

# Prisma Operator's Instructions



## A-Series Dental Units

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### Operating Conditions

Ambient	
Temperature	+10 C to +40 C
Humidity	30% to 75%
Atmospheric	
Pressure Range	700 hPa to 1060 hPa

### Storage & Shipping

Ambient	
Temperature	- 40 C to +70 C
Humidity	10 to 95 RH (non-condensing)
Atmospheric	
Pressure Range	7 to 15 psi (50 to 106 Kpa)

### Classifications

Classification of Equipment	Class I
Degree of Protection against harmful ingress of water	Ordinary
Mode of Operation	Intermittent

### Technical Support

For Technical support and repair assistance, contact your local Prroma dealer

### Specifications

#### Enlighten B

<b>Electrical Input:</b>	
Voltage	120 VAC
Phase	1
Frequency	50/60Hz
Power	15 VA

#### Electrical Output:

Voltage	9 VAC
Current	1000 mA
Power	9 W

#### Enlighten F

<b>Electrical Input:</b>	
Voltage	120 VAC
Phase	1
Frequency	50/60Hz
Power	1A

#### Electrical Output:

Voltage	13.7 - 12.2 VAC
Current	8.6 A
Power	104.92-117.82 W

#### Cavitron Ultrasonic Scaler

<b>Electrical Input:</b>	
Voltage	115 VAC
Phase	1
Frequency	50/60Hz
Power	1.25 A

#### Electrical Output:

Voltage	24 VAC
Current	1.25 A
Power	30 W

#### Pneumatic Specifications:

Water Pressure	
Patient Bottle.....	35 psi (241.4 Kpa)
City Water.....	35 psi (241.4 Kpa)
Air Pressure	
Regulated.....	80 psi (551.8 Kpa)

## ■ Replacement Parts

To order supplies or replacements parts for the A-Series dental unit, contact your local Proma dealer.

Part Number	Description
50001052A	Uni-Handpiece Holder Assembly, Right
500010621	Uni-Handpiece Holder Assembly, Left
8010410	Cooling Air Value Assembly
8020110	Control Module Assembly, Selector Head
8020140B	Water Protect Valve Assembly
41150004	Amalgam Trap Assembly
4115006	Amalgam Trap Lid
90989	O-Ring, Lid Amalgam Trap
93013	HVE Valve Assembly
93014	Saliva Ejector Assembly
93015	Lever, HVE
93018	Lever, Saliva Ejector
5013170	Socket Pressure Assembly
46188006	56 inch Handpiece Hose
92751	Syringe Assembly
92982	Gasket, Socket Pressure
9128600K	One Litter Water Bottle Kit
9132700K	Two Litter Water Bottle Kit
20150022	Channel Tilt, Telescoping Arm
8257002	Absorbing Oil Collector Pad
8030107	½-20 Finishing Nut
91032	Stainless Steel Tray
92451	Syringe Repair Kit
92814	Foot Control Repair Kit
91267	Diaphragm Pilot Valve
91462	Air Regulator Repair Kit
91463	Water Regulator Repair Kit
91301	Pilot Valve Repair Kit

## ■ Warranty

Proma warrants its products against defects in materials and/or workmanship for five years from the date of shipment from the factory. No other warranties are expressed or implied. No employee, representative or dealer is authorized to change this warranty in any way, or grant any other warranty dealing with this product. **Proma's** sole obligation under this warranty is limited to repair, replace, or modify the defective part or product if, in its judgment, this is advisable. Labor and other costs for removal and reinstallation are not included in this warranty. The buyer shall have no other remedy. (All special, incidental, and consequential damages are excluded.) Written notice of breach of warranty must be given to **Proma** within the warranty period. The warranty

## ■ Care & Disinfection

### Use Disposable Plastic Films and Foils

Proma encourages the use of disposable films and foils on handles and surfaces commonly touched with gloved hands. This can reduce the need for chemical surface disinfection and extend the life span and appearance of these surfaces.

### Do Not Soak Plastic Parts

The useful life of many plastics may be greatly shortened by soaking in any disinfectant solution for unnecessarily long periods.

### Cleaning Your Proma Unit

Clean and disinfect the unit at beginning and end of workday and week.

Proma only approves the use of a mild soap and water solution, applied with a soft cloth.



Proma recommends **Birex**<sup>®SE</sup> manufactured by Biotrol International

The outside surfaces may be cleaned with a moist (not dripping) soft towel soaked in any mild soap and water solution and squeezed dry. Wipe and dry with a soft towel. Do not use abrasive cleaners or rough paper towel which may scratch the molded surfaces. After cleaning, wipe all surfaces with a gauze sponge moistened (not dripping) in a properly prepared diluted disinfectant.

### Unitized Handpiece Holders

Proma also recommends the use of "Soft Scrub<sup>®</sup> with Bleach" to clean the handpiece cavity of the holder. Apply cleaner to a soft cloth and rub the area to be cleaned.

does not cover damages resulting from improper installation or maintenance, accident or misuse. Warranty is void if product is not installed by an authorized **Proma** dealer. **NO OTHER WARRANTIES AS TO MERCHANTABILITY, FITNESS FOR USE OR OTHERWISE ARE MADE.** This warranty gives specific legal right, and there may also be other rights which vary from state to state. (Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply.)

**Proma** will provide service advice and instructions as required for repair or replacement of this product. Call 1.310.327.0035 for service.

