

Installation
Operation
Maintenance
Troubleshooting

Version 3, June/09



1416

Cabinet Unit



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Important Information

Technical Specifications

Factory Pre-set Air Regulator Pressure: 80 PSI

Factory Pre-set Water Regulator Pressure: 40 PSI

Handpiece Pressure: **30-35 PSI (for most high-speed handpieces)**
 40-45 PSI (for most low-speed handpieces)

CAUTION: When adjusting the handpiece pressure, do not over tighten the screws. This may result in unnecessary damage to the handpiece control block.

- Pay careful attention when unpacking the delivery unit and its accessories. *Damage caused by mishandling the equipment during unpacking or installation is not covered under warranty.*
- **New Owner:** Please read, sign and submit the warranty registration form that is located on page 3 of this manual. Failure to return this form may void the warranty.
- Read this manual carefully. If you have any questions, please call **SDS Technical Service at 1-800-275-3368.**

CAUTION: Do not attempt to adjust the height of the flex arm without releasing the air-brake valve. Failure to release the air-brake valve may cause unnecessary damage to the unit's arm assembly.

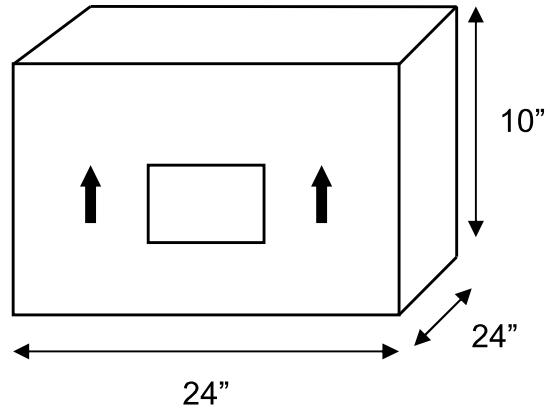
Product Label Location

The product label can be located on underneath the unit head chassis.

SUMMIT DENTAL SYSTEMS		
Ft, Lauderdale, FL USA		
<hr/>		
MODEL No:		
<hr/>		
SERIAL No:		
<hr/>		
PRODUCT:		
<hr/>		
VOLTS		HERTZ
		AMPS

