEAM

ALU-27



HIGH INTENSITY HALOGEN LIGHT WITH ADJUSTABLE BEAM AND STAND
FOR OFFICE, OPERATORY, SATELLITE OFFICE or PORTABLE SITUATIONS

A STEP AHEAD

DIRECT-A-BEAM

ALU-27
SPECIFICATIONS

The ALU-27 light operates on 120 volts, providing 2000 foot candles. Utilizes a high powered, high intensity halogen multi-mirrored lamp, which is a standard G.E. ESH, with long life bulb.

Also available for 220V upon request.

The light should be used at a minimum of 2' from the patient. At this distance, beam is adjustable from 1" to 8" diameter. Light can be directed into oral cavity; no glare in patient's eyes.

Ceiling mount, wall mount, post mount or portable stand models are available.

Stand specifications, floor stand type (mounted type similar):

- **Telescoping main stem adjusts lamp height from 39 inches (99 cm) to 66 inches (168 cm).
- **Horizontal segment, which may be tilted to any angle and fixed in position, has an adjustable lateral reach of 19 inches (46 cm) to 40 inches (96 cm).
- **Top horizontal segment rotates fully and freely on main stem.
- **Gooseneck conduit permits light to be aimed in any direction desired.

The stand model folds up into small convenient vinyl carrying case—45" long x 8" wide x 5" deep; weighs only 9 lbs. (4 kg)

Fig. 1

- 1) Beam adjustment
- 2) Bulb access screws
- 3) On and Off switch
- 4) Adjustment for light intensity

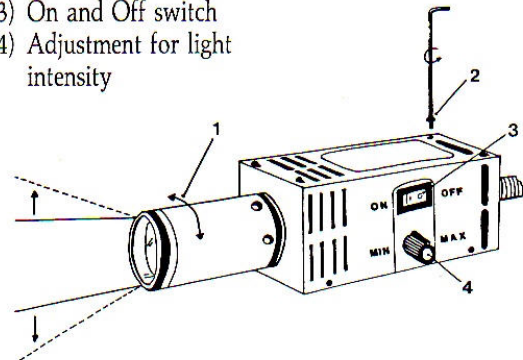
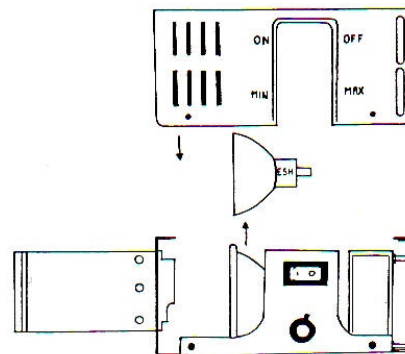


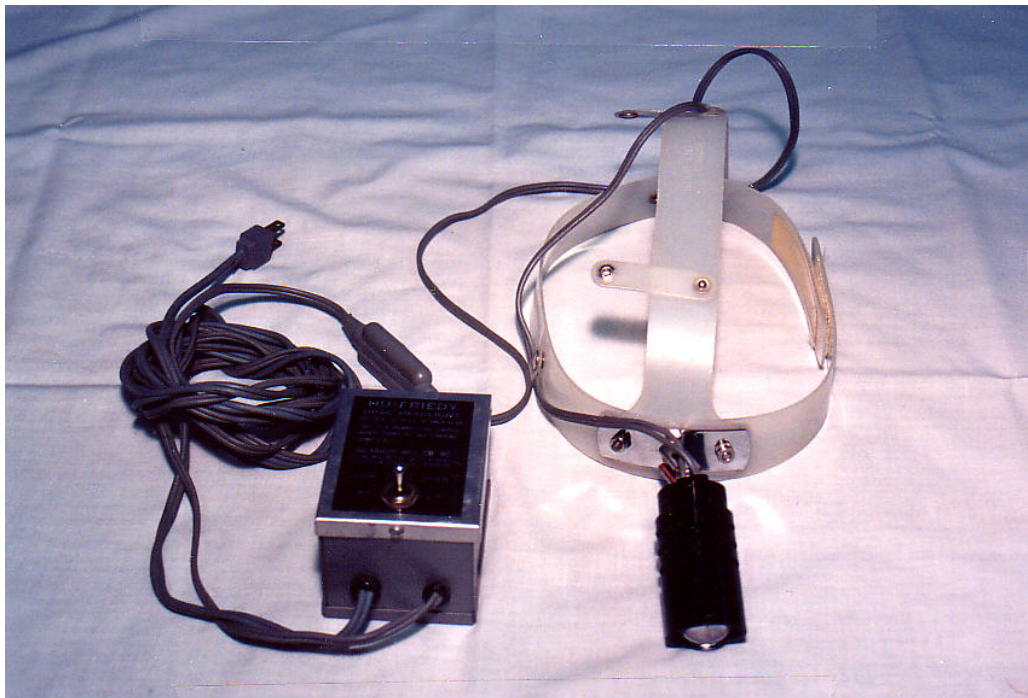
Fig. 2 Bulb Replacement

To change bulb, simply unplug from power source, remove the eight socket cap screws with the allen wrench provided. Remove cover and lift out bulb. Replace with new bulb.



ASEPTICO

P.O. Box 3209
Kirkland, WA 98083 U.S.A.
Phone 206 881 3388
Telex 634412INTR



Vortec Headlamp

NOTES

Portable X-Ray Systems



Is our patient sure there were 16 decayed roots?
So far, I've only found fifteen.
That last one looks like a good tooth!

G. Portable X-Ray Units

1. Aseptico ARU-OS comes in three cases weighing 13, 16, and 31 pounds or 60 total. There is an optional step down transformer for 220V and cart stand on wheels, which gives it height and mobility.
2. Phillips Oralix 65 comes in one case, weighs 67 pounds and operates on 110V current. It has a tripod to mount the head on and to adjust the height.
3. MinXray.P200D comes in two cases and total weight is 25 pounds. It operates on 110V or you can special order one to operate on 220V.
4. M-DECs Port XD with Oralix 65 tube head and timer; the case serves as the base, operates on 110V and weighs 54 pounds in the case. There is no option for 220V.
5. DNTLworks™ Trophy 70 KVP, 8ma system is made for air travel on commercial airlines. This unit is designed for quick set up without tools and has optional hardside cases for transport. It weighs 53 pounds (head and stand).
6. Safari Portable X-Ray Unit.

H. Portable Dark Rooms

Portable dark rooms are on the market to compliment the portable x-ray units. Some examples are included in this section for your information. But you can make your own collapsible dark room with a black plastic bag and your Collits rapid chemicals. Even a photographer's film changing bag works well.

Also, there is a self-develop dental x-ray film that has small developing gel and fixing gel pouches attached to the side of the film packet. You squeeze the developing gel into the x-ray film packet after the x-ray is taken wait 30 seconds and squeeze the fixing gel into the film packet. This gives you an immediate radiograph for quick diagnosis. The radiograph can only be read for 6 to 8 minutes before the quality (definition) begins to deteriorate. These were used in the Desert Storm Operation and are still available as of this writing.

I. Lap Top Imaging Portable

Lap top computers have ushered in the digital age for portable dentistry. Systems are now available to carry on the field using a portable x-ray unit and special lap top computer, which have a capture module with USB port and several x-ray film modules. The film (size 0,1,2,3) module is placed in the patient's mouth, the x-ray taken as normal, and an immediate readout comes up on the lap top computer screen. A much lower dose of radiation is used for the digital system and the x-ray image on the lap top screen can be enhanced, color graphed, or reverse contrasted with a few keystrokes by the operator.



- High-frequency, constant-potential x-ray generator provides constant radiation output, reducing skin dose to the patient relative to traditional half-wave (AC) generators.
- Ease of operation - Fixed high voltage (60kV) and Current (2.3mA) - the only operator input is the exposure time.
- Very lightweight - less than 9 lbs (4kg) and provides complete flexibility and convenience to move from chair to chair throughout the office.
- Compatible with both film and digital imaging systems.
- Operator Protection - External backscatter shield and internal radiation shielding protects the operator from radiation exposure.
- The ARU-06CE system includes two rechargeable battery packs, backscatter shield, battery charger, transport case, and NOMAD x-ray.
- System is also available without the transport case and the option of a 220 volt battery charger.
- FDA Approved
- Optional stand with carrying case.

**NOMAD™ Portable Hand-Held X-Ray
Model ARU-06CE**



www.aseptico.com
800-426-5913
425-487-3157

Portable X-Ray Model ARU-01

- **Lightweight X-ray for dental field radiography.**
- **Weights 18 lbs.**
- **Simple to operate, requires standard 110-130V outlet.**
- **Has 63 KvP output at 12 MA.**
- **Comes with sturdy carrying case.**
- **Case weighs 13 lbs.**
- **220-230V available on special order**



X-Ray Stand Model ARU-01S

Economical one piece tripod stand. The x-ray head can be mounted on top of center post. Center post extends a maximum of 16".

The tripod weighs 7 lbs.

Optional accessory to ARU-01

**www.aseptico.com
800-426-5913
425-487-3157**

YEAR 2000
COMPLIANT

P200D MKIII

MINXRAY[®]

Portable Dental X-ray Unit*

■ Lightweight

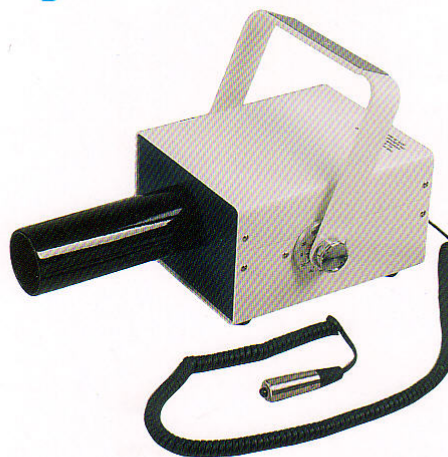
weighs just 18 lbs. (8 kgs).

■ Compact

Fits in carrying case
18" w x 16" d x 11" h
(46cm x 41cm x 28cm)

■ Powerful

63 kVp - 12 mA



The P200D MK III in an attractive lightweight unit used by practitioners worldwide.



By rotating the handle under the head, the unit can be quickly mounted to MinXray's X100S tripod.



After mounting, the unit is ready for use.