## Control Locations, Selector Head with Pinch Control Block

### 1 Master Air & Water ON/Off Toggle

Opens and closes the air and water supply for the complete system. Exhausts air when turned off

**Important:** Shut off system by setting toggle to the off position each night before removing Patient Water bottle, or when not in use

### 2 Handpiece Coolant Water On/Off Toggle

On/Off for handpiece water. Turn off for low-speeds that normally do not require water coolant.

### 3 Handpiece Water Flush System

Flushes handpieces with water. Remove handpiece from selector and hold over basin or cuspidor bowl. Open fine mist controls fully. Pull forward for two minutes before first patient. Ten seconds between patients. Adjust fine mist controls.

### 4 Arm Lock/Release Momentary Valve

Releases vertical arm travel lock. Push-in button to unlock arm and release button to lock. Exhausts air when released

### 5 Handpiece Pressure Gauge

Avoid exceeding manufacturer's recommended air pressure – 30 to 35 psi for most high-speed handpieces.

### 6 Drive Air Pressure Control Knob (Yellow)

Adjusts drive air pressure to the handpiece. Clockwise decreases pressure, Counter-clockwise increases pressure

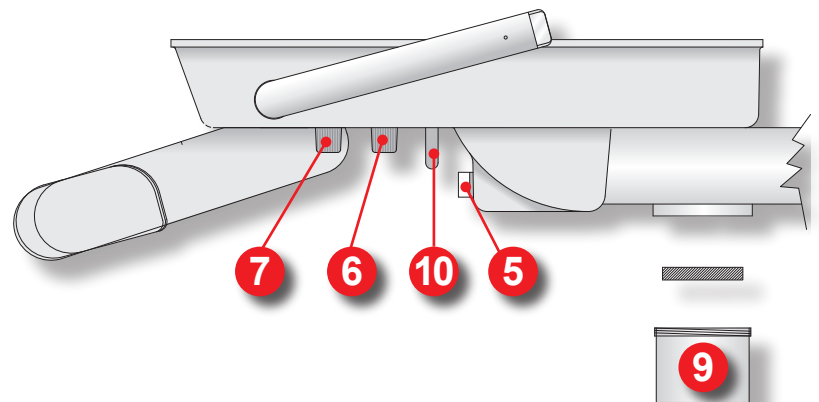
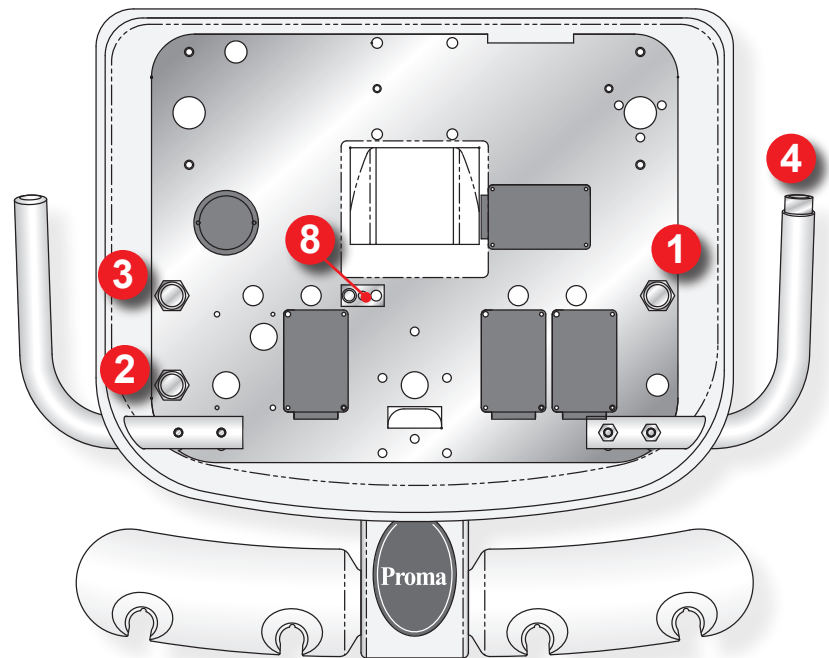
**Caution:** Excess pressure damages handpiece bearings

### 7 Coolant Water Fine Mist Control Knob (Blue)

Control water coolant to handpieces. Counter-clockwise increases pressure and clockwise decreases pressure.

### 8 Coarse Water Control

Stops water dripping after foot control is released. Adjust to fine mist with fine mist controls full opened



### 9 Oil Collection Jar

Pad absorbs handpiece oil. Unscrew and empty jar and replace pad weekly. Order kit 912-81-00 (24 pads)

### 10 Coolant Air Adjustment Control Knob

Adjusts coolant airflow to all handpieces. Counter-clockwise increases pressure and Clockwise decreases pressure.

## Control Locations, Selector Head with Traditional Control Block

### 1 Master Air & Water ON/Off Toggle

Opens and closes the air and water supply for the complete system. Exhausts air when turned off

**Important:** Shut off system by setting toggle to the off position each night before removing Patient Water bottle, or when not in use

### 2 Handpiece Coolant Water On/Off Toggle

On/Off for handpiece water. Turn off for low-speeds that normally do not require water coolant.

### 3 Handpiece Water Flush System

Flushes handpieces with water. Remove handpiece from selector and hold over basin or cuspidor bowl. Open fine mist controls fully. Pull forward for two minutes before first patient. Ten seconds between patients. Adjust fine mist controls.

