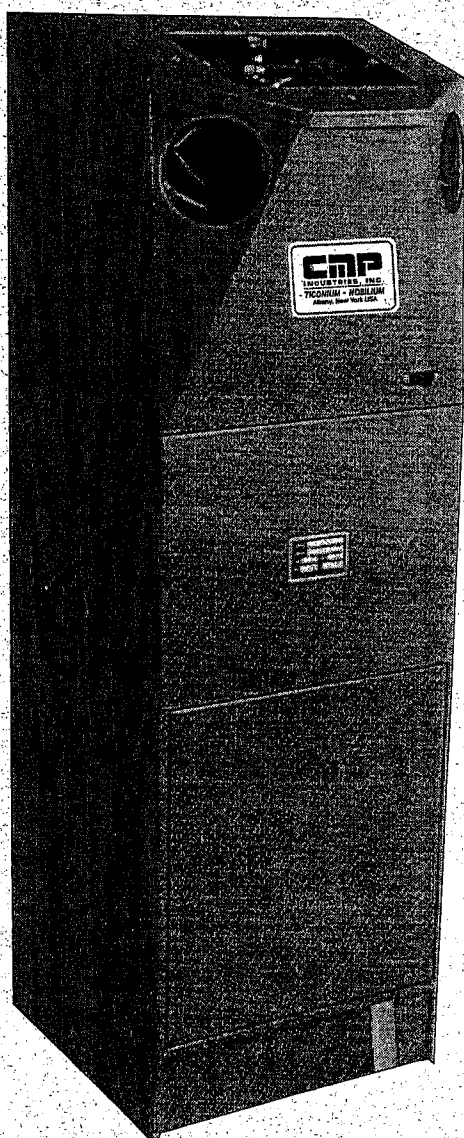
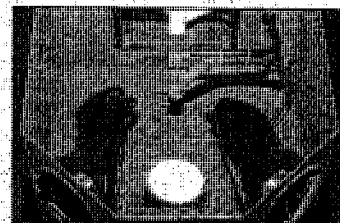
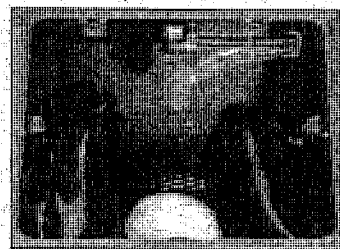

Quiet, Hands-Free "Foot Switch" Operation
SHELL/SANDBLASTER
Ideal for Walnut Shell Use with
Acrylic Dentures and Sand Abrasive Use
with Partial Dentures



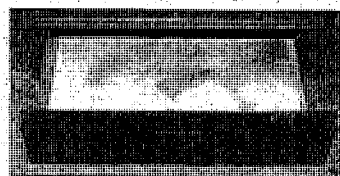
- Built-in Suction and Dust Collection System
- Convenient On/Off "Foot" Switch Operation
- Compact, Vertical Design Occupies Less Than 2-1/4 Square Feet of Floor Space
- High Visibility with Large View Glass and Bright Internal Lighting
- Standard 115 Volt Electrical Requirement
- New, Modern Putty Finish



Large, lighted working area with anti-static rubber gloves.



Extra-large, blast resistant viewing glass.



Easy access, pull-out tray for fast cleaning.

Owner's Manual

Congratulations!

You have just purchased a quality piece of CMP Dental Laboratory Equipment. It has been carefully quality-controlled and thoroughly tested at the factory for optimum performance and durability. From the smallest bench unit to the largest floor-standing casting machine, each piece of equipment must adhere to the same standards of quality and efficiency that have made all CMP laboratory equipment an outstanding value.

If you have any questions regarding CMP's quality line of dental laboratory equipment and supplies, please call toll-free: 800-833-2343 or 800-888-5868 (Fax: 518-434-1288) between the hours of 8:00 AM and 4:30 PM Eastern Time. Or, if you prefer, visit us at our web site: www.cmpindustry.com . . . we will be happy to assist you.

Demand the best! Insist on quality CMP Dental Laboratory Equipment.

Unpacking

Carefully remove the Shell/Sandblaster from its carton as outlined below and check for concealed damage. **If any damage is found, it must be reported to a representative of the carrier that delivered the sandblaster.** The representative should come to your laboratory and fill out a damage report form. **Do not proceed until this has been done.** Notify us only *after* the above has been initiated.

If no damage has been found, proceed as follows:

- 1) Remove all of the nails around the bottom of the crate.
- 2) Cut plastic bands.
- 3) Remove top.
- 4) Lift carton off bottom.
- 5) Remove plastic bag.
- 6) Again, check for damage. (*See above*)
- 7) Remove plastic bag of packing inside Shell/Sandblaster.
- 8) Lift Shell/Sandblaster *carefully* off bottom.