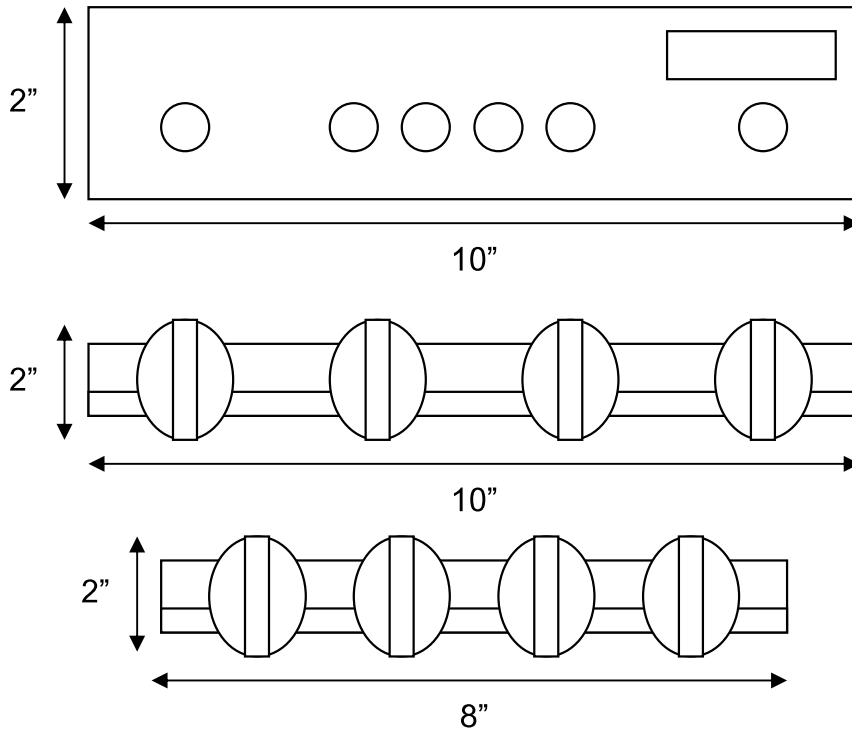
Weight & Dimensions

Shipping Information

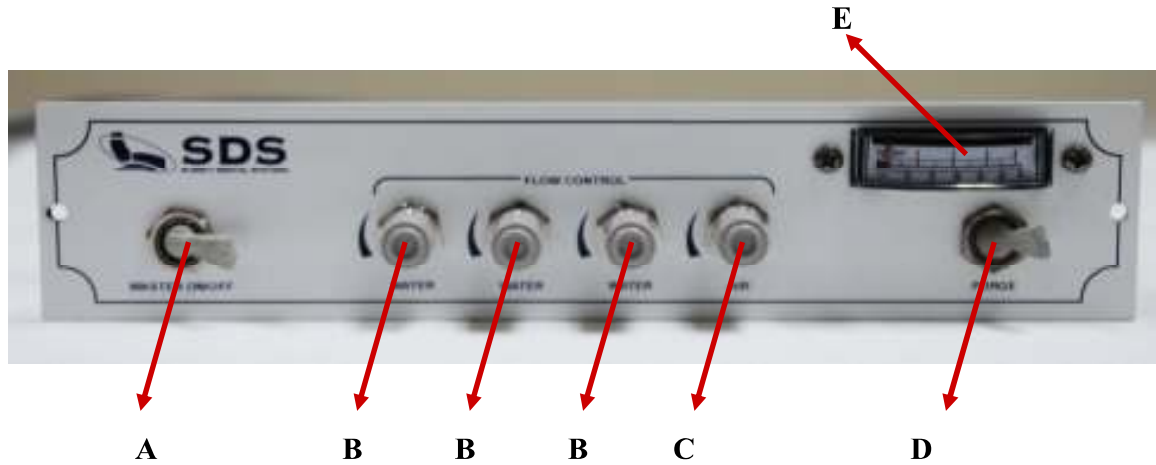


Shipping Weight: 23 lb

General Dimensions



Operator's Instructions

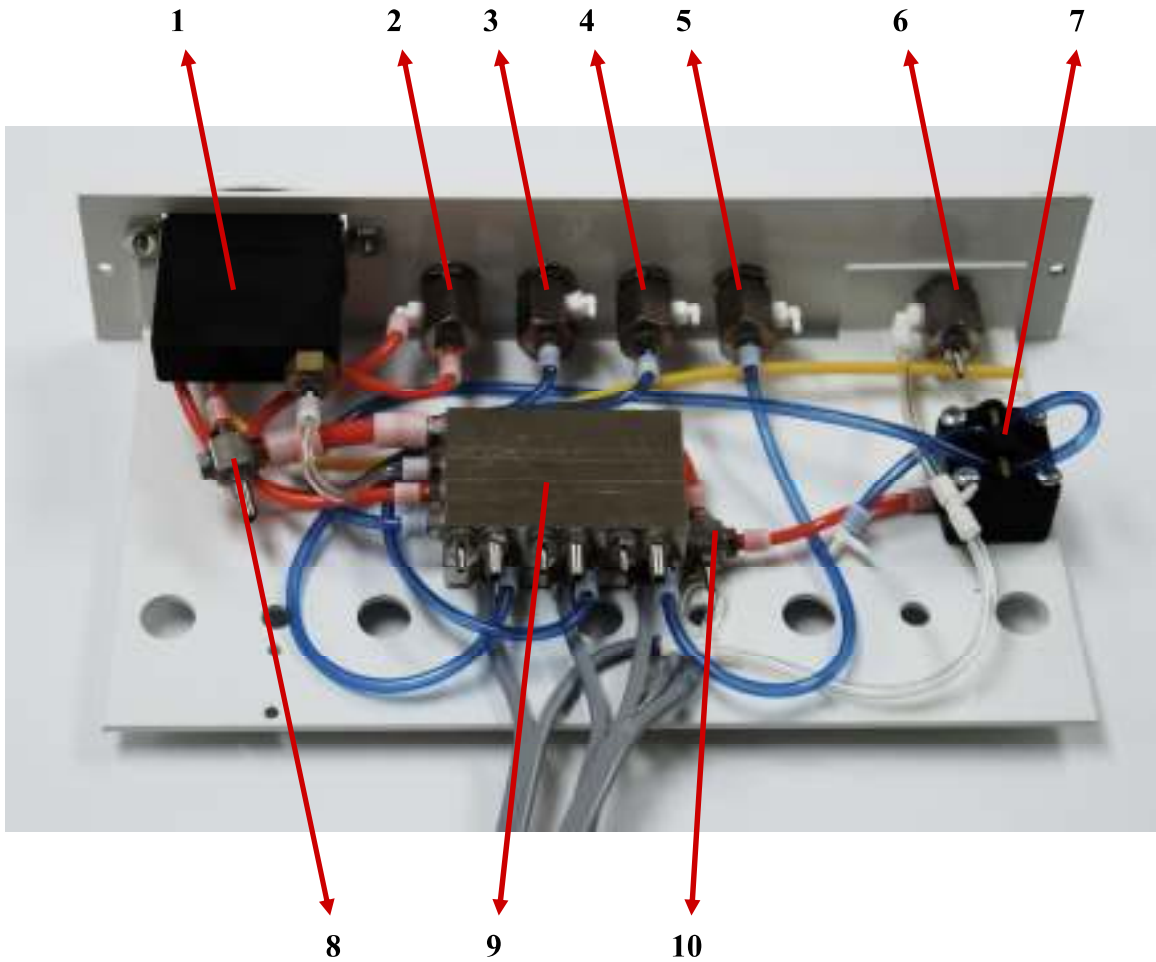


Product Serial Number Label
is located underneath Unit
Head Chassis.

SUMMIT DENTAL SYSTEMS		
Ft. Lauderdale, FL USA		
MODEL No:	_____	
SERIAL No:	_____	
PRODUCT:	_____	
VOLTS	HERTZ	AMPS

A. Master Air & Water On/Off Switch	Opens and closes the valves in the floor-mounted Utility Box, supplying air and water to complete system. Shut off nightly.
B. Water Coolant Flow Control	Controls the flow of water coolant to handpieces. Turn counter-clockwise to increase, and clockwise to decrease or to fully cease for low-speeds.
C. Air Coolant Flow Control	Controls the flow of air coolant to handpieces. Turn counter-clockwise to increase, and clockwise to decrease or to fully cease for low-speeds.
D. Drive-Air Pressure Control	Adjusts the drive air pressure to the handpiece selector. Turn clockwise to decrease pressure, and counter-clockwise to increase pressure.
E. Handpiece Pressure Gauge	Indicates pressure adjusted by the Drive-Air Control Knob. Avoid exceeding the manufacturer's recommended handpiece pressure. (30 – 35 PSI for most Highspeed Handpieces) (40 – 45 PSI for most Low-speed Handpieces)
F. Air Coolant Adjustment Screw	(INSIDE UNIT) Controls the flow of air coolant to handpieces. Turn counter-clockwise to increase, and clockwise to decrease. - clockwise to increase, and clockwise to decrease.