### 4 Arm Lock/Release Momentary Valve

Releases vertical arm travel lock. Push-in button to unlock arm and release button to lock. Exhausts air when released

### 5 Handpiece Pressure Gauge

Avoid exceeding manufacturer's recommended air pressure – 30 to 35 psi for most high-speed handpieces.

### 6 Drive Air Pressure Control Knob

Adjusts drive air pressure to the handpiece. Clockwise decreases pressure, Counter-clockwise increases pressure

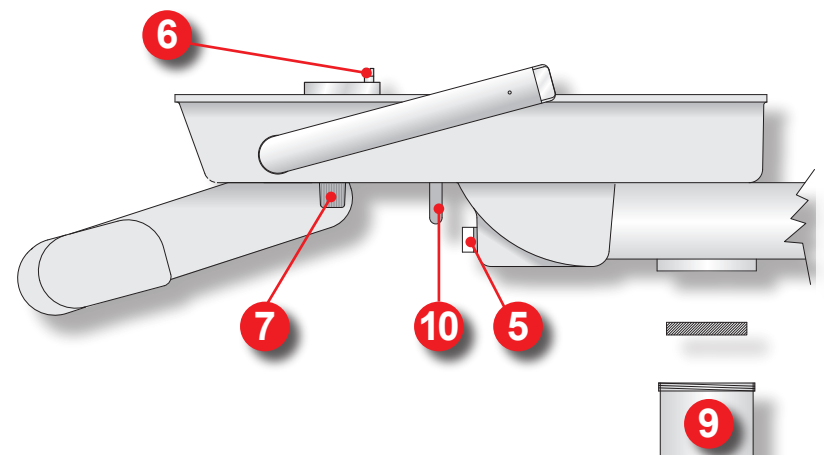
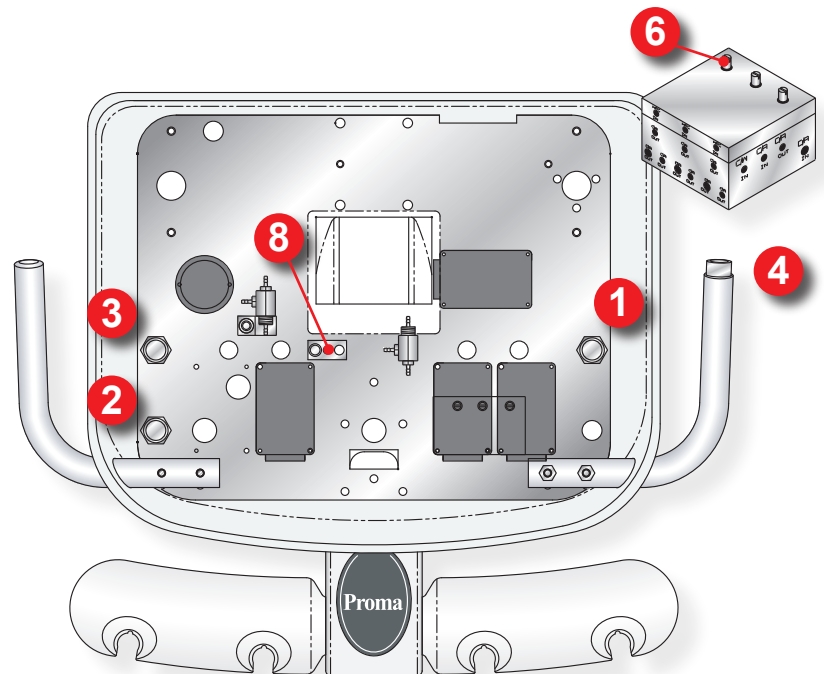
**Caution:** Excess pressure damages handpiece bearings

### 7 Coolant Water Fine Mist Control Knob (Blue)

Control water coolant to handpieces. Counter-clockwise increases pressure and clockwise decreases pressure.

### 8 Coarse Water Control

Stops water dripping after foot control is released. Adjust to fine mist with fine mist controls full opened



### 9 Oil Collection Jar

Pad absorbs handpiece oil. Unscrew and empty jar and replace pad weekly. Order kit 912-81-00 (24 pads)

### 10 Coolant Air Adjustment Control Knob

Adjusts coolant airflow to all handpieces. Counter-clockwise increases pressure and Clockwise decreases pressure.

## Control Locations, Selector Head with Pinch Valve Control

### 1 Master Air & Water ON/Off Toggle

Opens and closes the air and water supply for the complete system. Exhausts air when turned off

**Important:** Shut off system by setting toggle to the off position each night before removing Patient Water bottle, or when not in use

### 2 Handpiece Coolant Water On/Off Toggle

On/Off for handpiece water. Turn off for low-speeds that normally do not require water coolant.

### 3 Handpiece Water Flush System

Flushes handpieces with water. Remove handpiece from selector and hold over basin or cuspidor bowl. Open fine mist controls fully. Pull forward for two minutes before first patient. Ten seconds between patients. Adjust fine mist controls.

### 4 Handpiece Pressure Gauge

Avoid exceeding manufacturer's recommended air pressure – 30 to 35 psi for most high-speed handpieces.