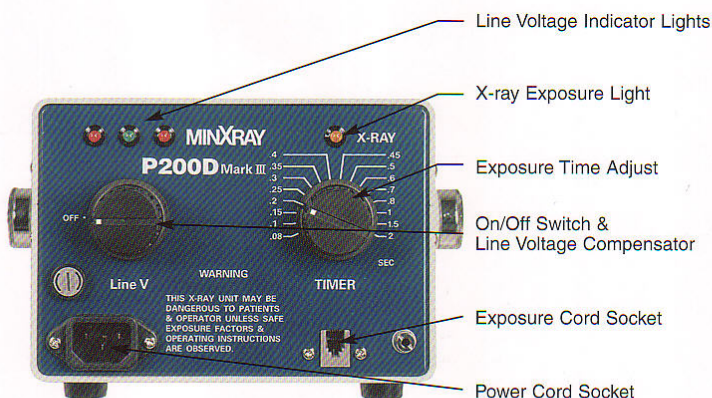
* Registered for human use with the U.S.A.
Food & Drug Administration (FDA)

MINXRAY[®] INC.

Unit Description

A lightweight rugged, truly portable x-ray unit for dental radiography, the P200D comes complete with a rugged carrying case. At 63 kVp - 12mA, the P200D has ample power. It plugs into a wall outlet and is simple to operate. Only two controls must be set: the line voltage

compensator and the built-in electronic timer. Consistent results are assured no matter where the equipment is used. The convenience of the P200D offers a new dimension to portable dental radiography.



Each P200D MK III comes complete with power and exposure cords, packed neatly in a convenient carrying case.

Specifications

P200D MKIII

Output	.63 kVp - 12 mA
Timer Range	.008-2.0 sec.
X-ray Tube	Toshiba D-082B
Focal Spot Size	.0.8mm
Total Filtration	.2.2 mm Al equivalent
AC Input	.110-130 V or 210-230 V (50/60 Hz)
Line Voltage Adjustment	specify voltage desired
Power Cord	.20 feet (6.1 meters)
Exposure Cord	.8 feet (2.44 meters)

Body Size	.5" H x 8.5" W x 9.5" D
	12.7 cm x 21.6 cm x 24.1 cm
Cone Size	.2" D x 6" L
	5.1 cm x 15.2 cm
Carrying Case	.18" W x 16" D x 11" H
	46 cm x 41 cm x 28 cm
P200D MKIII Weight	.18 lbs. (8.2 kgs.)
Carrying Case Weight	.10.5 lbs. (4.8 kgs.)

X100S

Maximum Center Post Height	.57.5" (146 cm)
Leg(s) Extension	.20" (51 cm)

Center Post Length	.21.5" (55 cm)
Weight	.7 lbs. (3.18 kgs.)

Ordering Information

P200D MKIII Portable dental x-ray unit complete per specifications above, with dental cone and fitted carrying case.

X100S Tripod Stand for P200D MKIII

For more information about Minxray products consult your local dealer:

MINXRAY INC.

3611 Commercial Avenue
Northbrook, Illinois 60062-1822, USA
847-564-0323
Toll Free 1-800-221-2245
FAX: 847-564-9040
Email: info@minxray.com
www.minxray.com

Specifications subject to change without notice.

© 1999 MinXray, Inc. All Rights Reserved 6/00 2978M

X100S Tripod Stand

A lightweight, portable, one piece tripod stand for the 110 or 200D MinXray units. The x-ray unit can mount on either the top or the bottom of the gear driven center post, and lock in any vertical position. Each of the three telescopic channel aluminum legs has two snap locks. Rubber feet prevent slipping.



Specifications

Leg Extension	24"
Center Post Extension	11½"
Maximum Height	56"
Minimum Height	20"
Focal Spot Height Adjustment	approx. 4" to 60" from floor
Weight	3½ lbs.

MinXray, Inc. is the largest supplier in the U.S. of portable x-ray units. Our equipment has been in use throughout the world for more than 20 years.

MINXRAY INC.

1732 Central Street
Evanston, Illinois 60201, U.S.A.
(312) 869-4321
Telex: 206101 KAYCORINTL EVN
Cable: MINXRAY

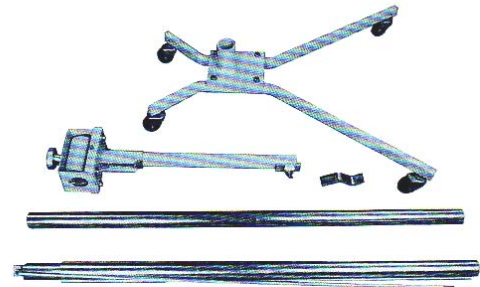
Specifications subject to change without notice.

**X200MS Mobile Stand
X100PS Portable Mobile Stand**

Two versions of the practical, economical mobile stand designed for the MinXray 110 and the MinXray P200D. Both models are the same size and wheel from room to room on four sturdy casters. Tube arm height is easily adjusted, too.

The X100PS portable mobile stand is easily assembled and disassembled without tools, and will fit in a car trunk when taken apart.

Mobility and portability make these two stands the clear choice at an economical price.



X100PS disassembled

Specifications

Overall Width of Base.	25"
Maximum Overall Height.	79.5"
Focal Spot Height	
Adjustment.	4.5" to 68.5" from floor
Weight.	35 lbs.

MinXray, Inc. is the largest supplier in the U.S. of portable x-ray units. Our equipment has been in use throughout the world for more than 20 years.

MINXRAY INC.

1732 Central Street
Evanston, Illinois 60201, U.S.A.
(312) 869-4321
Telex: 206101 KAYCORINTL EVN
Cable: MINXRAY

Specifications subject to change without notice.

MOBILE X-RAY

Model 5001 X-Ray and Mobile Stand



DNTLworks™
Equipment Corporation

THE UNIQUE DESIGN OF THE MODEL 5001 PROVIDES EASY PORTABILITY WHILE GUARANTEEING THE ABILITY TO PRODUCE QUALITY RADIOGRAPHS WITH HIGH RESOLUTION.

FEATURES INCLUDE:

- ♥ *Compact, modern tubehead produces sharp contrast for accurate diagnosis.*
- ♥ *Extra-length activator cord insures a safe operating distance.*
- ♥ *Telescoping upright post for height adjustment.*
- ♥ *Counterbalanced arm for stable positioning of the tubehead.*
- ♥ *Horizontal reach allows positioning for full-mouth radiographs.*
- ♥ *Wide-wheeled base for stability accommodates most brands of dental chairs and wheelchairs.*
- ♥ *Rolls easily through doorways and between operatories.*
- ♥ *Disassembles quickly into carrying cases for transporting or storage.*
- ♥ *Tripod stands available for field use.*



The Model 5001 is especially suited for mobile or portable applications.

DNTLworks is a registered trademark of
DNTLworks Equipment Corporation © 1997

MOBILE X-RAY

Model 5001 X-Ray and Mobile Stand

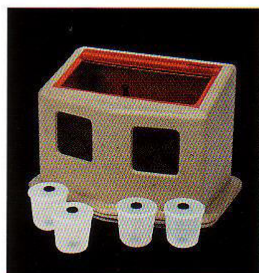


DNTLworks™
Equipment Corporation

PORTABLE DARKROOM MODEL 5110

The Insta-Veloper can be used chairside in an operator, or transported for field use. It produces diagnostic and archival quality x-rays in seconds without the need for electricity or plumbing.

Air-tight covers on the solution containers control oxidation of solutions and prevents spills during transport.



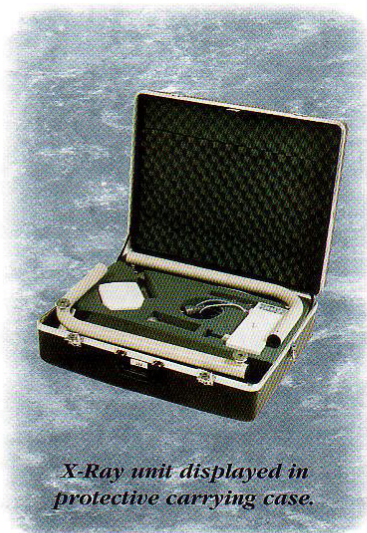
Wide amber viewing panel completely filters out normal office lighting and is effective with all brands of intraoral film.

SPECIFICATIONS

Developer, fixer and two rinse containers:
8 oz. (0.24 liters)

Dimensions: 15 3/4" (40 cm) L x 10 1/2" (26.7 cm) W
x 10" (25.4 cm) H

Weight: 5 lbs. (2.3 kg)



X-Ray unit displayed in protective carrying case.

SPECIFICATIONS

ELECTRICAL

Electrical: 99-125v/60 Hz
(220v/50Hz optional)
Timer: .05-.3.2 seconds
Accuracy: Greater of ± 35 ms or 10%
Tubehead: 70kvp $\pm 12\%$ @ 120 VAC
8 mA ± 1.5 mA @ 120 VAC
Focal Spot: 0.7 CEI
Duty Cycle: 1/75 second
Minimum wait time: 30 seconds
Radiation leakage: less than 100 mR/h @ 1 hour

COLLIMATOR

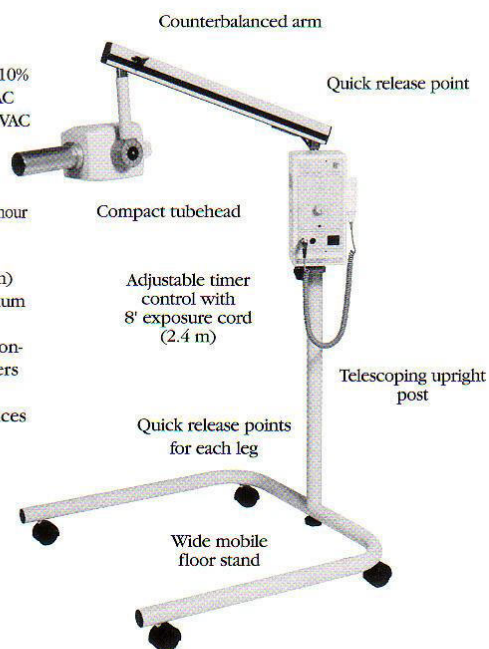
SSD (Source/Skin Distance) - 8" (20 cm)
Radiation field - 2'3/8" (60 cm) maximum
beam diameter at the distal end.
US/CDRH: The tubehead and time controller unit is listed with Underwriters Laboratories and conforms with requirements of the Center for Devices and Radiological Health.

MOBILE STAND

Outside base dimensions:
31" (78.7 cm) W x 31" (78.7 cm) L
Inside base dimensions:
27" (68.5 cm) W x 29" (73.7 cm) L
Telescoping height adjustment:
35"-55" (88.9 - 139.7 cm)
Maximum reach:
32" (81.3 cm) with cone

WEIGHT:

Tubehead: 15 lbs. (6.8 kg)
Control unit: 4 lbs. (1.8 kg)
Stand: 34 lbs. (15.4 kg)
Total: 53 lbs. (24 kg)



DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com

PORT-XD

M-DEC's portable dental X-ray, the Port-XD, gives you maximum portability as well as mobility. It is the first design to successfully permit ease of movement both within and between facilities, yet still enabling you to position the X-ray tubehead where you need it. Whether your patient is in a chair, wheelchair or bed, the Port-XD provides you with a stable platform and can be repositioned quickly and easily.

