TABLE OF CONTENTS
Air Vac XQ User Manual

GENERAL INFORMATION

ADDITIONAL TECHNIQUES

INTRODUCTION

The Patented Air Vac XQ Vacuum Former has been designed and built for years of trouble free service and includes an industry exclusive 5 year extended warranty against original defects in material and workmanship.

This is the first “Xtra Quiet” (XQ) vacuum former in the industry. The state-of-the-art design offers virtually silent operation and compact size. The Air Vac XQ utilizes the internal laboratory or operatory compressed air to fabricate all types of dental appliances in less time, more accurately than traditional vacuum forming machines. By incorporating a revolutionary new internal air system with either the standard platform or bead well, it allows for ease of use and professional results.

Please read the entire instruction manual before operating the Air Vac XQ. You can learn correct operating procedure by carefully reviewing the following pages, however, mastering vacuum forming techniques may require a longer period of time. Practice with appropriate materials is recommended. Also, pay close attention to all “Note” and “Caution” statements included in each section.

UNPACKING AND SETUP

1. Handles
Attach the two enclosed handles into the threaded holes located at the rear of the hinged frame. Install the round knob into the hole centered in the front of the heater unit.

2. Placement
The machine should be placed on an open counter, within 4' of a standard properly grounded electrical outlet.

CAUTION: The unit should not be placed closer than 6" from walls, cabinets or other equipment while in operation because of the temperature emitted from the heater. Under no circumstances should this unit be operated while located under or in a cabinet.

3. Electric Cord
Plug the female end of the cord into the electrical inlet located on the back of the unit and the male end into a properly grounded outlet. The unit's power cord should not be placed near the heater or any other hot surface.

4. Connecting to the Air Supply
Enclosed with the Air Vac XQ, you will find:

a) 5' polyethylene tubing (1/4" O.D. x .040 wall) with the most commonly used quick connect attached.
b) Adjustable metal clamp.

Connect the open end of the tubing into the plastic bulkhead fitting on the rear of the Air Vac XQ. Ensure that the tube is fully inserted into the fitting. When correctly inserted, the tubing is locked in place and will not dislodge by pulling.

The other end of the tube (with the metal quick connect) should be inserted into your female adapter, connected to the air line from your compressor. The male and female connection must be secured and locked in place before operating the Air Vac XQ.

In some instances, primarily laboratory, the female connector may not be present. In this case, remove the metal male connector from the air tubing

by unscrewing the collar. The plastic tubing should be directly inserted into a properly dimensioned rubber or plastic air supply tubing and secured with the adjustable metal clamp provided. It is recommended that a trained professional oversee the installation, ensuring correct procedure is followed.

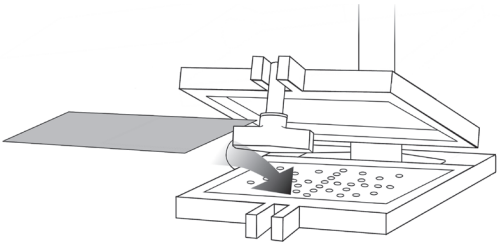
CAUTION: All air connections must be properly secured to avoid bodily injury.

PARTS IDENTIFICATION

1. Heating Unit
2. Heating Unit Handle
3. Vertical Post
4. Material Plate Handle
5. Top Material Plate
6. Bead Well (under the vacuum platform)
7. Bottom Material Plate
8. Heater Switch
9. Machine Base
10. Vacuum Platform (removable)
11. Frame Latch Knob
12. Air Switch

INSTRUCTIONS FOR BASIC OPERATION

1. Swing the heating handle unit to the rear and turn on the heating element switch. It will require approximately one minute to preheat. Preheating the unit before use is especially important when using materials .040 or thinner. These materials heat very quickly and it is best to have the heater temperature stabilized first.



2. Open the hinged frame by turning the latch knob. Place a sheet of forming material on the lower material plate. Lower the top material plate over the material and engage latch.