### 5 Drive Air Pressure Control Knob (Yellow)

Adjusts drive air pressure to the handpiece. Clockwise decreases pressure, Counter-clockwise increases pressure

**Caution:** Excess pressure damages handpiece bearings

### 6 Coolant Water Fine Mist Control Knob (Blue)

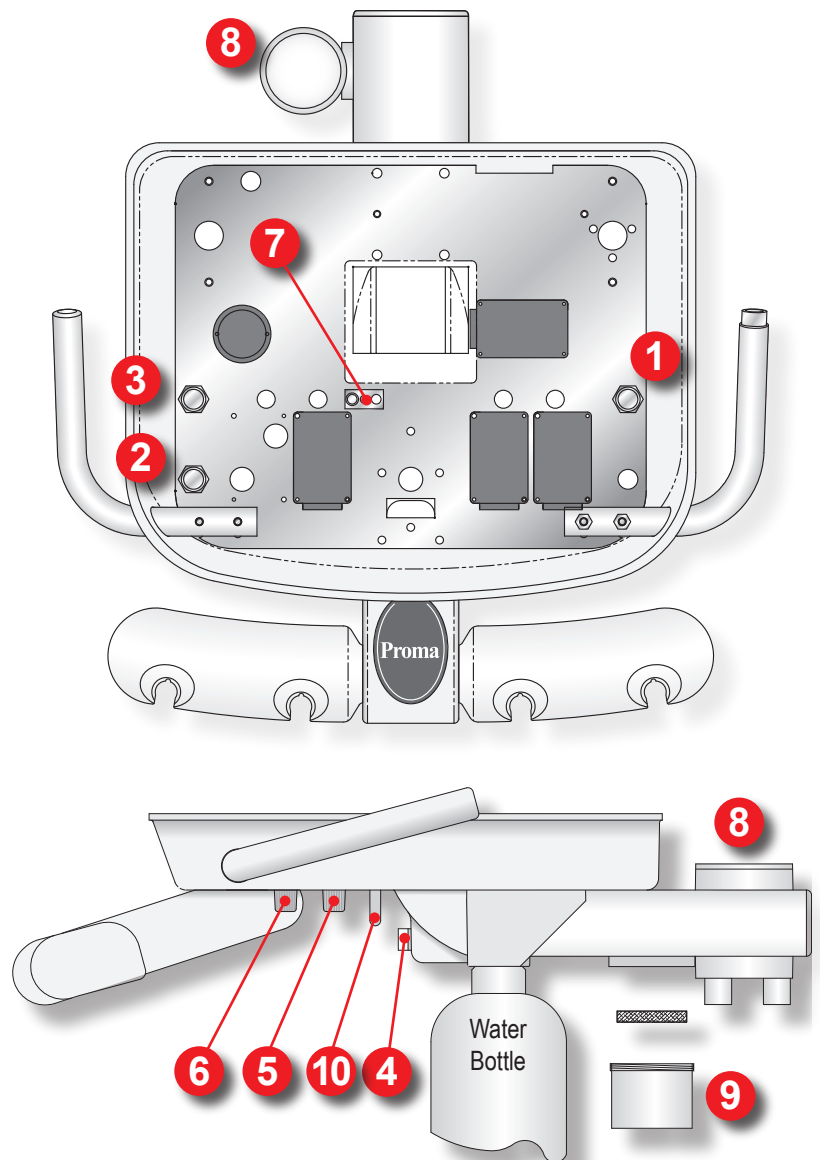
Control water coolant to handpieces. Counter-clockwise increases pressure and clockwise decreases pressure.

### 7 Coarse Water Control

Stops water dripping after foot control is released. Adjust to fine mist with fine mist controls full opened

### 8 Solids Collector

Catches debris that would otherwise clog sub-floor vacuum pumps and plumbing. Remove and replaceable screen (Proma part #91475). Treat as biocontaminated waste\* (see caution on page 00). Always flush vacuum system before changing screen.



### 9 Oil Collection Jar

Pad absorbs handpiece oil. Unscrew and empty jar and replace pad weekly. Order kit 912-81-00 (24 pads)

### 10 Coolant Air Adjustment Control Knob

Adjusts coolant airflow to all handpieces. Counter-clockwise increases pressure and Clockwise decreases pressure.

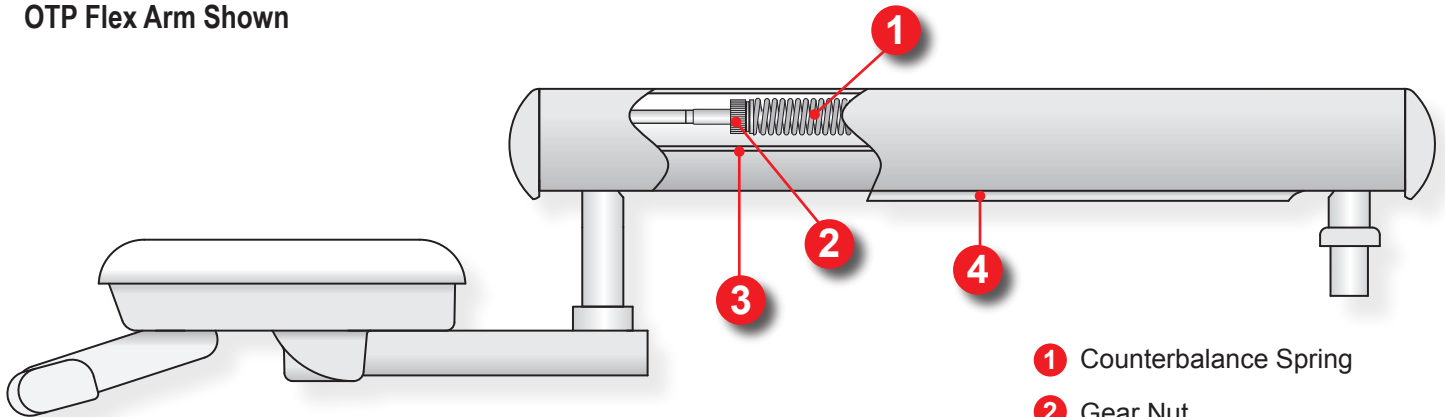
## Flex Arm Counterbalanced Adjustment

The flex arm counterbalanced spring tension is factory adjusted carry the weight of the unit plus an additional 1½ pounds. If the user's application requires the flex arm to carry an additional load, the counterbalanced spring can be adjusted to carry up to, but not exceeding 10 additional pounds.