Flow Diagram



Item	Description	Part #	Item	Description	Part #
1	Pressure Gauge	5-020-0008	6	Master On/Off 3-Way	5-070-0051
2	Air Coolant	5-070-0054	7	Pinch Relay	5-020-0043
3	Water Coolant	5-070-0054	8	4 Way Cross	5-070-0005
4	Water Coolant	5-070-0054	9	Tri Block	5-020-0023
5	Water Coolant	5-070-0054	10	4 Way Cross	5-070-0005
*	Toggle Valve (Purge)	5-070-0052			

Purging Your System

Daily Maintenance

Purging with air: At the end of every day, the lines should be purged with air to prevent the growth of biofilm.

1. Remove handpieces from tubing.
2. Empty the water bottle, then reinstall it (if water bottle is applicable, when using city water, turn off water from the source).
3. Hold the handpiece tubing and syringe over a pail. Turn the unit on, wait a few moments and then operate the flush toggle (if applicable), syringe and foot control until water is purged from the system.
4. Turn unit off.

Disinfecting the bottle (if applicable): Fill the bottle with 100 ml disinfectant solution, shake vigorously and let settle for 10 minutes. Shake again, and then rinse twice with water.

Weekly Maintenance

The weekly cleaning procedure should be performed at least once a week, preferably at the start of the week before treating patients. If the unit is stored for any length of time, perform the weekly maintenance routine immediately before and after storage.