3. Grasp both handles located on the rear of the hinged material plate and raise the material plate until it clicks into the heating position.

4. Place the cast on the vacuum plate or bead well.

Model Preparation Guidelines:

Base — The base of the model should be as slim as practical excessive base could result in thinning of the material and/or decreased details.

Stone — Quality stone or gypsum that produces a hard, dense model is suggested. Softer materials may be dusty. This dust may settle into the finished appliance.

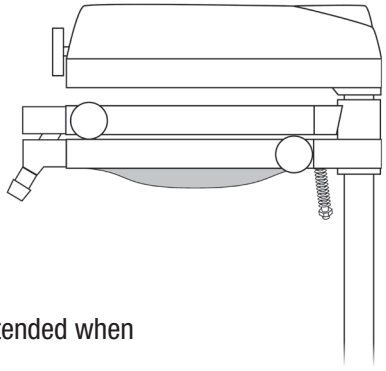
Undercuts — The trimmed sides should be flat and cut at a 90˚ angle. Undercuts and angles that cut into the base will create a vacuum lock and make it difficult to produce a detailed appliance. If possible, it is best to have the base flare out by a few degrees. This is completed during the trimming stage.

Stone Characteristics — The model should be dry.

5. Swing the heating unit into position directly over the material.

   Caution: Move heating unit only by the handle provided. The unit becomes very hot to the touch during use.

6. Watch the material as it heats. When the material begins to sag, lower the material plate down to the cast on the vacuum platform. (Use the handles located on the back of the material plate). Thinner materials (.040 or less) require less sag than the thicker materials (.150+)

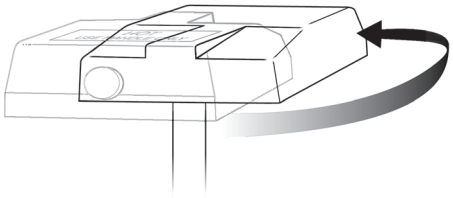


   Caution: DO NOT leave the machine unattended when heating materials.

Type of Material	Typical Heating Time	Typical Vacuum Time
.020" Coping and Splint	1 min. 30 sec.	10 to 15 sec.
.040" Bleaching Tray	1 min. 30 sec.	15 to 20 sec.
.080" Baseplate	2 min.	15 to 20 sec.
.100" Tray or Mouthguard	2 min. 30 sec.	20 to 25 sec.
.150" Tray or Mouthguard	2 min. 30 sec.	20 to 30

Times are approximate and should be adjusted according to heater condition and operator experience.

7. Turn off the heater switch and turn on the vacuum pump switch to complete the adaptation (approximately 15 seconds). Most forming takes place immediately - however with thicker materials, allow the pump to run longer for finer detail.



8. Using the round handle attached to the front of the heating unit, swing the heating unit to its furthermost position at the rear of the machine.

   Note: Allow the heating unit time to cool between operations (or placement near a wall). Do not allow the heating element to rest over the handles at anytime as they become very hot.

Warning: Turn heater switch off before positioning heating unit in rear of machine to avoid excessive heating of electrical cord and air tubing. Failure to follow could damage the above and void warranty.

BEAD WELL OPERATION

The Patented Air Vac XQ employs a revolutionary new concept for dental vacuum formers - the Bead Well.
The Bead Well utilizes the concept of fluid bed dynamics to give you maximum flexibility in the use of the Air Vac XQ.

The Bead Well will allow you to place individual teeth, sections of teeth or an entire model in the beads at exactly the depth that you desire. This will enable the user to control how much of the model is formed. This technique lends itself very well to copings, bleaching trays and custom trays. The Bead Well is also recommended with difficult models, especially those that have pronounced undercuts.