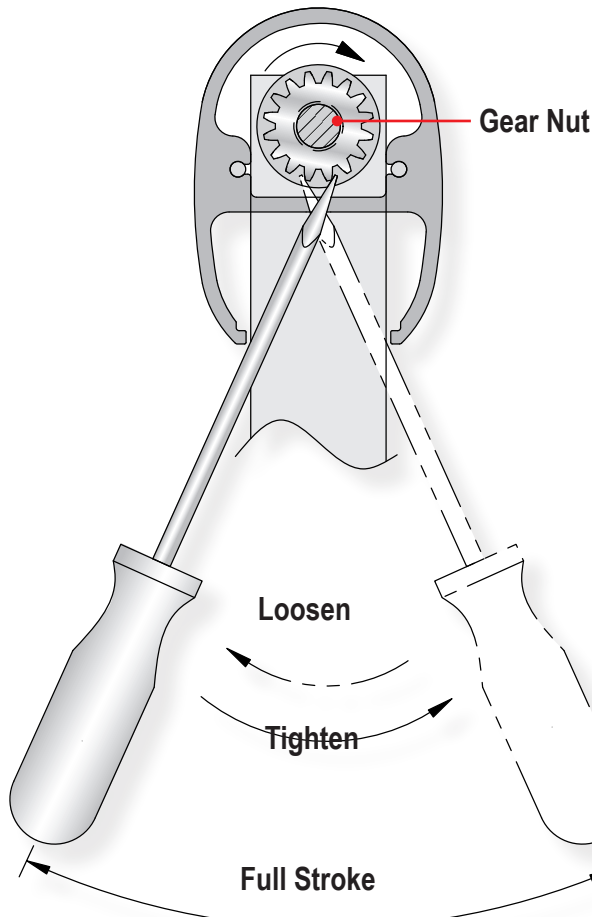
### Warning

Do not over tighten the flex arm counterbalanced spring. The flex arm counterbalance mechanism is designed to compensate for a maximum of 10 pounds of additional load. Adjusting the spring tension to carry more than an additional 10 pounds may cause permanent damage to the flex arm.

### OTP Flex Arm Shown



- 1 Counterbalance Spring
- 2 Gear Nut
- 3 ¼" Slot in Underside of Flex Arm Support
- 4 Bottom Cover



### Adjusting the Flex Arm Counterbalance Spring Tension

Remove the plastic bottom cover by pulling down on one end. Insert a flathead screwdriver thru the ¼" slot in the underside of the flex arm support and rotate the gear nut that compresses the counterbalance spring. See figure left.