The XD uses an industry standard Trophy 70 KvP tubehead and timer. The unit is conveniently stored in a low profile, sturdy wheeled case when not in use. To set up, simply open the case, mount the included telescoping stand and arm to the external bracket and connect the X-ray tubehead and timer. The telescoping stand permits appropriate height adjustment, while the shock-mounted arm permits precision placement to accommodate your typical intra-oral imaging requirements.

The XD case also serves as the base for the modular portable dental system offered by M-DEC, which includes a portable dental operator (the PORT-Op III), and instrument case. The Port-XD allows maximum in-office mobility and ease of portability between locations - so store it away when not in use or take it with you on outside calls.

Weights 56 lbs

**Case dimension:
16.5" x 14" x 14.5"**



M-DEC
1330 SE 30th Street
Suite 101
Bellevue WA 98005

800-321-6332
425-747-5424
www.portabledentistry.com



New!

ARU-HF70D COMMAND AIR X-RAY SYSTEM

The ARU-HF70D is the latest in a series of technological advances for portable dental radiography. The high frequency, full-wave-rectified output, coupled with the close spacing of the electronic timer, make this an ideal unit for use with film and the latest in digital imaging systems. The x-ray unit, dental cone, power and exposure cords pack easily into the military spec. hard shell case.

- Output: 10mA @ 60, 65, 70 kVDC.
- Exposure Timer: 0.02 - 1.98 seconds, 99 steps
- Inverter Frequency: 70kHz
- Focal Spot: 0.8mm
- Available either 110-130v or 210-230v, 50/60Hz.
- ARU-01S tripod stores in vinyl carrying case.
- Comes with leaded scatter shield for safe hand held operation.

Dimensions: 17.5" x 16" x 17", 2.75 Cu.Ft.
(44.5cm x 41cm x 43cm)
Weight: 33lbs. (14.8kgs.)

NSN: Pending



ARU-01CF COMMAND AIR X-RAY SYSTEM

- 63 kVp @ 12mA output X-ray.
- Mil-spec. case with shock resistant foam insert.
- Available either 110-130v or 210-230v, 50/60Hz.
- Adjustable timer and line voltage.
- ARU-01S tripod stores in vinyl carrying case.

Dimensions: 17.5" x 16" x 17", 2.75 Cu.Ft.
(44.5cm x 41cm x 43cm)
Weight: 42 Lbs. (19kg)

NSN: 6525-01-468-1672



Toll Free - USA & Canada: 800-426-5913 International: 425-487-3157
Fax: 360-668-8722 Email: info@aseptico.com

INSTA-VELOPER PORTABLE DARKROOM

INSTA-VELOPER...A new age of flexibility and convenience in X-ray processing has arrived. The INSTA-VELOPER enables quality processing to be completed chairside, under normal office lighting, in just *seconds* with Insta-Neg and Insta-Fix. Strong and sturdy, with quality-designed features, the attractive INSTA-VELOPER guarantees many years of highly efficient, economical and dependable use.



INSTA-VELOPER PORTABLE DARKROOM



A DELUXE PORTABLE LIGHT-TIGHT UNIT FOR PROCESSING INTRA-ORAL DENTAL X-RAY FILM IN SECONDS, CHAIRSIDE, UNDER OFFICE LIGHTING!

- **NO HEATING OF SOLUTIONS REQUIRED!**
- **NO NEED FOR ELECTRICITY OR PLUMBING!**

EXPERIENCE A NEW FREEDOM AND CONVENIENCE IN X-RAY PROCESSING -

- ✓ **CUT ENDODONTIC AND ORAL SURGERY TREATMENT TIME DRASTICALLY**, by processing film chairside in less than 30 seconds...at normal room temperature!
- ✓ Free-up busy darkrooms and automatic processors. (Great as a back-up system, too!)
- ✓ Process X-rays in places where there are no processing facilities.
- ✓ **ECONOMICAL** - No large outlay for expensive equipment. Solutions, when not in use, stay fresh in sealed processing jars.
- ✓ **SIMPLE TO USE, DEPENDABLE** - Easy to clean, no moving parts to breakdown.

FEATURES OF THE INSTA-VELOPER:

EASY SEE-THROUGH (AMBER) LIGHT-FILTERING PANEL.

- Completely filters out normal office lighting.
- Lifts back for entry from above.

STURDY MOLDED STRUCTURAL PLASTIC BODY.

- Front of unit is contoured for normal arm positioning.
- Easy-entry hand holes are equipped with nylon reinforced neoprene rubber, which grips wrists gently, yet effectively prevents entry of light into unit.
- A Time/Temperature Processing Chart is printed on top of unit for quick, convenient reference.

DETACHABLE MOLDED STRUCTURAL PLASTIC BASE,* which has:

- Recessed retainers for four (4) processing jars.
- Recessed holding tray for clips, discarded film packets, etc.
- * The base fits snugly into the upper body but may be removed for easy cleaning!

ALSO PROVIDED WITH THE "INSTA-VELOPER" ARE:

- Developer and Fixer solution jars: each 8 oz. jar is equipped with an easy-to-operate hinged stainless steel closure which prevents oxidation of solution.
- Two Rinse Water jars: one between developer and fixer, the other for final rinse and film holding. Screw caps included for transporting unit.
- Set of four (4) non-skid fasteners for securing bottom of base to counter top to prevent slippage of unit, yet allowing easy removal for cleaning or use at another location.

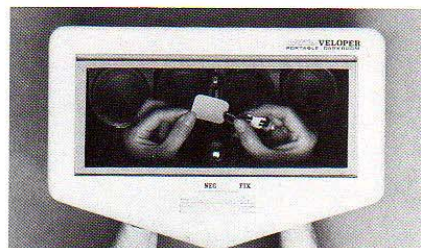
Overall Dimensions:

15 3/4" x 10 1/2" x 10" high

Available Colors:

IVORY or BROWN exterior finish.
(both models have brown interior)

All parts resistant to x-ray chemicals.



Complete processing, from removal of film jacket to final rinse, is performed within the light-tight unit. Top viewing panel lifts back for removal of processed film.

The INSTA-VELOPER was designed for use with our rapid processing solutions:

INSTA-NEG/INSTA-FIX [®]									
X-RAY PROCESSING CHART									
Temp.	18°	20°	22°	25°	27°	29°	C°		
	64°	68°	72°	76°	80°	84°	F°		
Develop	30	23	16	12	9	8	seconds		
Fix	60	45	30	25	20	20	seconds		

Instant Processing. Completely develop and fix X-rays in less than 60 SECONDS at normal room temperature! Extra-rapid 'working' films are processed in only 15-30 seconds. INSTA-NEG Developer gives both speed and quality with results equal to conventional processing. After the X-ray film is developed and immersed in water a few seconds it is ready for INSTA-FIX which **permanently** fixes film in 15-30 seconds. Archival quality film - **without** fading, browning or yellowing - is achieved following final wash.

Economical. Even if it takes weeks or months, with INSTA-NEG & INSTA-FIX 60-100 film can be processed per filling of the hermetic sealing containers in the INSTA-VELOPER. Solutions are pre-mixed, packaged in quarts and gallons.



Microcopy - MANUFACTURER & DISTRIBUTOR -
P.O. Box 3047
Kennesaw (Atlanta), GA 30144 U.S.A.

TOLL FREE 800-235-1863

In GA 404-425-5715

Telex: 6714320 MICRO

INSTA-MINI•TANX

INSTA-MINI•TANX...Never before has quality darkroom processing been so rapid, convenient, clean and easy...very economical too. Air-tight sealing keeps solutions fresh for maximum life. Just a lift of the cover for quality X-ray processing in *seconds* with Insta-Neg and Insta-Fix. The INSTA-MINI•TANX, a quality-made instant system, great for endodontics and emergencies.



INSTA-MINI-TANX



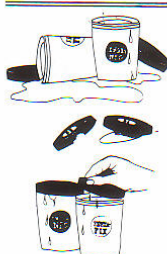
JUST A LIFT OF THE COVER!...for INSTANT x-ray processing that's QUICK, CONVENIENT, CLEAN & EASY!

The **INSTA-MINI-TANX** is specifically designed for instant "one-at-a-time" processing of intraoral film in your darkroom with **INSTA-NEG** & **INSTA-FIX** --- the film developer and fixer that "broke the time and temperature barrier!"

*Process up to four (4) x-rays at a time in the MINI-TANX with our unique "BW film clip" holder.

The compact **INSTA-MINI-TANX** neatly houses three (3) - 8 oz. tank-jars: developer, rinse water and fixer. **NO HEATING --- NO ELECTRICITY**. Simply place unit next to darkroom sink --- just a short reach away. (The **MINI-TANX** is also a great back-up to an automatic processor!)

The **Special Feature** is that when the **MINI-TANX's** cover is latched with one hand, 100% air-tight sealing of developer and fixer tank-jars is attained ---thereby, reducing oxidation and maximizing solution life. Even if it takes months, at least 60-100 films can be processed with **INSTA-NEG** & **INSTA-FIX**, because of this air-tight seal.



NO LOOSE SOLUTION JARS TO KNOCK OVER OR TO CLUTTER UP THE COUNTER!

NO WORRY ABOUT BROKEN CAPS OR DETERIORATED CAP LINERS THAT WON'T SEAL!

NO MESSY, TIME CONSUMING UNSCREWING AND SCREWING-ON CAPS BETWEEN PROCESSING!



Labeled 8 oz. tank-jars (approx. 2 1/2" diam. x 3 1/2" high) lift out for easy cleaning and refilling.

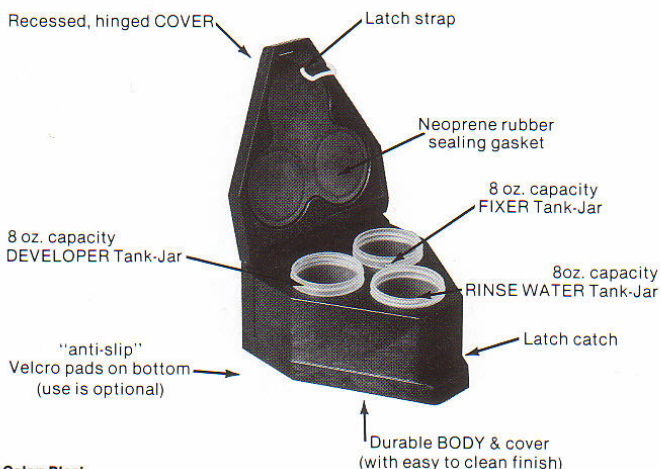
GREAT FOR ENDODONTICS --- ALL EMERGENCY TREATMENTS!