Use of the Bead Well

1. Before placing the model in the well, ensure that the beads are level.
2. Place the model or teeth to be formed into the beads. Adjust the height of the model according to how much of the model you want to be formed.
3. Make sure the beads are again level.
4. Proceed to use the Air Vac XQ as described in the previous pages.
5. Once the formation is finished, use Insta Cool® Chilling Spray, allowing material to be instantly handled.
6. Remove the form from the Bead Well.
7. Brush any beads stuck to the material back into the well or a separate container for reuse.
8. Make sure that no beads are outside the bead well. Beads outside the well may interfere with the gasket and proper performance of the Air Vac XQ.

NOTE: Under certain processing conditions beads may become embedded in the material to be trimmed and discarded. Replacement beads are available from your Keystone Dealer for a nominal charge.

Remove platform
to expose bead well.

9. Disengage the latch.

   NOTE: For instant handling of the processed material, spray a generous amount of Insta Cool® Spray directly onto the material.

10. To remove the cast from the adaptation, first cut away the flat surplus material from around the cast. Trim as close to the cast as possible.

11. Use a disc or any grinding wheel suitable for trimming excess acrylic to cut through the material at the periphery of the cast to separate the adaptation from the cast.

    Caution: A knife should be used only on the thinner base plate or clear material.

TROUBLESHOOTING GUIDE

1. Insufficient detail: This is often caused by improper heating or vacuum time. If your adaptation does not show enough details, allow the material to heat longer prior to forming and/or increase vacuum time.
2. Material creasing or tearing: This is a result of excessive heat. Reduce the heating time. When using materials .040 or thinner, it is important to stabilize the heater temperature by pre-heating the unit for approximately 1 minute prior to forming.
3. Material sticking to the model: Spray the model with a small amount of silicone lubricant prior to forming.
4. Material sticking to the gaskets: Replace the gaskets.

5. Material stuck in the vacuum holes: This can occur if the material is overheated and pulled into and through the vacuum holes. Allow materials to cool completely. Attempt to pull the material from the platform. If the material is not protruding through the vacuum holes, you should be able to gently pry the material off.

6. Bubbles appearing in clear material during heating: This is caused by the absorption of moisture from the air. Bubbles can be removed from unformed material by placing it into a warm oven (160˚F) for approximately one hour. Store materials in a sealed bag with desiccant gel and in a cool dry area.

7. Heater does not function: Ensure power cord is properly connected to the wall outlet and rear of Air Vac XQ. The heater is always functional when the lighted switch is in the "on" position. If the switch does not illuminate when turned "on", disconnect the power cord from the wall outlet and rear and check the fuse. Replace if necessary. (See No. 4 on page 14 - Cleaning and Maintenance - for fuse replacement instructions).

8. Air Button does not function: Check air connections to the Air Vac XQ and air supply source. Reattach if disconnected.

The Air Vac XQ utilizes a precise, sensitive air pump. It should only be used with clean dry air. In order to alleviate clogs from occurring in the air pump, this unit has been equipped with an inline filter designed to aid in removing matter from the air line. Due to foreign matter in the compressed air system, this may become clogged. It is advisable to replace the filter any time buildup of foreign matter is visible inside the filter and the Air Vac performance is diminished.

Replacement filters are available by contacting Customer Service at (800) 333-3131 or your authorized Keystone dealer.

If the Air Vac XQ remains non-operational, please call Keystone Industries for further assistance at: (800) 333-3131 or (856) 663-4700.

Dirt and debris can accumulate in the muffler. This can cause the muffler to clog. The Air Vac will not suction properly in this case. It may blow air up instead of vacuuming down. The muffler may be cleaned out using compressed air or by tapping the debris out. Mufflers are also available as a replacement part.

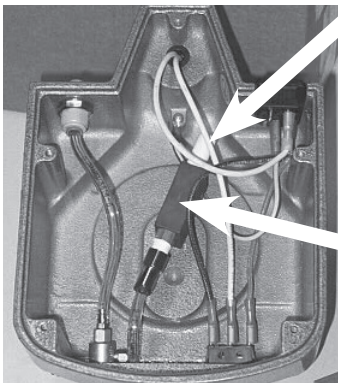
Contact the Customer Service/Technical Assistance number listed below to order.