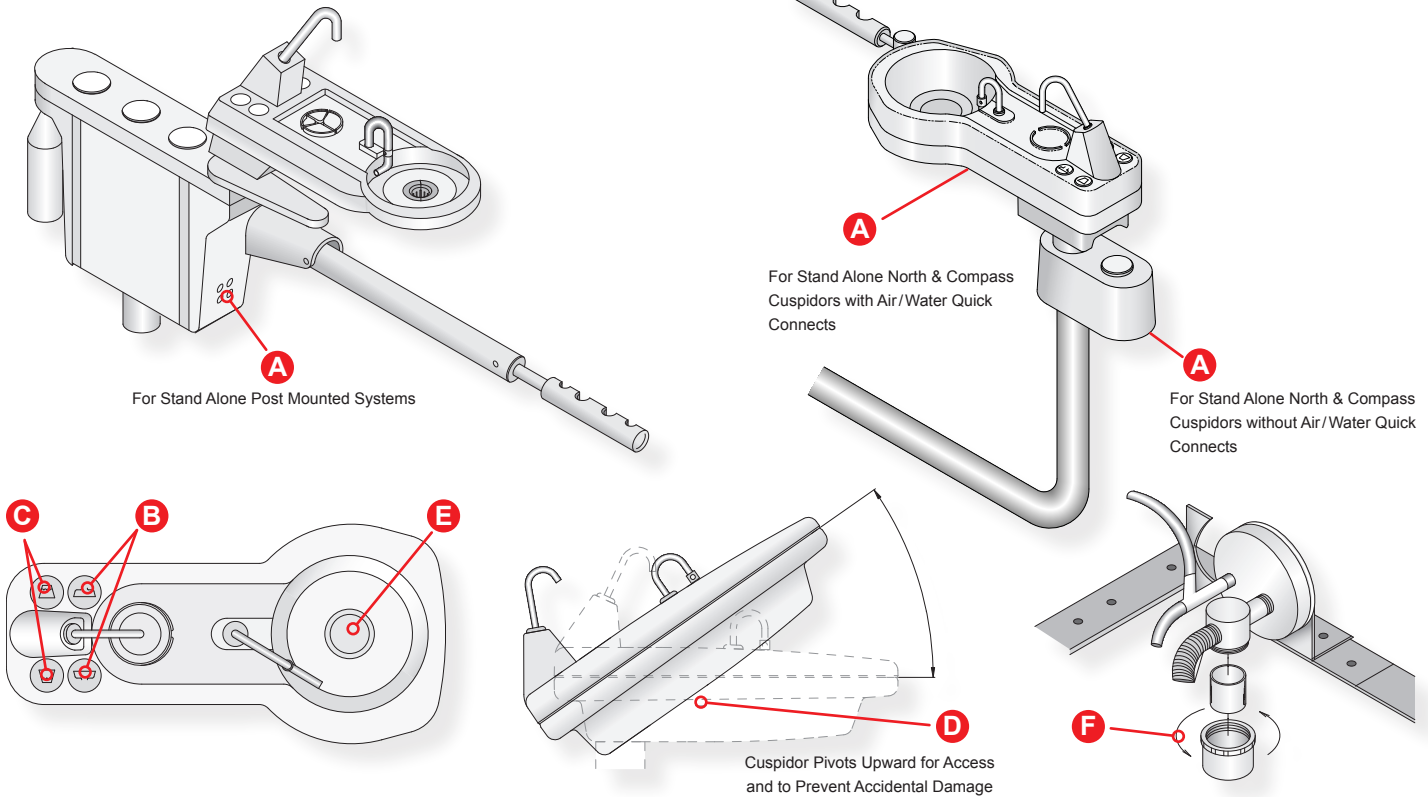
### Dual Cabinet / Wall Mount Unit

One full stroke of screwdriver will increase/decrease the flex arm counterbalance by 1/10<sup>th</sup> (.10) pounds

### OTP, Doctor and Hygiene Cabinet Units

One full stroke of screwdriver will increase/decrease the flex arm counterbalance by 1/16" (.06) pounds

## ■ Cuspidor Controls



### **A Master Air & Water On/Off Toggle**

Opens and closes the air and water supply for the complete system. Exhausts air when turned off.

**Important:** Shut off system by setting toggle to the off position each night, before removing Patient Water bottle, or when not in use.

### **B Bowl Flush Button**

Press down buttons to activate bowl flush. Delay timer terminates flow automatically.

### **C Cup Filler Button**

Press down buttons momentarily to fill the rinsing cup.

### **D Bowl Flush Time Delay Adjustment Knob**

Time of flush is regulated by adjustment knob located under cuspidor on the right side of unit. Turn counter-clockwise to reduce flush time; fully clockwise for continuous flow.

### **E Removable Debris Screen**

Use rubber gloves when cleaning. Removable screen allows for easy regular cleaning. Wipe amalgam silt from debris catch under screen with a paper towel and discard.

### **F Vacuum Drain (Option)**

Clean vacuum jar under floor utility cover weekly. Flush vacuum drain by pouring one (1) quart of water and Biotrol's Vacusol Plus® (or equal) detergent into cuspidor. Next, operate toggle valve for 30 seconds then turn toggle off. Remove jar and clean jar and screen.\* Lubricate seal and threads with Proma part #92004 or petroleum jelly and reassemble.

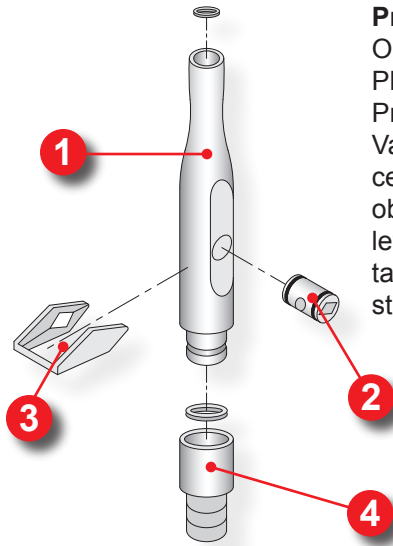
**Caution: Do not over-tighten.** (Note: use gloves, face and clothing protection when handling biohazardous materials.)



### **\*CAUTION**

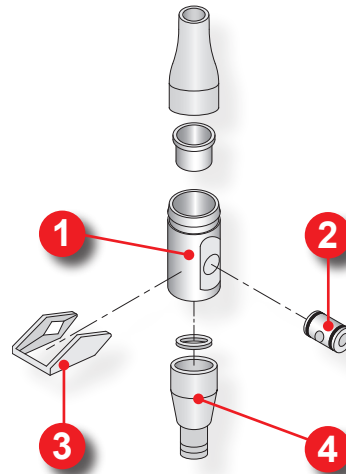
Debris from solids jars and vacuum screens may be classified as biocontaminated hazardous waste and require special handling and disposal. Contact your local community government for local regulations. Debris from amalgam filling placement and removal may contain mercury and heavy metals.

## Assistant Vacuum Controls



### ProValve Plus HVE

One autoclavable ProValve Plus is provided on most Prima vacuum packages. Variable control of the wet central vacuum system is obtained by adjusting the lever on the valve. See details below for cleaning and sterilization procedure.



### Saliva Ejector Valve

(Low volume vacuum) Autoclavable. A debris screen is provided under the tip. For trouble-free service, clean thoroughly by flushing daily with water. Use a non-foaming flushing detergent weekly.