The **INSTA-MINI-TANX** was designed for use with our rapid processing solutions....

INSTA-NEG/INSTA-FIX® X-RAY PROCESSING CHART

Temp.	18°	20°	22°	25°	27°	29°	C°	F°
	64°	68°	72°	76°	80°	84°		
Develop	30	23	16	12	9	8	seconds	
Fix	60	45	30	25	20	20	seconds	

Completely develop and fix x-rays in less than 60 SECONDS --- at normal room temperature! --- x-rays that have excellent diagnostic quality with archival permanence. Extra-rapid "working" films are processed in only 15-30 seconds!



Color: Black
Overall Dimensions: 7 1/4" x 7 1/4" x 4 1/2" high (10 1/2" high with cover open)
All parts resistant to x-ray chemicals.



Microcopy - MANUFACTURER & DISTRIBUTOR.
P.O. Box 3047
Kennesaw (Atlanta), GA 30144 U.S.A.

TOLL FREE 800-235-1863
In GA 404-425-5715
Telex: 6714320 MICRO

Complete Film Replacement

Only Schick Technologies completely eliminates the need for film while offering imaging this superior, and options this comprehensive

The CDR® Single-user System

Full-featured and lightning fast, the CDR® System includes everything you need to provide the best in digital radiography to your patients.

- CDR® for Windows® software
- One APS sensor
- USB interface
- Premium Dell® computer
- Foot pedal
- Complete set of holders
- Starter set of sheaths
- Optional rolling cart (19"x19" footprint)
- Free training video
- One year warranty including free software upgrades
- Extended warranties available

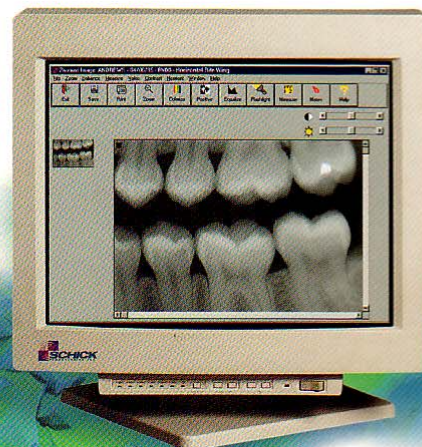
CDR® Network

Lets you affordably network your CDR® System throughout your practice.

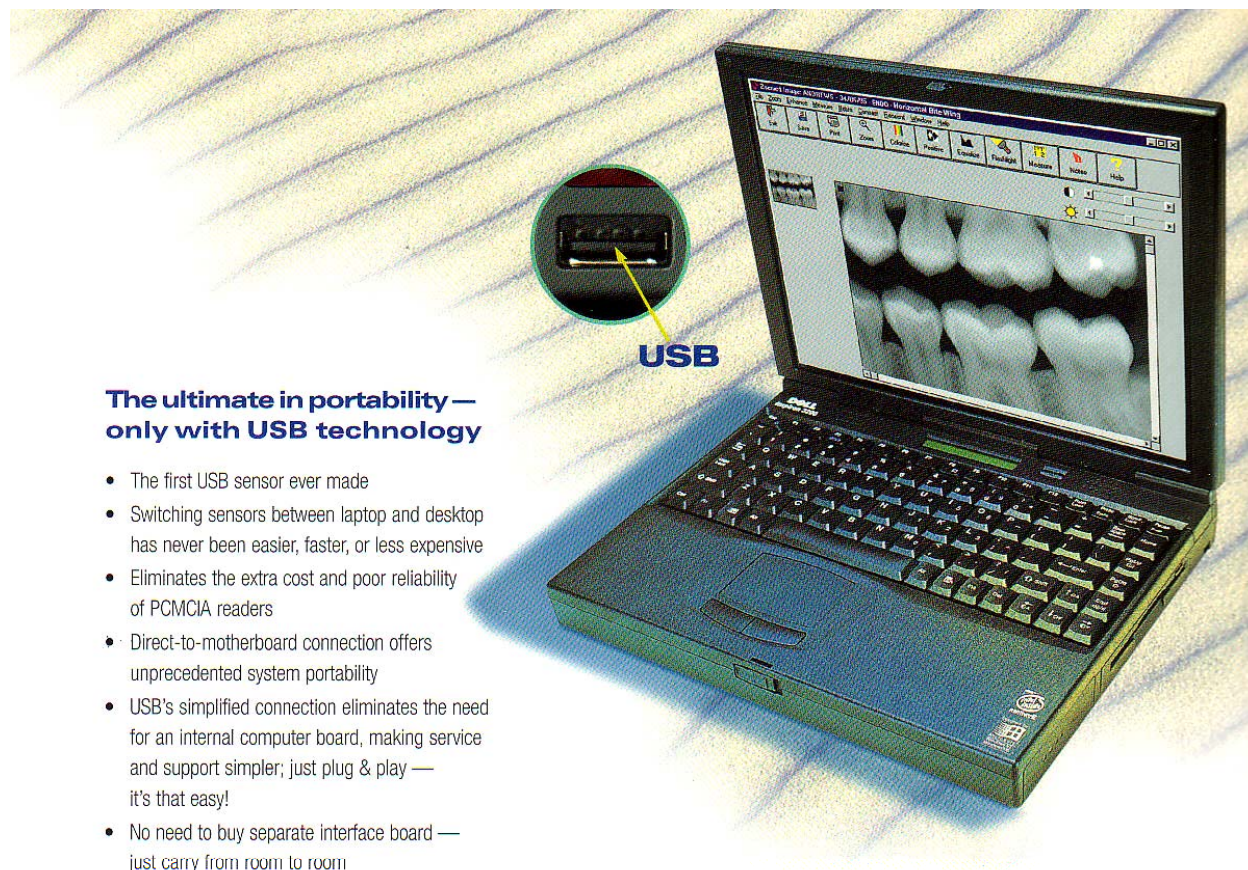
CDR® Kit

Perfect for the practice that has already invested in a top of the line computer system. Includes everything you need to integrate CDR® into your practice management software.

- One APS sensor
- USB interface
- CDR® for Windows® software

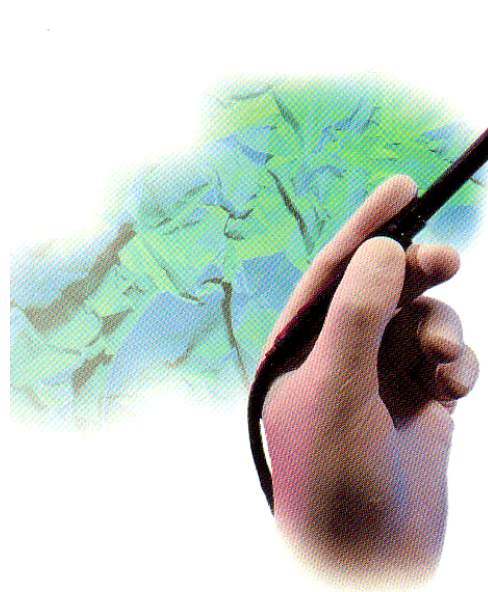


B...APS...DELL...USB...APS...DELL...USB...APS...DELL®...USB...A



The ultimate in portability — only with USB technology

- The first USB sensor ever made
- Switching sensors between laptop and desktop has never been easier, faster, or less expensive
- Eliminates the extra cost and poor reliability of PCMCIA readers
- Direct-to-motherboard connection offers unprecedented system portability
- USB's simplified connection eliminates the need for an internal computer board, making service and support simpler; just plug & play — it's that easy!
- No need to buy separate interface board — just carry from room to room



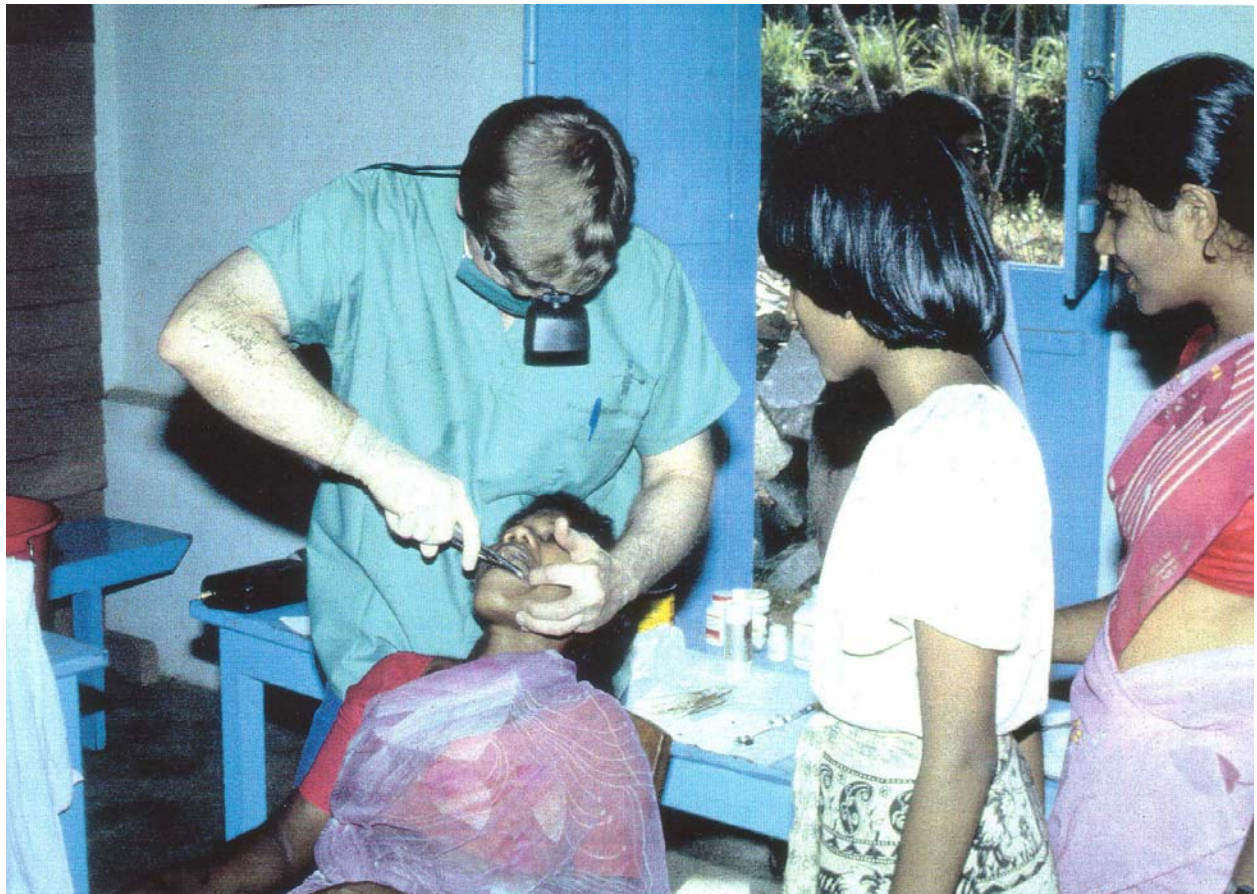
CDRCam™

The smallest, lightest, most portable intraoral camera ever made, designed to work together with your CDR® System.