Directions for replacement of the muffler

1. Unplug your unit and remove the airline.

2. Turn the unit upside down. Using a 9/64" Allen wrench, remove the 5 screws that attach the rubber feet to the bottom of the unit. This will loosen the bottom plate. Remove this plate.

3. The muffler is attached to the red vacuum pump. It is either white or gold in color. Carefully unscrew the old muffler from the red vacuum pump by turning it counter-clockwise. Insert the replacement muffler into the red vacuum pump. Tighten by turning in a clockwise direction.



4. Prior to refastening the bottom plate, ensure that no wires were loosened from their attachments. Replace the bottom plate and the feet to the unit.

5. Return the unit to its upright position, replace the power supply and airline. Your unit is now ready to operate. If you should continue to experience problems, it is suggested that you return your unit to our repair department for evaluation. Service Center, 52 West King Street, Myerstown, PA 17067. Prior to shipping the Air Vac, please call (800) 333-3131 or (856) 663-4700 to obtain a return authorization number.

6. For Customer Service/Technical Assistance call (800) 333-3131

CLEANING AND MAINTENANCE

1. A slightly damp cloth can be used as necessary to wipe down the unit. No other cleaning should be required.

2. Periodically inspect the power cord for wear (ie., fraying, etc.) and check the plug to insure that the connectors are fully seated. Also inspect the air hose and connections.

3. The small screen positioned in the bottom of the well housing must be free of all debris. Periodically remove the beads, and visually inspect this area.

4. Fuse Replacement - The power inlet incorporates a fuse. The fuse is rated for proper operation under normal conditions. If the fuse needs to be replaced, an extra fuse is included for your convenience. It is located in the fuse holder. First, remove the cord assembly from the unit by unplugging from the electrical outlet and from the unit itself. Use a flat bladed screwdriver to gently pry the fuse holder from the inlet at the area indicated by the fuse symbol. Remove the fuse and replace it with the one located in the holder. It is important to obtain spare fuses of the same type for replacement (4 Amp for the 110V and 2 Amp for the 220V unit). A different type of fuse may cause failure of the unit and will void warranty.

5. Only the finest quality materials are incorporated in the Air Vac XQ. However, after years of use, the heater or some other part may need replacement. If a part requires replacement, please contact Keystone Industries.

WARRANTY TERMS AND CONDITIONS

The Air Vac XQ Precision Air Vacuum Former is warranted for its designated use, in accordance with the instructions, against original defects in material and workmanship for a period of 60 months* from date of purchase. This warranty extends only to the original purchaser, provided the warranty registration card is completed and returned to Keystone Industries within two weeks of purchase date.

*Tampering with unit voids user warranty.

Note: If the equipment is not used in the manner specified by the manufacturer, the protection provided by the equipment may be impaired. Gaskets, fuses, beads, vacuum platform and electrical cord are excluded from warranty guidelines. The beads provided with the bead well are the only materials designed for use in the Air Vac XQ. Using any other materials will cause

REPAIRS

Please send The Air Vac XQ and a full description of the problem and contact information to:

SERVICE CENTER
52 West King Street
Myerstown, PA 17067
For Technical Assistance: Phone: 1-800-333-3131, 856-663-4700
Repair Charges are payable via C.O.D., Visa or MasterCard.

Do NOT pack The Air Vac XQ in styrofoam chip material for shipping. The material may lodge into the heater mechanism and become a fire hazard. Remove handles.

During processing, the beads in the Bead Well may stick to the material. Replacement beads (1.3 lbs.) may be purchased from your dealer or Keystone Industries.