An occasional spray of a handpiece lubricant will keep the knobs free of excess debris. Clean or replace Saliva Ejector screen after each patient with Prima part # 91057 or equal. Handle screen as biocontaminated waste\*

1 Valve Body

2 Spool

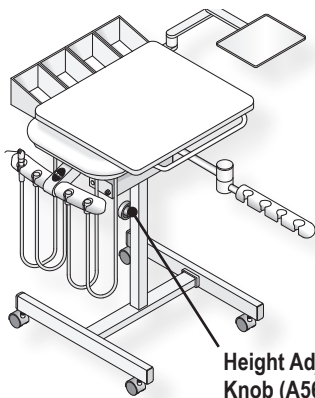
3 Lever

4 Swivel

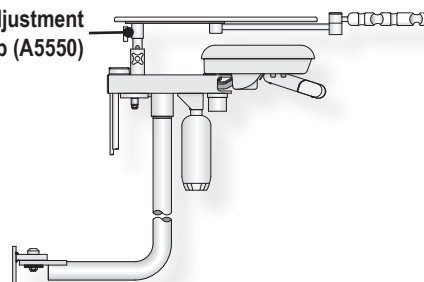
## Sterilization of ProValve Plus and Saliva Ejector Valves

- Disconnect valve from swivel
- Spread lever tips outward slightly and remove from spool.  
(Note By reversing spool end, you will reverse level on and off position).
- Push spool outward
- Clean thoroughly all O-rings, valve body and spool parts inside and out with diluted germicidal detergent. Rinse thoroughly and dry.
- Lubricate O-rings and all moving parts using Prima silicone lubricant (part # 92004).
- Reassemble valve and sterilize.

## Dual Cart & 12 O'Clock Cabinet Mount Unit



Height Adjustment Knob (A5550)

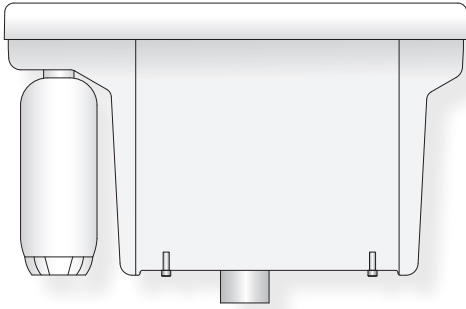


### Work Surface Height Adjustment

Always remove heavy loads from work surface. Locate Height Adjust knob and with one hand supporting the work surface, loosen the knob. Raise or lower work surface to desired height. Securely tighten knob

# ■ Dental Patient Water System

Post Enclosure Mount



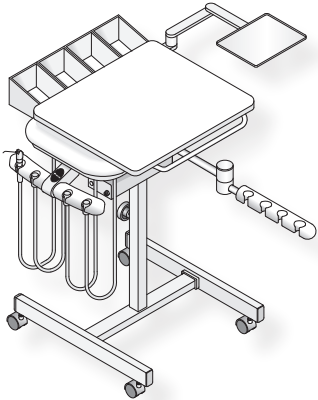
## Dental Patient Water Systems: The Choices

Users can control water quality and contaminants by properly using Prisma's Dental Patient Water System. This system consists of an isolated bottle and all polymer pathways through the selector and allows for regular treatment with bleach solution to address effects of contamination.

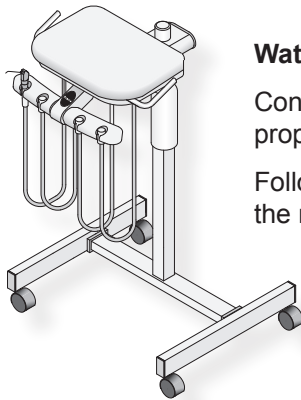
The bottle holds sufficient water for a normal day's use. Heavy users may require mid-day refill. A bottle simply unscrews for refilling. Use only Prisma bottles on Prisma water system.

Use only distilled or demineralized water and treat empty bottles with a rinse of bleach solution once weekly.

A5630 Dual Cart



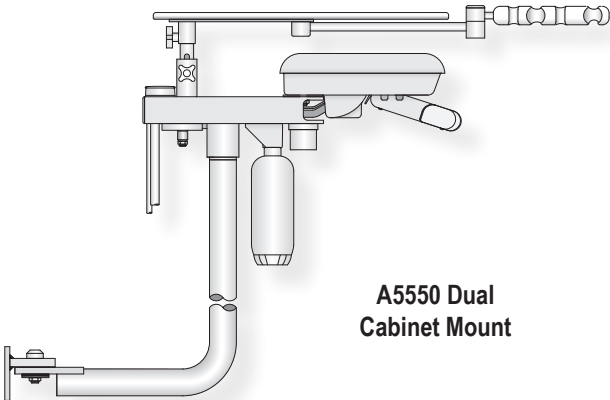
A5610 Doctor Cart



## Water System Maintenance

Control asepsis by filling from a quality water source and using proper water handling and filling techniques.

Follow instructions in Quick Notes, document 9050261, to reduce the risk of contamination in your water lines.