- Light source built into handpiece
- 40,000 hrs. bulb life
- Digitally controlled
- Intraoral and extraoral capability with just a twist

*"Under NO circumstances would I return to film.
CDR is the best investment I've ever made!"*

Electric Dental Drills, Scalers, Curing Lights



Is this the patient who just wanted a filling?
When the tooth is decayed below the gum line,
Only one thing can be done.



J. Portable Electric Drills, Curing Lights, Ultrasonic

1. **Portable electric drills** which work on 110V, 220V or battery packs have good torque and are now very dependable. Selection of a portable electric drill boils down to personal preference and you should look at all that is available in the marketplace. An electric model, which comes with a belt clip battery pack, will not confine you to the length of an electric cord if you are working multiple chairs.

The RPM (revolutions per minute) and torque are important considerations when comparing your normal turbine handpieces with electric handpieces. Slow speed electrics normally will do between 18-35,000 RPM but vary greatly in torque. They are good to remove gross decay, remove bone during flap procedures, and can be used for normal preps as a slow speed when high speed is not available. The slow speed electrics I have used do not have water attachments on them. So a conventional air water syringe would be helpful. In remote settings I take a rubber bulb chip blower to use with the slow speed handpiece. It is more difficult, but will work when you do not have a three-way syringe available.

The high-speed electrics go up past 100,000 RPM and have excellent torque. A feature that I like about the high-speed electrics is that their motors will increase torque as you put more pressure on them. This adds to the nice smooth feel of total control while doing a prep. This solid didactic feel adds to your perception of where you are on the tooth. I must say that I like the high-speed electrics.

Check to see what contra-angle attachments are available for the handpiece and if it will operate on the 110V or 220V current of the country. Some units can charge the power pack on either current. Other units you must specify which power source you prefer. It's usually safe to order the 110V if you have any doubts or want to use it in various countries. Travel kits are available which make it possible for you to step 220V down to 110V for charging your battery power pack. Some travel kits have both the power plug adapters and transformer to run any small appliance. If you can charge the battery pack with some available source of electric, then the battery pack will provide a consistent stable power source for the electric drill and you do not have to worry about electric surges which may damage small motors or electronics.

Porta-Tip Model AEU-03SS



This fine portable and versatile system, with its rechargeable battery, is made by Aseptico in the USA. Power unit, motor, handpiece - all supported by Aseptico's service and supply. Excellent reliability. Comes with click case, power adapter and pouch. Variable speed to 16,000 RPM.

**www.aseptico.com
800-426-5913
425-487-3157**

TRAVELBELL™

B E L L D E N T A L P R O D U C T S



Take your dental office anywhere on earth

Portable, powerful and completely self-contained, the TravelBELL™ is a field dental system with capabilities you'd expect from your office. Now standard equipment of the U.S. Army, the TravelBELL™ goes anywhere, anytime. It allows you to do high-performance dentistry in places as remote as the Amazon jungle or high in the Himalayas. And with the optional solar panels, you'll never need a wall plug.

- Up to eight (8) hours of operation per charge
- 1.5 hr quick charge, with overcharge protection
- "Gas guage" to indicate battery charge state
- Up to 150,000 rpm top speed
- B-30-E Motor accepts E-type nose cones
- Rugged, compact carrying case
- Three configurations: Basic, Advanced, Wilderness
- Optional: air/water system and solar panels for recharging batteries in remote locations

Better Dentistry Through Innovation



To order: 800-920-4478





**Transport II
Deluxe
Portable Electric
Dental System
Model AEU-425
Model AEU-425FO**



Aseptico's Transport II is a fully self-contained electric dental system. Quick and easy to set up and operate. Ready for travel. Available with optional piezo ultrasonic scaler and fiber optic handpiece configurations

Features include:

- 3-Way Air/Water Syringe
- Autoclavable 30k Motor
- Accepts All E-Type Handpieces
- High and Low Volume Evacuation
- Self Contained Water Supply
- Self Contained Air Compressor
- On/Off Foot Switch
- Easily Transported With Pull-Out Handle and Wheels
- Weights 54 to 60 lbs depending on configuration
- 110V or 220V Compatible!
- Optional ASC-10 Piezo Ultrasonic Scaler
- Optional Motor with light for fiber optic handpieces



**www.aseptico.com
800-426-5913
425-487-3157**

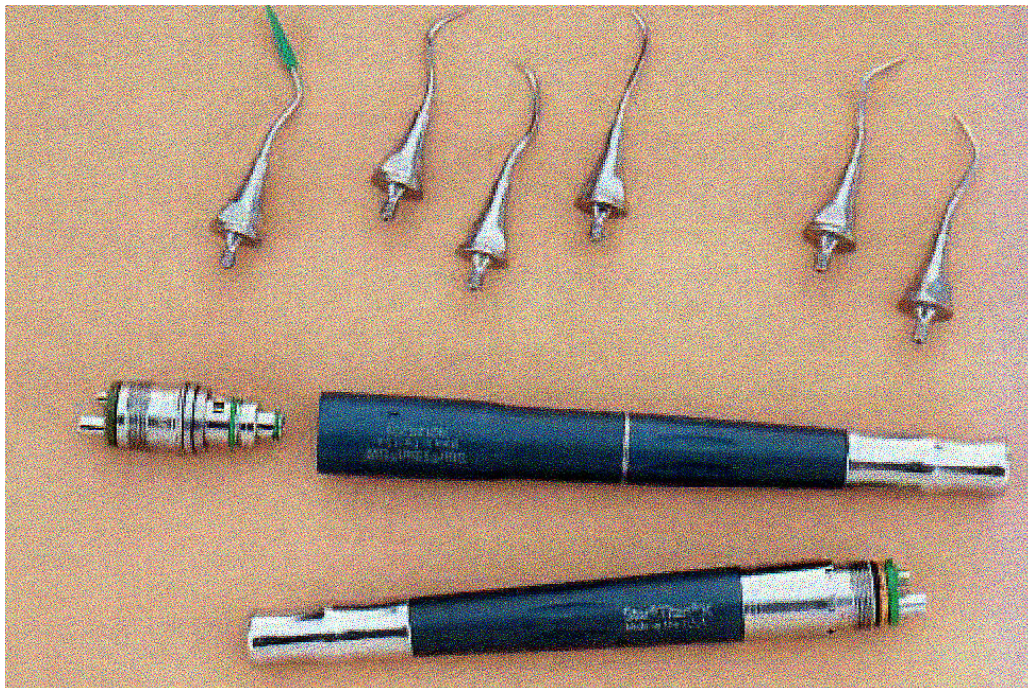
2. **Curing Lights** come in a wide variety of designs and models. Most of the new lights have the light source in a cordless LED design with a quartz or glass rod tip. Be sure your curing light is in good working order before packing it on the trip. Meter the light to be sure that it is transmitting enough light-curing intensity for large composites (minimum 300). Your dental supply dealer has light meter testing units or they are available to purchase for about \$185. Low electric voltage in another country does not affect the output intensity of the cordless LED like it did the bulb-type for curing your restorations. The cordless will charge on 110v or 220v.

Pack one or two extra bulbs and fuses for your equipment in case they are not available overseas. Numerous times, a team has arrived on sight and plugged 110V equipment into 220V electric and blown a fuse. Then they could not find the necessary fuses or bulbs to replace those burned out. Consider packing your curing unit in your carry-on bag to avoid the shock of baggage handling. If you pack it in your suitcase, be sure to pad it carefully so the bulb or LED does not break in transit. It goes without saying that the smaller, lighter units are better for travel and easier to pack in your carry-on bag.

If the electric current in the country where you travel is 220V, be sure it is compatible with your curing light. It may be necessary to take a multi-plugged surge protector bar. These circuit breaker bars are cheap and will help protect your equipment from overload, current fluctuation, and burn out. They are commonly available in most overseas countries now.

Light cure units are still not too common in third world countries. If you have a second hand unit in good shape, to take and use on your trip, consider donating it to a local dentist. You would make a life long friend and help provide long-term service for the community. If you choose to return to that location in the future, it would provide a lifetime of opportunities for you. It would also be easy to mail small boxes of composite material to the dentist, knowing that many were being helped in your absence, with the supplies you could provide.

3. **Air Sonic** scalers, which work off of your high-speed handpiece air hose, are good, but not great. They are lighter and less bulky than packing an ultrasonic scaling unit. The water-cooled ultrasonic scalers require water pressure to push water through the tip. If you plan to be in a site with gravity feed or low water pressure, it would be wise to make a small plastic water pressure tank as discussed earlier in this chapter under “Water Sources.” Cleaning and scaling teeth for people who have never seen a dentist can work your fingers to the bone. Calculus can be so thick and hard that you must take a high-speed handpiece to slab heavy calculus away from the teeth before starting in with an ultrasonic. Literally it is so bad sometimes, patients look like they have one solid tooth from ear to ear. Cleaning and scaling teeth can be extremely time consuming in a population who has never seen a dentist. I have broken several of them on trips cleaning heavy calculus.



Titan-SW Plus Sonic Scaler

4. **Ultrasonic Scalers** require both electricity and water pressure to operate efficiently. The tip vibrates at 25,000-40,000 cycles per second in an elliptical path during use. They are much more powerful than air sonics, generate heat during operation and require a water spray to keep the tooth surface flushed free of loose debris and requires a good suction system to keep the mouth evacuated.

K. Portable Generators

Each portable dental compressor will have different energy requirements depending on its horsepower, piston size, and efficiency. It takes more energy to get a compressor to turn over and start than to sustain the operation. That extra boost, which it needs to start, is called “surge capacity.” We have had our best luck with 2200 watt generators or larger. A 1500-watt will not operate a ¾-hp compressor if there is other equipment running on it, such as lights or an autoclave. Normally, generators of this size will have both 110V and 220V outlets. When possible, we get the generator as far from our work area as possible, because of the noise. A single heavy 12 or 14 gauge extension cord from the generator to the compressor is best. Then a multiplex six-plug box with circuit breaker is good to plug all of the equipment into at the chair. It is better to use a larger gauge extension cord for long runs of electricity with a load on it, so it does not overheat and burn up.