ENVIRONMENTAL CONDITIONS FOR OPERATION AND STORAGE

- Intended for indoor use in a standard dental laboratory
- Ambient operating temperature 5-40˚C
- Maximum relative humidity 80%
- Maximum altitude 2000m
- Installation Category II
- Pollution Degree 2

AIR VAC XQ SYMBOL KEY

Fuse Ground I On O Off

Attention Vacuum Heater

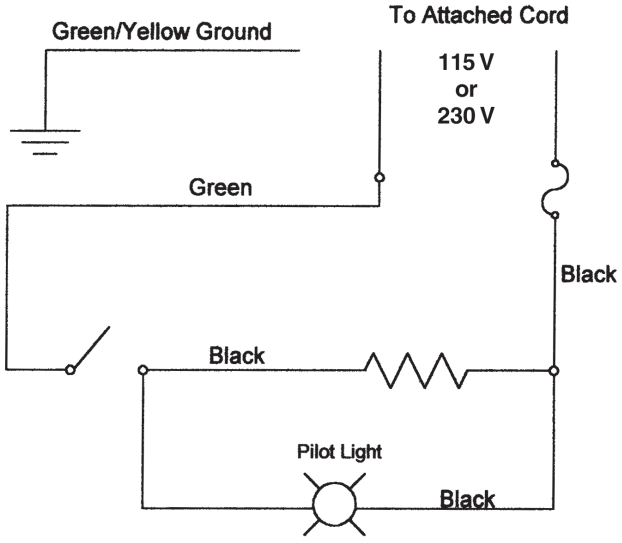
AIR VAC XQ TECHNICAL SPECIFICATIONS

Model Number 101
cUL/ UL & CE
115 V~ 50/60 Hz 350 W
Air pressure (optimum): 72 psi

Model Number 201
cUL/ UL & CE
230 V~ 50/60 Hz 350 W
0.5 M Pa (5kg/cm2)

ELECTRICAL SCHEMATIC

115 volt & 230 volt



ADDITIONAL TECHNIQUES

BASE PLATE TECHNIQUE

Material

You will achieve precision adaptations using the same basic techniques whether you are using resin base plate material, tray material or clear material. Resin tray material may be used for heavier bases, particularly on some lower cases. The material is easily cut or ground when the base plate is removed from the cast. Any problem areas may be re-adapted by heating the local area with a micro-torch and pressing down with dampened fingers. The precision adaptations achieved by The Air Vac XQ eliminate the need for any stabilizer. Resin base plate material is not brittle and is also dimensionally stable up to 180˚-190˚ F.

Blocking Out

When using The Air Vac XQ for adaptation of partial denture base plates or casts with severe undercuts, we suggest the use of block-out compound. (Resin base plates will easily slip on and off over most undercut areas). By covering the teeth in the labial and buccal areas liberally on partial denture casts with a block-out compound, the material is prevented from locking around the teeth.

Note: Do not use wax or any other substance, which could melt during the heat adaptation process.

Reinforcing

If reinforcing is desired, ordinary reinforcing wire may be attached to the base plate at two or three spots with cold cure acrylic or sticky wax. Cold cure monomer may also be brushed on the lingual area and cold cure powder added to provide additional strength.

Finishing

Although not normally required, the peripheral edge may be polished with pumice and a buffing wheel to provide the finest quality try-ins.

Note: On heavily undercut casts, the top surface of the base plate may be shell blasted to increase wax adhesion.

Relief Chamber Technique

Forming the relief chamber to the cast and cementing it in place before adapting the resin base plate eliminates the need to saw out the palate when the case is returned for finishing. This precision adaptation has the uniform thickness over the palatal area. For finishing, simply place a sheet of wax or rugae form in the palate and invest.

RESIN TRAY TECHNIQUE

Material

Use high-grade resin tray material or tray material, extra weight.