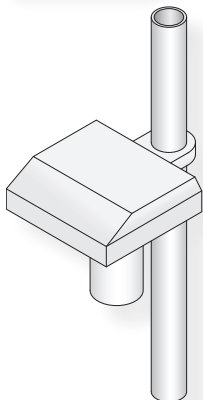


A5550 Dual Cabinet Mount

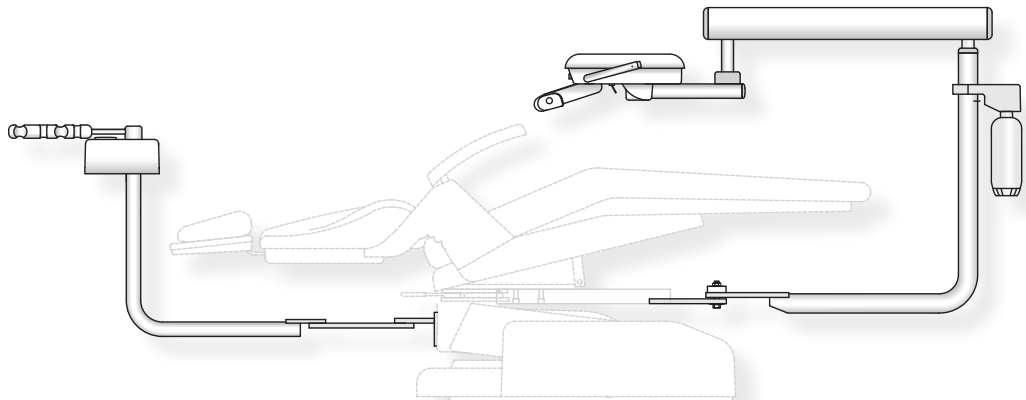


### Caution

Studies show most improperly maintained dental unit water lines have microbial contamination. For proper use and maintenance, please read and follow instructions. Failure to perform this maintenance can promote contamination.

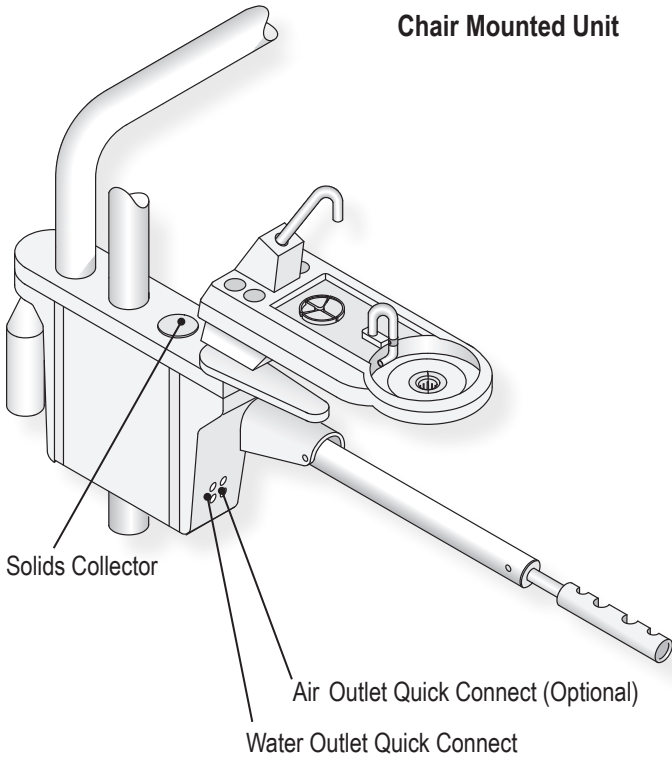


Stand Alone System Mount



A5210 Compass Mount Unit with A5760 North Mount Vacuum

## ■ Solids Collector

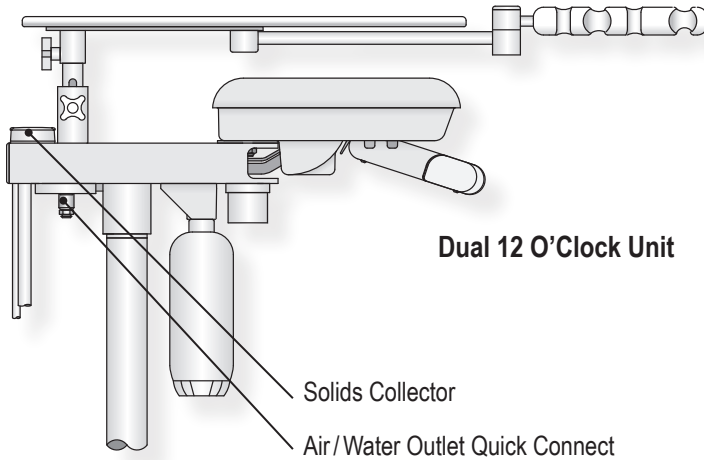


### Solids Collector

Catches debris that would otherwise clog sub floor vacuum pumps and plumbing. Removable and replaceable screen (Proma part # 91475). Treat as biocontaminated waste. \* Always flush vacuum system before cleaning screen.

### Cleaning of Vacuum System

- Open all valves to drain excess water and relieve pressure
- Leave valves open and flush hoses with warm water and germicidal detergent (Vacusol or equal).
- Wearing rubber gloves, open Solids Collector and remove Screen (Note: wear gloves, face shield and protective clothing when handling biohazardous materials.)
- Empty debris into paper towel and properly dispose.\*
- Thoroughly wash and wipe collector lid and screen, especially sealing edges.
- Apply silicone paste (Proma part # 92004) or petroleum jelly to lid and sealing edges.
- Reinstall screen, replace lid and close valves.



### \* Caution

Debris from solids jar and vacuum screens may be classified as biocontaminated hazardous waste and require special handling and disposal. Contact your local community government for regulations. Debris from amalgam filling placement and removal may contain mercury and heavy metals.