L. NASA Developments In Dentistry

1. A small solar powered air compressor pumps air into a large air bladder made out of parachute shroud. This air bladder blows up like a balloon to hold about 10 gallons of air volume for smooth consistent airflow to a handpiece. When not in use, it folds back down into a small basketball sized package for storage
2. A small gasoline air compressor in a backpack runs air pressure to a large air bladder, which blows up like a balloon. Principle is the same as the solar powered compressor. The small compressors can run a handpiece if they have a place to store the air volume. The bladders provide storage and pressure to an air driven handpiece.

M. Cases for Transport of Portable Equipment

1. Most portable dental equipment makers have custom cases made to protect their equipment. These padded cases are made to fit tightly around the equipment and should be durable enough for rough handling in transit.
2. Pack Lite Case Company in Tulsa custom designs and builds cases for any type of equipment. They use a corrugated tough plastic, which resists dents, scratches, or acid. There are several

equipment case companies around the country to compare quality and price.

3. Sometimes you can find strong padded cases at war surplus stores, garage sales, and liquidation sales, but they may not be the right dimensions for your equipment. Know the exact size of the case you need and measure to be sure it does not exceed the 62" total height, width, length standard of the airline carriers.
4. You may purchase a nice large hard side suitcase for \$3-\$5 at Goodwill or Salvation Army to pack your supplies in. Then you can travel to some distant country and give it to a missionary who needs a suitcase. That gives you a good travel case for supplies with a handle and you do not have to bring it back. But, if necessary you have something to pack souvenirs in for the trip back home.
5. Be sure to have wheels on your large suitcases to drag them through airports. There will be times when those wheels are worth their weight in gold.
6. Our chair cases used to be 10" oversized for airline travel, but they let us take them because we would get approval in advance with the airline supervisor 24-hours before departure.
7. You can get extra insurance at the ticket counter when you check in for departure. Our dragster case many times will have a compressor, Star Wars unit, Venturi suction, and handpieces in it when checked. We insure that case for \$3,000.00.
8. On a few occasions we have arrived at the check in counter and found the airline had declared a "box ban," meaning the airline would only accept suitcases for the flight. Boxes would be shipped on a later flight, Next Day, or later in the week, whenever they had extra room for luggage. We had one situation recently where we never received the boxes. We finally picked them up at customs on our way out of the country to return home.





MILITARY

ADU-100CS COMMAND AIR PORTABLE DENTAL SYSTEM

ADU-10CF Unit complete with high and low speed handpiece controls, high and low volume vacuum, air/water syringe, water supply system. All built into military specification carrying case.

(System does not include handpieces).

- AA-19-S2 Fiber Optic illumination system for the highspeed handpiece control.

- ATC-05CF Tripod stand. Includes mounting bar and tray arm in soft carrying case.

(Soft case fits into ADC-01CF case).

- AA-01CF Field service replacement parts kit.

- Size: 17.5" X 16" x 17"

AA-75F COMMAND AIR PORTABLE AIR COMPRESSOR

- 3/4 H.P. oilless compressor.

- 3.4 CFM @ 50 PSI.

- 115/220V switchable power supply.

- Air storage tank.

- Military spec. carrying case.

- Size: 17.5" X 16" x 17"

ADC-01F COMMAND AIR PORTABLE DENTAL CHAIR

- ADC-01 Portable patient chair in soft carrying case.

- Military spec. carrying case.

- Size: 39" X 9" X 5.5"

ADC-08CF COMMAND AIR PORTABLE OPERATOR'S STOOL

- Two ADC-08 portable operator stools in soft carrying cases.

- Military spec. carrying case.

- Size: 25.5" X 24" X 19"

ALU-29CF COMMAND AIR PORTABLE LIGHT

- 3000 foot candle halogen operating light in soft carrying case.

- 115/220V dual voltage switchable.

- Sized to pack into ADC-01F case.

- Size: 36" X 9" X 5.5"

ARU-01CF COMMAND AIR X-RAY SYSTEM

- 63 KVP @ 12MA output x-ray.

- ARU-01S tripod mounting stand (stand fits into ADC-01CF case).

- Military spec. carrying case.

- Size: 17.5" X 16" X 17"

TOTAL WEIGHT 309 LBS

TOTAL VOLUME 26.17 CU.FT.

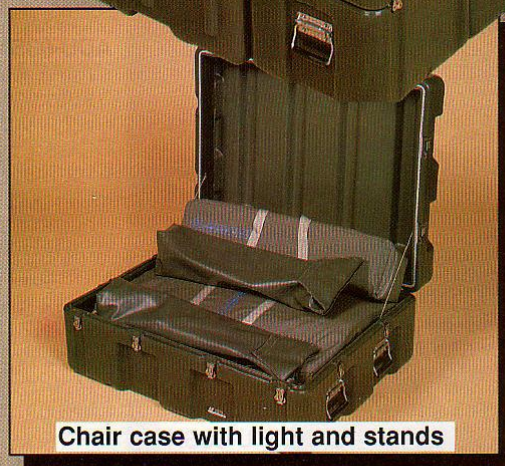
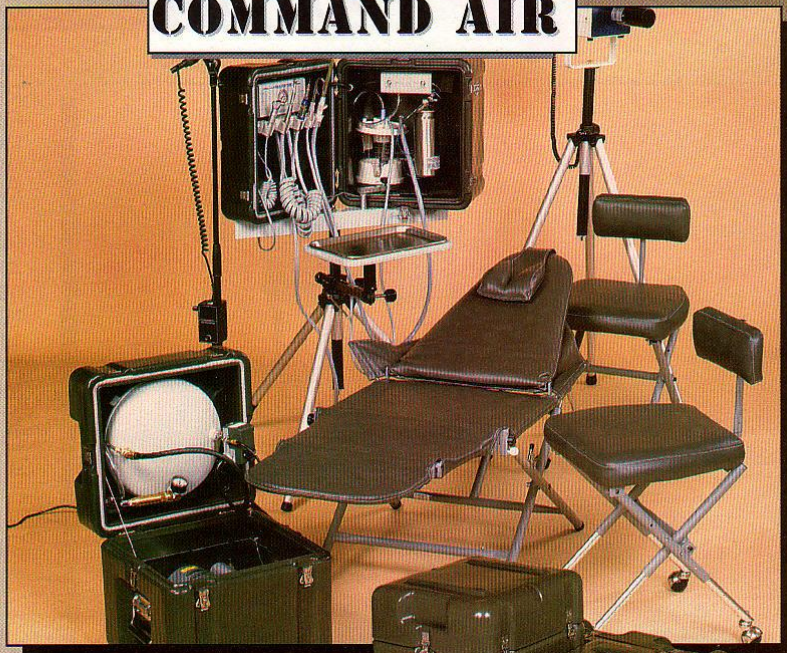
ASEPTICO

WORLDWIDE PHONE

206-487-3157

CALL TOLL FREE IN U.S.A 1-800-426-5913

COMMAND AIR

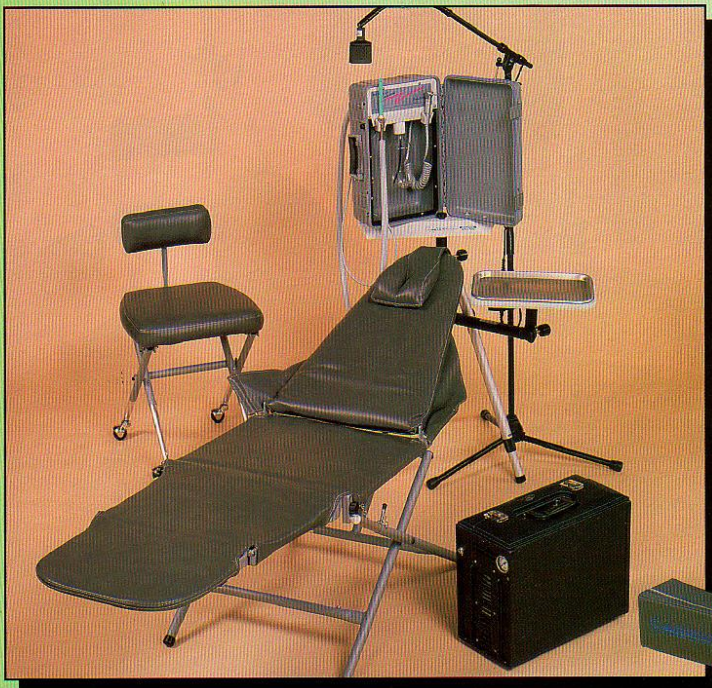


Chair case with light and stands

SEALANT
Express

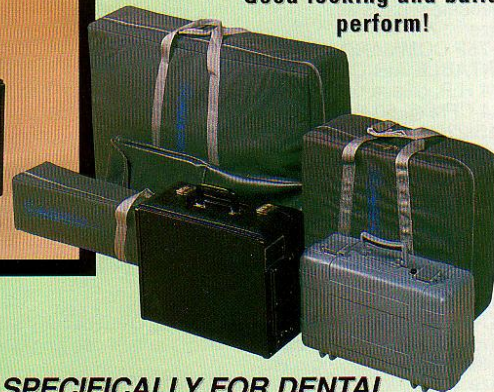


PORTABLE SEALANT SYSTEM



Aseptico introduces a new portable sealant system combining Aseptico quality, performance, and portability at a surprising value. The Sealant Express unit features an air/water syringe with autoclavable tips, high volume self-contained vacuum system, self-contained clean water system, and an integral filter dryer for clean, dry air. Included is a unique tripod stand with a quick lock mounting system for set-up anywhere. Add a working surface with the optional side arm/tray assembly.

Good looking and built to perform!



DESIGNED SPECIFICALLY FOR DENTAL HEALTH SEALANT PROGRAMS!



ADU-08SX

ADU-08SX Sealant Express Unit

- Air/Water Syringe with autoclavable tips
- High Volume vacuum system
- Clean water system
- Air Filter/Dryer
- Quick disconnect to compressed air
- Size: 17.5"x11.6"x7.5"
- Weight: 10 lbs.

Tripod Stand & Mount

- Aluminum construction
- Locking height adjustment
- Mounting bar for above unit
- Weight: 6 1/2 lbs.