It is important to thoroughly review this manual and test your new shell/sandblaster prior to loading with abrasive media.

Electrical Connection

In most cases your new Shell/Sandblaster

requires only a standard 115V-60 Hz outlet to operate. Before plugging the sandblaster in, be sure the identification plate's electrical specifications agree with the electrical provided at the outlet. As with any electrical device, take extra care when handling liquids around electrical connections to avoid accidental shock.

It is important to read the next section prior to plugging your Shell/Sandblaster in.

Installation and Testing

Even though your unit was fully tested and inspected before leaving CMP Industries, we cannot control the handling of equipment en route to you. For this reason we feel the following checks are very important.

- 1) Remove rear panel on top section of Shell/Sandblaster.
- 2) Connect air line to input side of solenoid valve. (*Check air requirement for questions about air supply*)
- 3) Install light bulb.
- 4) Check to see that motor lead is plugged in and light bulb is tight.
- 5) Check electrical information on identification nameplate and make sure the blaster is of *correct frequency and voltage*.
- 6) OPTIONAL: The 4" round collar (packed in the blast chamber) can be attached to *rear of blaster* and exhausted air can be ducted *outside*. Dryer vent kit can be used.

- 7) Replace panel back.
- 8) Place Shell/Sandblaster in desired laboratory location.
- 9) Plug Shell/Sandblaster in.
- 10) Push rocker switch on front panel.
 - A. Light should come on.
 - B. Blower should start.
 - C. Push stainless steel toe switch activator and air should flow.
- 11) Put blasting media into hopper and fill to about 1" below screen.
- 12) Try blaster. To *adjust* for blast media, see section on "BLASTING MEDIA".

Adjusting Shell/Sandblaster

- 1) **BLASTING GUN:** To regulate force of blasting and suction loosen top 8-32 round head screw on blast gun and move slowly *up* and *down* while operating. When desired results are obtained, *lock screw*.
- 2) **SUCTION MEDIA:** See blast gun section above. If "*pulsing*" occurs, the vent tube in the right rear corner may need the *plug removed*. This normally remains in except for **shellblasting**.
- 3) **SUCTION VACUUM:** Remove *front panel* in the base cabinet. There is a damper in the *front left corner*. Adjusting this will vary the suction of the built-in vacuum.

This should be done only after the blaster has been used a few days and the pores of the filter bag are filled.

4) **NOZZLE REPLACEMENT:** Loosen lower screw on blast gun and nozzle will come out. The nozzle hole is 3/16" in diameter. When the hole enlarges (*from normal use*) to 1/4" diameter, the nozzle should be replaced. Order **nozzle #65108P5**.

5) **GLASS REPLACEMENT:** To remove glass, lift 4 spring clips found underneath cover and glass will come out. Put new glass (**#61647**) in and release spring clips *carefully*.

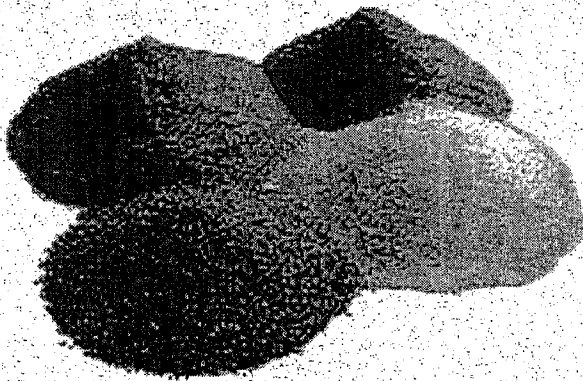
6) **AIR REQUIREMENT:** To obtain the best results with your new Shell/Sandblaster, your compressor should be capable of delivering **5-1/2 cubic feet of air per minute** at pressures between **80 to 100 pounds**. Roughly, a 1 HP motor on a compressor will deliver *4 cubic feet of air per minute*. If your compressor will *not* deliver this volume of air, the pressure will fall as you continue to use the unit and blasting efficiency will drop. You will then have to stop the blasting operation until the pressure builds up to a satisfactory level.

Pressures over 100 pounds should not be used as the magnetic solenoid valve which controls the air flow is not designed to open against pressures *above* "100" pounds. If your compressor is set for 150 pounds, as many are, use a pressure reducing valve at the point of attachment to the Shell/Sandblaster. This will **reduce the pressure** to the correct level.