Instructions

1. Prepare the cast in the usual manner. However, you may desire grinding the peripheral roll nearly up to the height desired on the labial and buccal flanges of your tray.
2. If a handle is desired - cut a scrap of material approximately 3/4" x 1-1/2". Attach the 3/4" side of this material using blockout compound to the area where you want the handle to be formed. The materials must be completely vertical. Proceed with normal forming method. The heat from the materials will transfer into the handle allowing you to bend the handle as you wish.
3. To oversize or create spacing for your tray use blockout compound, a damp paper towel or a properly sized fluoride tray placed on the model.
4. For oversizing or spacing your tray, use a wet sheet of paper towel or block-out compound. Cut the paper towel into the shape desired, wet the paper towel and pack into undercuts and anywhere you wish to oversize the tray. Block-out compound is generally used on immediate casts.
5. On very deep lower lingual flanges, it is best to block out the depth not needed on your tray.
6. The adaptation is now made directly over the cast and handle form so that the handle becomes an integral part of the tray.
7. Use heavy shears or Keystone electric knife to cut around the cast after adaptation. A wheel or disc is then used to cut excess material away from the cast. After removing the tray from the cast, a trimming wheel or a regular spiral plater saw can be used to cut around the lingual area of a lower tray. The final shaping should then be done with a grinding wheel. Bur or grind away the base of the handle on the interior of the tray where it was waxed to the cast, restoring the spacing in this area.

Note: If the tray is to be used with alginate impression material, holes may be burred in the tray with a No. 8 round bur to provide adhesion for the material. The interior of the tray may be shell blasted to provide a rough surface. If stops are desired on oversized trays, use small pieces of soft wax. The resin tray can be warmed with a micro-torch at any time to slightly alter the shape and fit.

A custom impression tray may be adapted without a handle, by adapting the material to the cast without first attaching the handle form. A cold cure or metal handle may be attached after trimming the tray.

BITE RAISER OR RIGID BRUXISM SPLINT
TEMPORARY PARTIAL OR SPACE MAINTAINER
BITE PLANE OR PERIODONTAL STABILIZATION SPLINT

1. The basic technique is followed except that the cast should be blocked out in the labial and buccal areas nearly up to the occlusal surfaces to prevent the material from completely jacketing the cast. This procedure will insure easy removal of the adaptation from the cast.
2. After adaptation, trim the appliance to the desired contours. The cast can be scribed with a sharp instrument to show desired margins before adapting the appliance. This line will be reproduced in the adaptation.
3. When making a bite raiser or bite plane, a slight capping can be left on the posteriors to increase stability. To raise the bite more than the approximate 1mm thickness of the finished adaptation, build up the occlusal surfaces with cold cure acrylic or make a second adaptation in its finished form on the cast. Attach the second set of occlusals to the first adaptation with cold cure, building up to the eight desired. Using this method, you may raise the bite as desired and have natural occlusal surfaces for the opposing teeth.
4. In making a temporary partial, the adaptation is formed, trimmed to the desired shape and placed on the cast. The teeth to be attached are held in place with sticky wax or a plaster cast while being attached with cold cure acrylic. The appliances are completed by pumice polishing any rough edges. Stabilization splints and space maintainers are formed to the cast, which has been blocked out or relieved as necessary. Trim and finish the appliance to the final margins.

Note: Resin tray material may be used for partials to provide a stronger appliance. Tray material should be heated to a greater degree when used for this purpose in order to achieve a complete adaptation. If cold cure is used for attaching teeth, the finished appliance may be cured in a pressure unit at approximately 130˚F following the manufacturers recommended curing times.

SURGICAL BASE

Material

Use The Air Vac XQ with clear tray material (.060) or clear tray weight (.080), to construct bases to aid in precise visual determination of the surgery necessary to accommodate the immediate denture. Clear materials should be stored in a cool, dry place. Refer to trouble shooting section if bubbles appear.

Instructions

1. This technique begins after the immediate cast has been invested, boiled out and trimmed. An impression is then taken of the cast, preferably with alginate material.
2. Using the machine and 5" x 5" clear tray material, run a new cast of plaster or stone in which the adaptation is made. Remove and finish the surgical base.
3. Polish the edges with pumice and a buffing wheel as the final step in forming your precision surgical base if severe undercuts are present.