ADU-08SX w/ Tripod Stand

AA-08A (Side Arm optional)

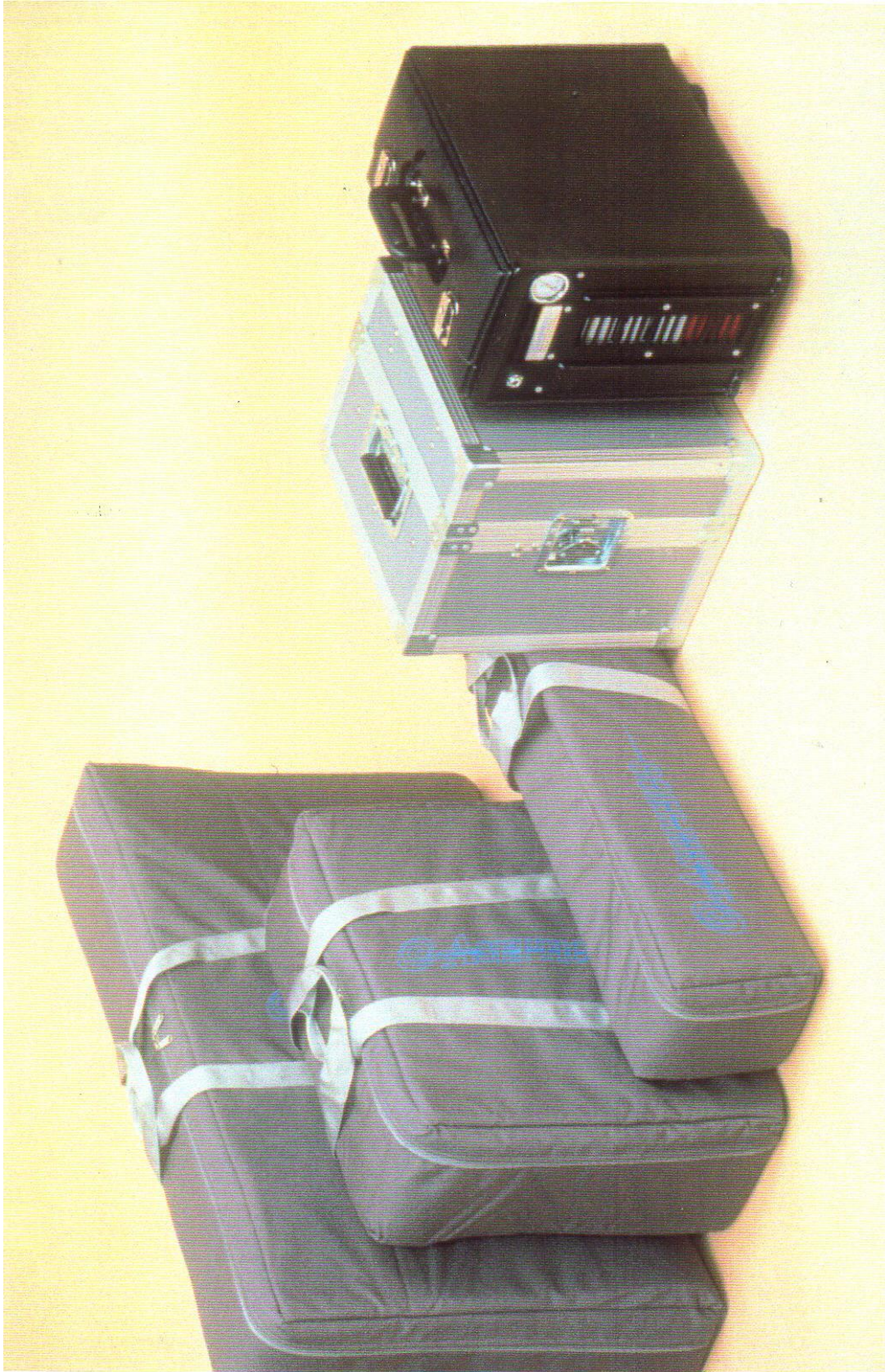
- Two adjustable joints
- Easily attaches to tripod post
- Includes s/s Ritter tray & holder
- Weight: 5 lbs.

AA-08A Side Arm w/ Tray

**MANUFACTURED
EXCLUSIVELY BY**

ASEPTICO

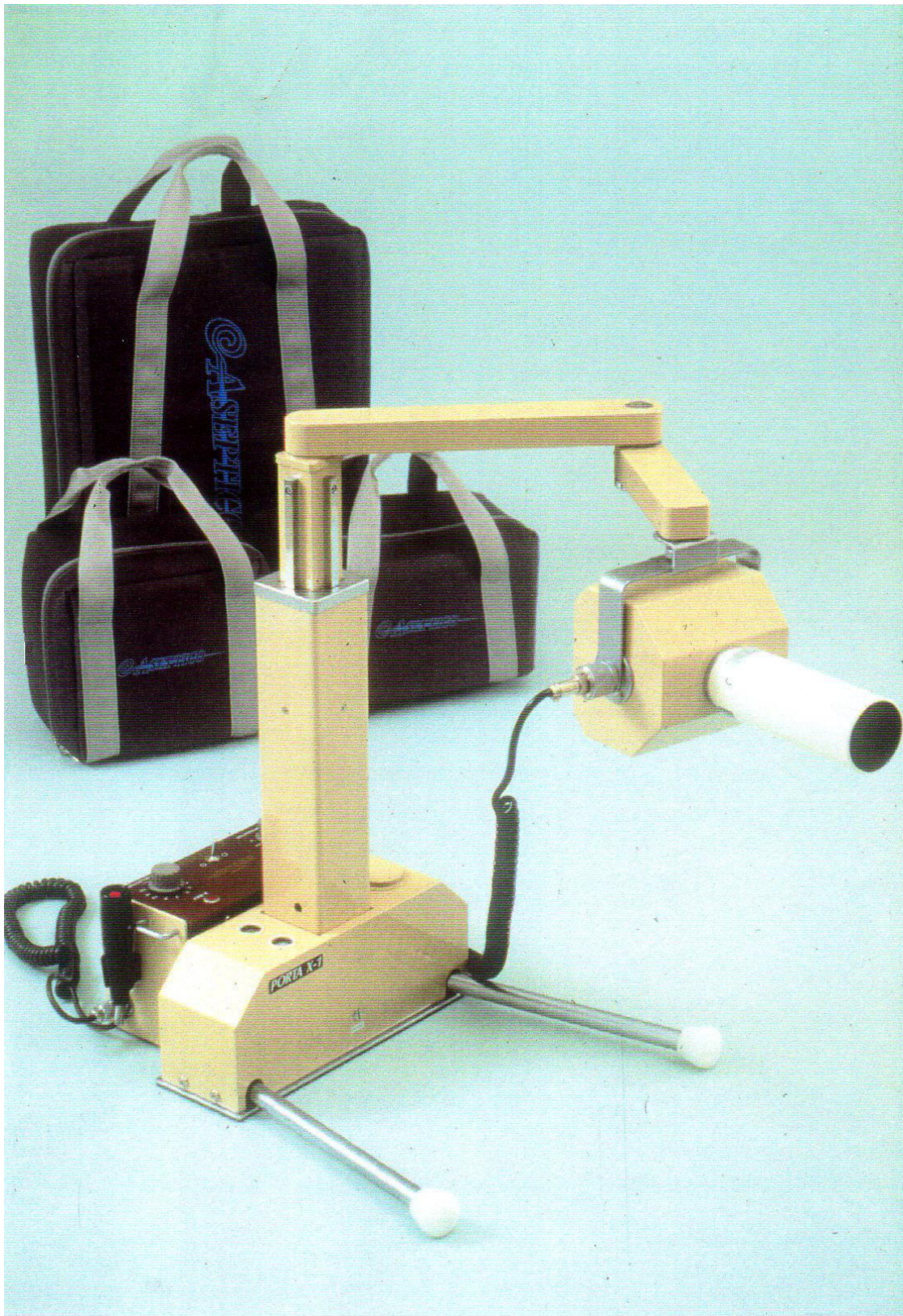




Standard canvas bags for equipment



Military “drop proof” hardside cases



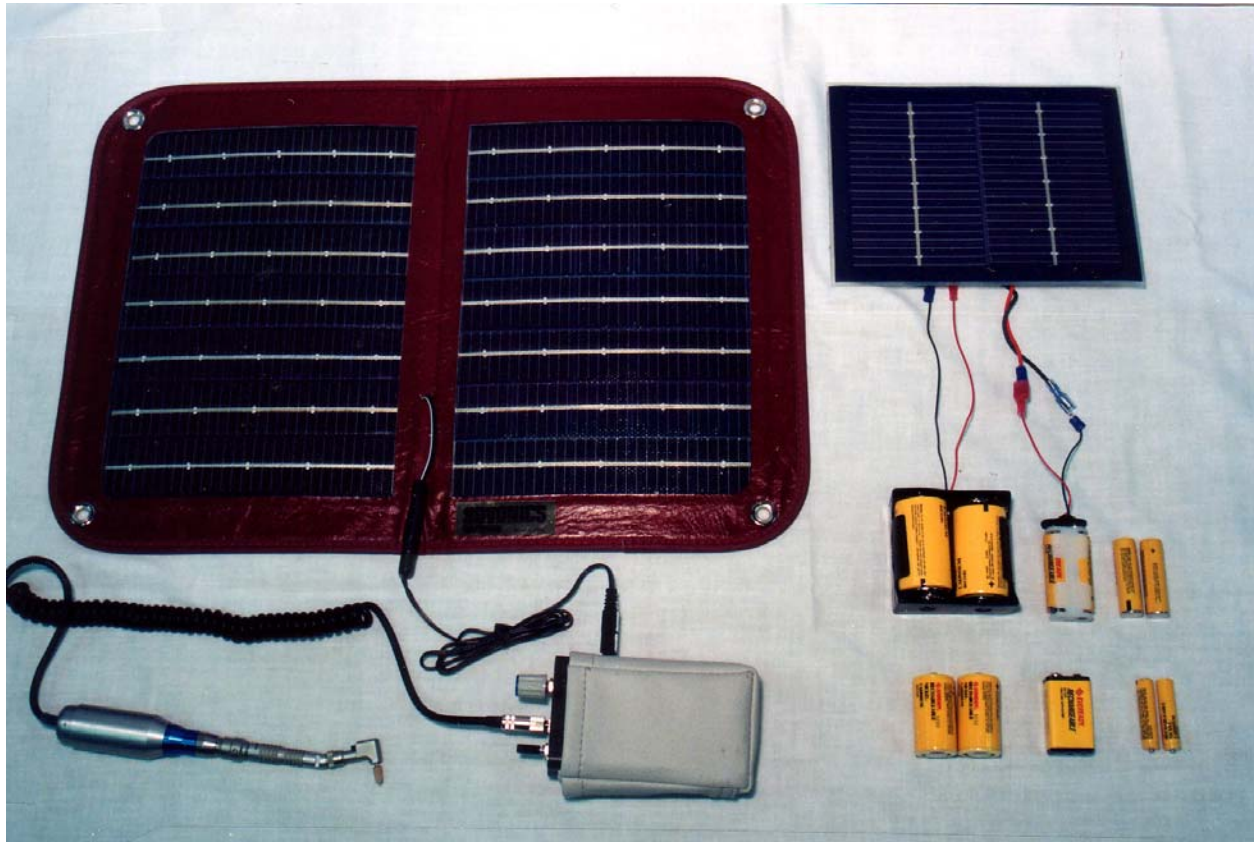
Soft side canvas bags for x-ray machine



Military packing containers made for each piece of equipment.