Since most compressors contaminate the air with both oil and moisture, install a moisture trap *close to the point where the Shell/Sand-blaster is attached to the airline.*

A TRAP AT THE COMPRESSOR IS NOT EFFECTIVE. It must be *close to the Shell/Sandblaster* to operate efficiently.

Blasting Media



1) SILICA SAND #5037 – 100 LB:
An economical, medium-grit abrasive with consistent properties. Good all purpose use with chrome-cobalt alloys.

(See "ADJUSTING" instructions on page 4.)

2) ZIRCON GRIT #108 – 50 LB:
A fine-grain, free-flowing granular grit with high specific gravity. Consequently, while the grit size is small, the impact on the work is heavy and both investment and oxide are removed quickly and effectively. The Shell/Sandblaster is factory-set for use with Zircon Grit as shipped.

(See "ADJUSTING" instructions on page 4 for any minor changes.)

3) GLASS BEADS #85 – 10 LB:

These quality glass beads are medium size (about 300 mesh), standard glass micro-beads. The Shell/Sandblaster can be used "*as shipped*" except for a minor blast gun adjustment.

(See "ADJUSTING" instructions on page 4.)

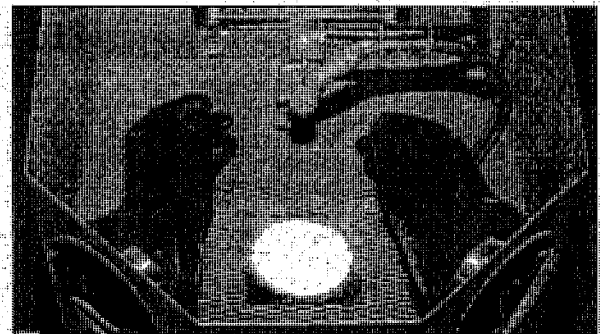
4) WALNUT SHELL #123 – 50 LB:

This premium walnut shell abrasive is approximately 30-40 mesh in size. When using shell, *the plug in the vent tube should be removed for better shellblast operation.* Adjust the blast gun for optimum results.

(See "ADJUSTING" instructions on page 4.)

Cleaning Blast Chamber

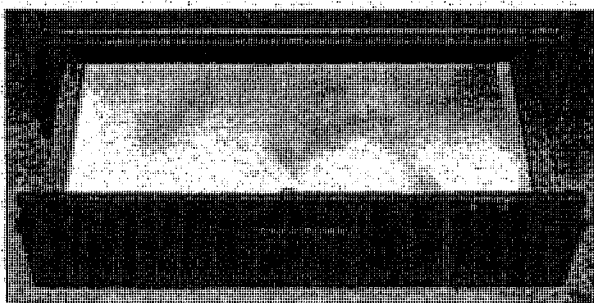
- 1) Remove front panel of base cabinet.
- 2) Place container under pipe extending down from top.



- 3) Remove pipe cap and sand will drain.
- 4) Clean cap and pipe thread and put cap back on.
- 5) Put front panel back on.

Cleaning Suction Chamber

- 1) Remove *lower drawer*.
- 2) *Dump* drawer.



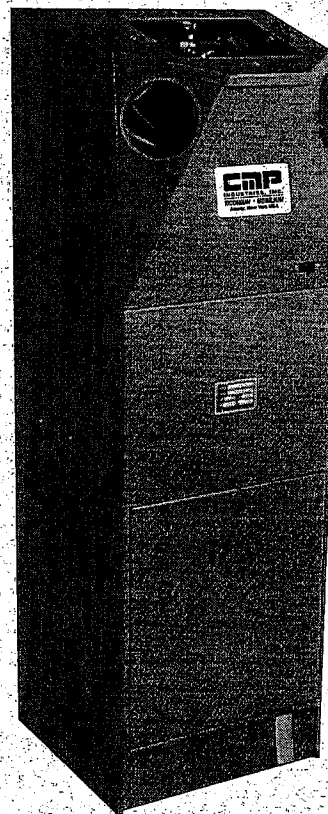
- 3) Clean area drawer *slides in*.
- 4) Replace drawer.