FLUORIDE TREATMENT SPLINT
SURGICAL PACKING SPLINT

Material

Temporary splint material is used for these techniques. This material provides a very thin splint, which will be adapted securely to the teeth and tissue, be completely unobtrusive in the mouth as a temporary appliance, and will not interfere with bite relationship. This extremely versatile material is also useful for many types of immediate splinting procedures in the dental office.

The Fluoride Treatment Splint

Adapt the splint directly to the cast following the Basic Technique outlined on page 6 and using material of choice (mouthguard material works well for this). Carefully remove the adaptation from the cast and trim with scissors.

The Surgical Packing Splint

1. If the splint is to be used for retaining packing or maintaining pressure on an edentulous area, it is usually formed to a cast from which the extracted teeth have been removed and the edentulous area simulated by carving. Alternatively, an impression may be obtained after the extraction and surgical procedures are completed. A cast is then poured for use in the formation of the splint. Packing material is simulated on the cast using block-out compound.

2. If the splint is to be used for retaining packing or treatment material placed gingivally, as in the case of periodontal procedures, a cast is obtained and the packing or treatment material is simulated on the cast by the use of block-out compound. The temporary splint material is then adapted over the relieved cast. After careful removal from the cast, it may be trimmed with scissors.

MOUTHGUARD
RESILIENT BRUXISM SPLINT

The Air Vac XQ will form mouthguard material without the use of hot water and without handling the sticky material.

Note: To identify an individual mouthguard, the patient's name or I.D. number may be scribed on the cast or alternatively, a plastic tape marking machine may be used to print out patient I.D. information. The tape should be attached to the cast lingually beneath the gingival margin before coating with an appropriate silicone lubricant spray. Either of these methods will provide an imprint, which will transfer to the formed clear mouthguard.

Instructions

1. Lightly spray the perforated vacuum plate and the sides of the hinged frame with silicone lubricant spray to prevent the material from sticking to machine parts when warm.
2. Trim the cast to keep the vertical height to a minimum.
3. Spray the cast with silicone lubricant spray.
4. Let the vacuum pump run until you have a completely defined appliance. This may take about 30 seconds.
5. Mouthguards retain heat after processing. Leave the appliance on the machine to cool or use T&S Insta Cool. When the appliance is no longer tacky, it can be removed from the machine. To speed the cooling process, you may put the appliance under running water.
6. Trim away excess material and remove the cast from the adaptation and finish trimming the mouthguard to the desired shape.
7. Rough edges can be smoothed with a micro-torch and a wet finger or by lightly touching the appliance to a cloth polishing wheel.

TEMPORARY SPLINT

To register the opposing teeth in the occlusal surface of the splint, articulate the upper and lower casts. Place the splint on the proper cast and warm the occlusal surface with a Bunsen burner or alcohol torch. When sufficiently warmed, the opposing arch may be pressed into the soft material of the splint. Heat the splint carefully to avoid scorching the material. Lubricate the opposing arch with lubricant spray before seating it in the warmed material.

This technique will facilitate the construction of temporary bridges over prepared teeth with speed, safety and accuracy.

Material

The .020 temporary splint material used for this technique is very thin and heats quickly. It is recommended that you preheat the heater for approximately 1 minute to stabilize the temperature.

Instructions

1. Take an impression prior to the preparation of the teeth and pour a cast of the entire arch or a quadrant.
2. If there is an edentulous area where the bridge is to be constructed, an artificial tooth must be waxed in place to provide anatomy for the adaptation of the splint. Reduce the vertical height of the cast as much as practical.
3. Using the basic technique described on page 17, form the 5" x 5" temporary splint material to the cast.