Supplies can be packed around the portable chair in its container.



Solar panel can recharge rechargeable batteries, even a dental drill.



Prototype solar recharger for electric handpiece

N. Miscellaneous Portable Equipment

1. A solar energy panel can be used to recharge the D.C. battery power pack of an electric dental drill. It requires that you have two interchangeable battery packs for the electric handpiece. One battery pack charges all day with the solar panel while you use the other one for dentistry. Solar energy may be all you have when working deep in the jungle on an isolated population (tribe). The mating of these two technologies has worked so well that, Dr. Richard Charlick has purchased 10 drills and solar units to train dental nurses in basic dental care for the government of Colombia. Improvements are being made rapidly in the field of battery packs and solar energy.

These handpieces normally come with a 110 V charger for the D.C. power pack. You can use them as a portable drill unit for simple cleaning and fillings in a nursing home, hospital, or on the mission field. They normally do not have water, suction, or three-way syringe for your convenience.



TRAVELBELL™
BELL DENTAL PRODUCTS

Take your dental office anywhere on earth

Portable, powerful and completely self-contained, the TravelBELL™ is a field dental system with capabilities you'd expect from your office. Now standard equipment of the U.S. Army, the TravelBELL™ goes anywhere, anytime. It allows you to do high-performance dentistry in places as remote as the Amazon jungle or high in the Himalayas. And with the optional solar panels, you'll never need a wall plug.

- Up to eight (8) hours of operation per charge
- 1.5 hr quick charge, with overcharge protection
- "Gas gauge" to indicate battery charge state
- Up to 150,000 rpm top speed
- B-30-E Motor accepts E-type nose cones
- Rugged, compact carrying case
- Three configurations: Basic, Advanced, Wilderness
- Optional: air/water system and solar panels for recharging batteries in remote locations

Better Dentistry Through Innovation

To order: 800-920-4478

BELL DENTAL

MADE IN THE USA

2. The foot powered antique dental drill takes our imagination back one hundred years to horse and buggy days. But they are still being used in some parts of the world. It is interesting to see the contrast between the "original" portable dental drill and our new solar prototypes.



One hundred year-old foot pump and belt driven dental drill.

O. Portable Autoclave and Sterilization

1. I now carry a small four-quart stainless steel pressure cooker with me, which has been fitted with a 24-pound manual pop off to sterilize instruments. It can be heated over a gas flame, electric hot plate, propane torch, log fire, or Coleman stove. Most heat sources that can boil water will autoclave instruments in this little pot. You put half a cup of water in it with your instruments, put it over a heat source to boil, bring the pressure up to 24 pounds pressure for 10 minutes, and they are flashclaved (Sterilized)! This gives you quick, easy sterilizing. Also, it will work with any heat source you have available. It is lightweight and will pack into your suitcase.
2. Sterilization with a good liquid glutaraldehyde cidex, iodophor, or surgical scrub should cover anything you cannot put in the autoclave to sterilize. Be very aware that overseas you probably will not know if one of your patients has hepatitis, AIDS, or tuberculosis. So take every precaution available to protect yourself and coworkers with infection control procedures.



Converted four-quart pressure pot for sterilization.
Weighs 6 pounds

Bench Top Portable Autoclave with Dry Cycle MICROCLAVES SL 9000-2 S



The drying cycle protects instruments from oxidation, damaged and allows an immediately use of it.
The digital thermometer allows a constant monitoring of the cycle.

Electronic detectors turn off the power in case of malfunction or improper use.
A two stage overpressure-protection system incorporates a calibrated Pressure Release Valve and Gasket Offset device.
Thermal and electric fuses protect against overheating and electrical fault.

Stainless steel accessories for Dental, General Medical, Acupuncture, Tattooing, Veterinary and Laboratory applications.

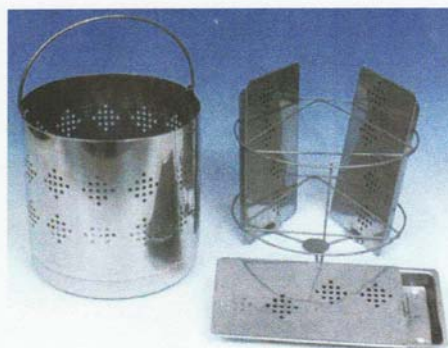
Fully automatic cycle offers the most economical choice with high technology in steam sterilization being the effective solution for the world's preferred method of sterilization.

Product Specification

Model	SL 9000-2S
Chamber Diameter	220mm - 9"
Chamber Height	220mm - 9"
Total Height	260mm - 10.5"
Capacities	9.5 litres - Rack with 3 Cassettes
Accessories	3 Cassettes - 200 x 100 x 10mm
Heating Element	110v - 1000 watts - 9 amperes
Sterilization cycle	134° C for 20 minutes @ 2.1 BAR
Drying	30 min (15min + 15min)
Weight	4.5 kg



ISO 9001
ISO 13485



Basket, Cassette Rack & 3 Cassettes

The stainless steel (AISI 304L) chamber ensures long life an easy cleaning
Cycle choices are based on the International Norm BS 3970 Part 4 for steam sterilization cycle times/temperature combination.



SL9000-2S Control Panel

US\$ 1015.00*

110 volts

Complete with basket, rack and 3 cassettes

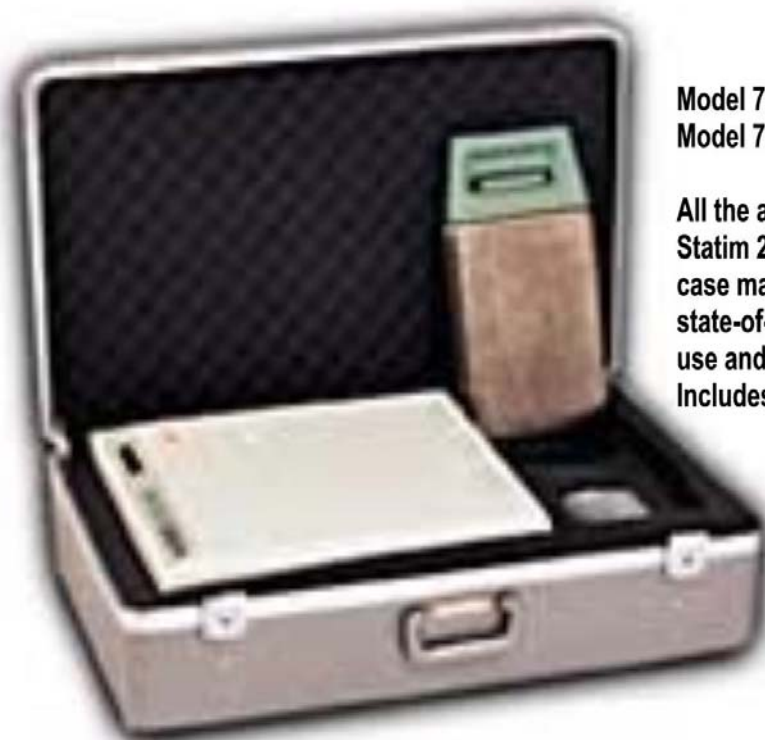
Replacement parts available:

- Replacement gasket \$45.00 US
- Heating element \$45.00 US

Safari Dental. 94D Des Entreprises Boul., Boisbriand, QC J7G 2T3
Toll Free: 1 800 567 0013 Phone: 450 433 5754 Fax: 450 433 5987

www.safaridental.com

SciCan's Statim 2000



Model 7001

Model 7002- Hard-sided Carrying case only

All the autoclaving power of SciCan's Statim 2000 in a rugged, padded carrying case manufactured by DNTLworks. This state-of-the-art steam sterilizer is easy to use and ideal for field use. Includes instrument cassette.

DNTLworks Equipment Corporation
7300 South Tucson Way
Centennial, CO 80112 USA
Toll-free: 1-800-847-0694
Phone: +303-693-1410
Fax: +303-693-6189
E-mail: info@DNTLworks.com

ProCare II is a trademark of
DNTLworks Equipment Corporation © 1998



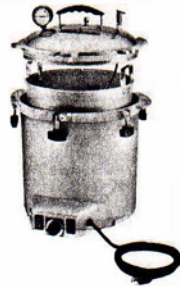
Autoclave / Sterilizer Today's Sale Only

Contact Us

1-800-748-1259

Alfa Medical - Your Sterilizer Experts ...

The All American Sterilizer

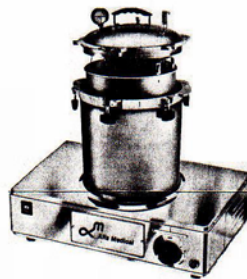


Large Capacity — 11½ Dia. x 8½ Len.
Very easy and simple to use

25X Electric Sterilizer

SPECIFICATIONS: Calrod Immersion Heating Element, 1100 Watt, 110 Volt AC (also available 220 Volt) — Fenwell thermostatic Control — Heavy Cast Aluminum Cover and Bottom Construction — Aluminum Alloy Seamless Inset Container — Cast Aluminum Rack — Flexible Metal Exhaust Tube — Metal-To-Metal Seal (No Rubber Gaskets) — Complete and Effective Sterilization at the Lowest Possible Cost — 3 Wire Grounded and Plug for Safety — Amazingly Low In Price.

BENEFITS: Large Capacity — Inexpensive — Maintenance FREE



Model 1915X Pressure Sterilizer

The "ALL AMERICAN" Sterilizer is a high steam sterilizer features a two-step valve, a calibrated gauge, a safety locking mechanism prevents opening while the sterilizer is under pressure, and a steam release switch and release valve. The electrically heating unit incorporates a thermostat and an indicator and has an Anti-Blocking system, and 12" depth. It will fit 4 of the large Hu Friedy IMS cassettes

BENEFITS: Large Capacity. The best inexpensive back-up sterilizer on the market

Model COL 255 Hot Plate

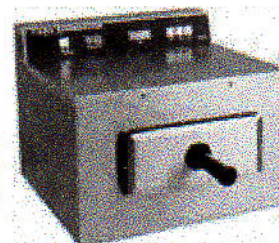
Made specially for heavy and day-long use. Equipment with Robertshaw infinite control switch; signal light; 3-ring lift-up tubular element; removable well. Switch operates counter or clockwise.

13½x8½x4 in. high overall.
120V. AC only, 1100W.



Alfa Medical

For assistance, call 1-800-748-1259 and ask for ... Mark, Shlomo, Chuck, Marcus, Jeff, Daphne, Miral, Dannielle, or Anne.



59 Madison Ave
Hempstead, NY 11550

1-800-748-1259 (International Calls) 516-489-3855 (Fax) 516-489-9364



NOTES