Specifications

Item: Shell/Sandblaster 3160
***Electrical:** 115 Volt, 60 Hz—7 Amp
Air Requirement: 80 to 100 PSI
Height: 51" (130 cm)
Width: 16" (41 cm)
Depth: 19" (48 cm)
Shipping Wt: 137 Lb (62 Kg)

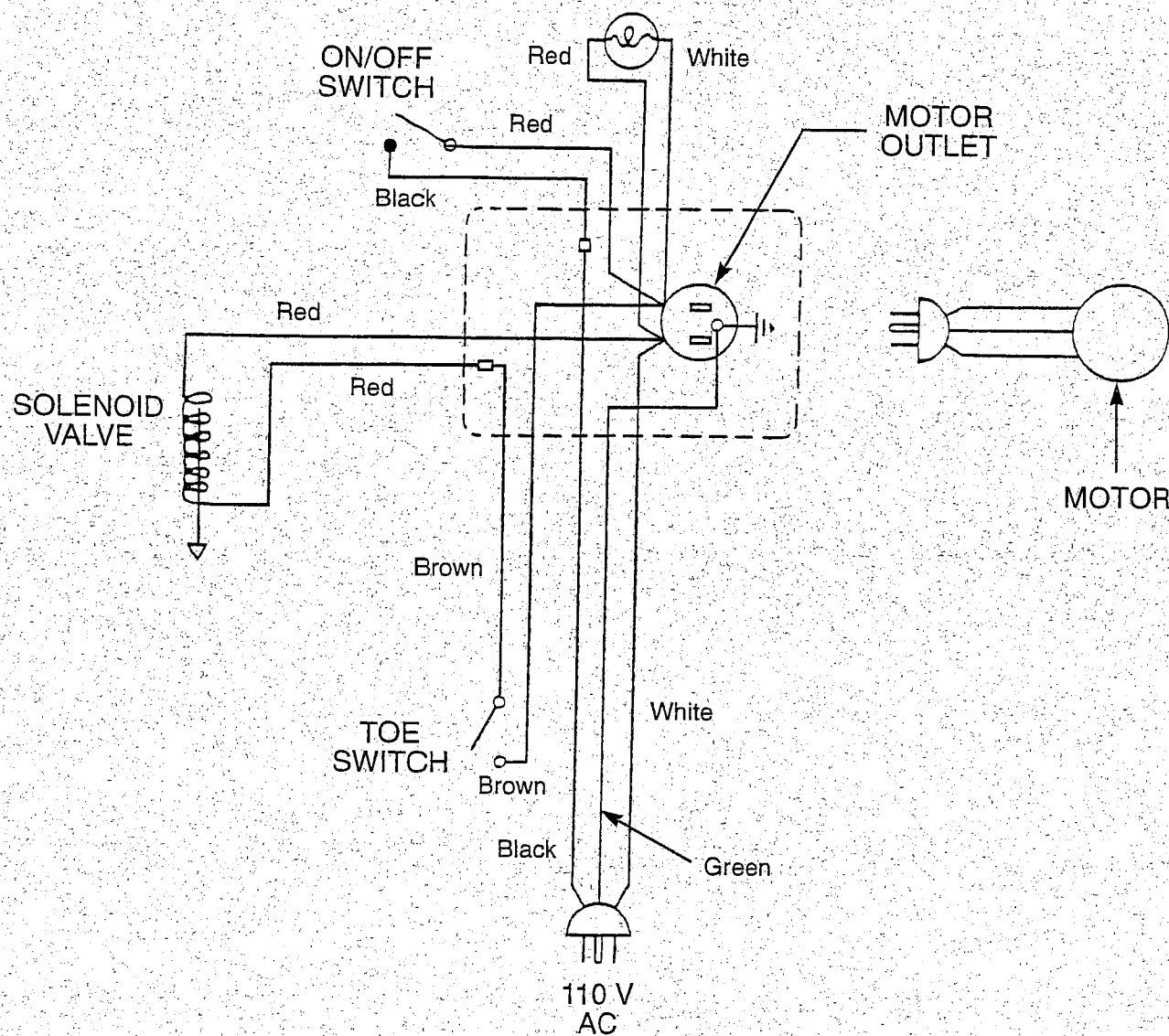
* Alternate voltages and cycles are available which require the use of a transformer. If you have ordered such a unit, first check the transformer to be sure you have the proper unit for your requirements. Plug the Shell/Sandblaster into the receptacle on the transformer marked "115 V". Plug transformer unit into a wall receptacle. Your new Shell/Sandblaster should now be operational.

Suggested Spare Parts



ITEM	DESCRIPTION	PART #
1	Door Glass, 8" x 10"	61647
2	Vacuum Bag	65141G2
3	Solenoid Valve	40910P30
4	Blast Gun	65143
5	Blast Nozzle	65108P5
6	Inner Nozzle	65143P3
7	Suction Screen	65143P5
8	Vent Cap	65143P10
9	Switch, On/Off	40910P24
10	Bulb	40910P29
11	Gloves	1872
12	Plastic Hose	40894P24
13	Plastic "Y"	65143P6
14	Glass 5-1/4" x 8" Light	61752
15	Switch, Foot	40910P66

Electrical Schematic





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