   Caution: THIS MATERIAL HEATS TO THE ADAPTABLE STAGE VERY QUICKLY.
4. Using scissors and a knife, carefully remove the adaptation from the cast. Be careful not to tear the material during removal.
5. If the formation of the splint is done by a laboratory, it should be provided to the dentist at this point without final trimming.

6. Trim the splint to cover one or two abutment teeth on either side of the splint area and approximately 1/8" beyond the gingival margin.
7. During the preparation stage, the splint may be inserted in the mouth and used as a reference for the contour of the preparation. The splint will provide a transparent anatomy of the original teeth and the proper occlusion with the opposing arch.
8. After the preparations are complete and lubricated, cold cure acrylic is built up in the splint by alternately adding liquid and powder in the prepared area to the height of the gingival margins. If there are bubbles or voids at this point, they can easily be seen. When the cold cure acrylic takes on a dull finish and begins to set up, insert the splint into the mouth.
9. Ensure a proper fit in the mouth. Check to see that all margins are full and there are no voids. As the cold cure acrylic begins to set, the splint can be loosened and re-seated to ensure that it will not cure onto the preparations.
10. The temperature of the curing splint can be felt through the clear material. It will be firm enough to remove from the mouth before the acrylic reaches its hottest temperature. This will eliminate the possibility of gingival burn.
11. After the splint is removed from the mouth, allow it to cure completely in warm water or in a pressure curing unit.
12. When the acrylic is completely cured, remove it from the clear splint by flexing or peeling the splint from the cured acrylic bridge. The acrylic will be released from the splint material in a polished condition. It will only be necessary to trim the margins and interproximal spaces with a small disc.
13. The temporary splint is then cemented in place in the usual manner.

COPING TECHNIQUE

This technique can also be used for vacuum forming bases for full or veneer crowns, bases for telescope crowns, cast transfer copings and unit built bridges.

Material

Coping material is designed to give accuracy, dimensional stability and complete burn out. The plastic copings may be handled without distortion. Margins and detail of the die can be easily seen through the transparent material. Finish waxing is facilitated due to the stable plastic base. For example, windows for veneers can be carved quickly and easily by relieving the area to the plastic coping or base.

Coping material can also be used with the Temporary Splint Technique for the construction of temporary acrylic bridges. Since cold cure acrylic materials will not bond to the coping material, the cured bridge can be easily removed from the splint.

Instructions

1. The use of the Bead Well is suggested for individual teeth or quadrants. The beads will hold the teeth and allow for very precise adaptations. The teeth or quadrants should be inserted as desired for finished results. It is recommended that all dies be painted with die spacer.
2. Lightly spray the entire upper surface of the clay and exposed dies with lubricant spray.
3. Place the clay and dies in the center of the vacuum plate on The Air Vac XQ.
4. Proceed with the vacuum forming process according to the instructions for basic operation of The Air Vac XQ as described on page 6. THE HEATING ELEMENT SHOULD BE PREHEATED.
5. After forming the adaptation and swinging the heating element out of the way, allow the adaptation to cool for at least 30-60 seconds. The material will become cloudy before it cools sufficiently for removal from The Air Vac XQ.

6. Cut the individual dies from the sheet material with scissors.
7. The individual copings may be removed from the dies by cutting through the coping material with a hot instrument at least 1 mm below the margin or shoulder of the die. Before removing the coping, you may trace a line with a scribe or marking pen approximately 1 mm above the margin and trim the coping to this line.
8. The final trimming of the coping margin can be accomplished with small, curved-blade scissors. Trim the plastic coping at least 1 mm above the shoulder or finish line.
9. With the coping removed, lightly spray the die with a die separator. Replace the coping on the die and wax the margins to the desired length. Any form of waxed unit can be shaped at this time such as a veneer, full crown, transfer coping, or unit built coping. Any form of retention can be used.
10. Sprue on the copings in the usual way.

    Note: Prior to investing, the forms should be sprayed with debubblizer to insure smooth, bubble free investing.

11. Follow through with your normal investing and casting technique.