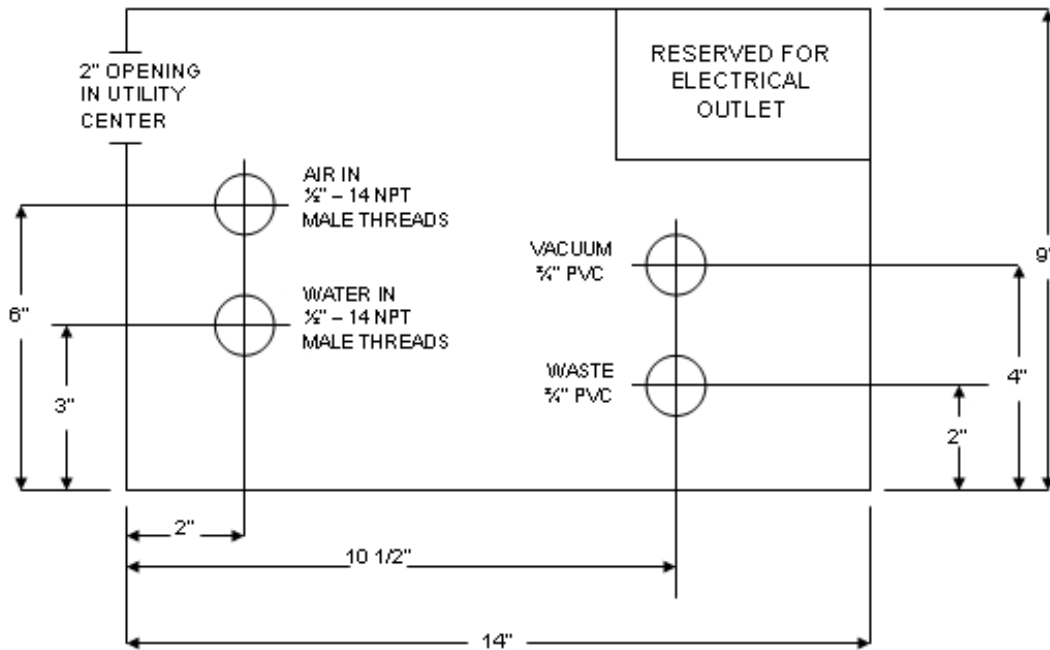
1. Purge the unit with air (see Daily Maintenance).
2. Flush the system with disinfectant solution:
 - a. Turn unit off. Empty the water bottle (if water bottle is applicable), replacing the water with cleaning solution (see Disinfectant Solution).
 - b. Remove handpieces from tubing and hold the handpiece tubing and syringe over a pail. Turn unit on, wait a few moments and then operate the flush toggle (if applicable), syringe and foot control until a continuous stream of solution is running through the system.
3. Allow the disinfectant to remain in the unit for at least 10 to 20 minutes and then flush the system again until all the solution is used up.
4. Purge the unit with air:
 - a. Hold the handpiece tubing and syringe over a pail. Turn the unit on, wait a few moments and then operate the flush toggle (if applicable), syringe and foot control until all solution is purged from the system.
 - b. Turn unit off. (If the unit is to be stored, stop here.)
5. Fill with clean water:
 - a. With the unit turned off, remove the empty disinfectant bottle (if applicable). Replace with clean bottle and water.
 - b. Hold Remove handpieces from tubing and hold the handpiece tubing and syringe over a pail. Turn unit on, wait a few moments and then operate the flush toggle (if applicable), syringe and foot control until a continuous stream of solution is running through the system.

Disinfectant Solution: Use 100 ml (9 parts tap water & 1 part 5.25% Sodium hypochlorite (household bleach) of disinfectant solution for each application per week. Always use a fresh mixture every week.

Installation Instructions

Utility Center Plumbing Layout

Not to Scale



NOTE: All pipes must be terminated 1 inch above floor.
Position box so that 2" opening faces post side.

Master On/Off Toggle Signal Connections

Connect the 1/8" yellow and 1/8" clear tubing from the unit to the plastic in line connectors located on the ends of the matching yellow and clear 1/8" tubing in the cuspidor umbilical.

Control Head Water And Air Lines

Connect the 1/4" blue tubing to the unregulated port on the water shut off valve.

Connect the 1/8" blue tubing from the unit to the water regulator.

Connect the 1/8" green tubing from the unit to the port, shown in the diagram, cut and install the 1/16" plastic "T" provided.

Locate the 1/8" gray tubing and connect to the 1/16" plastic "T" installed in the previous step.

Foot Control Connections

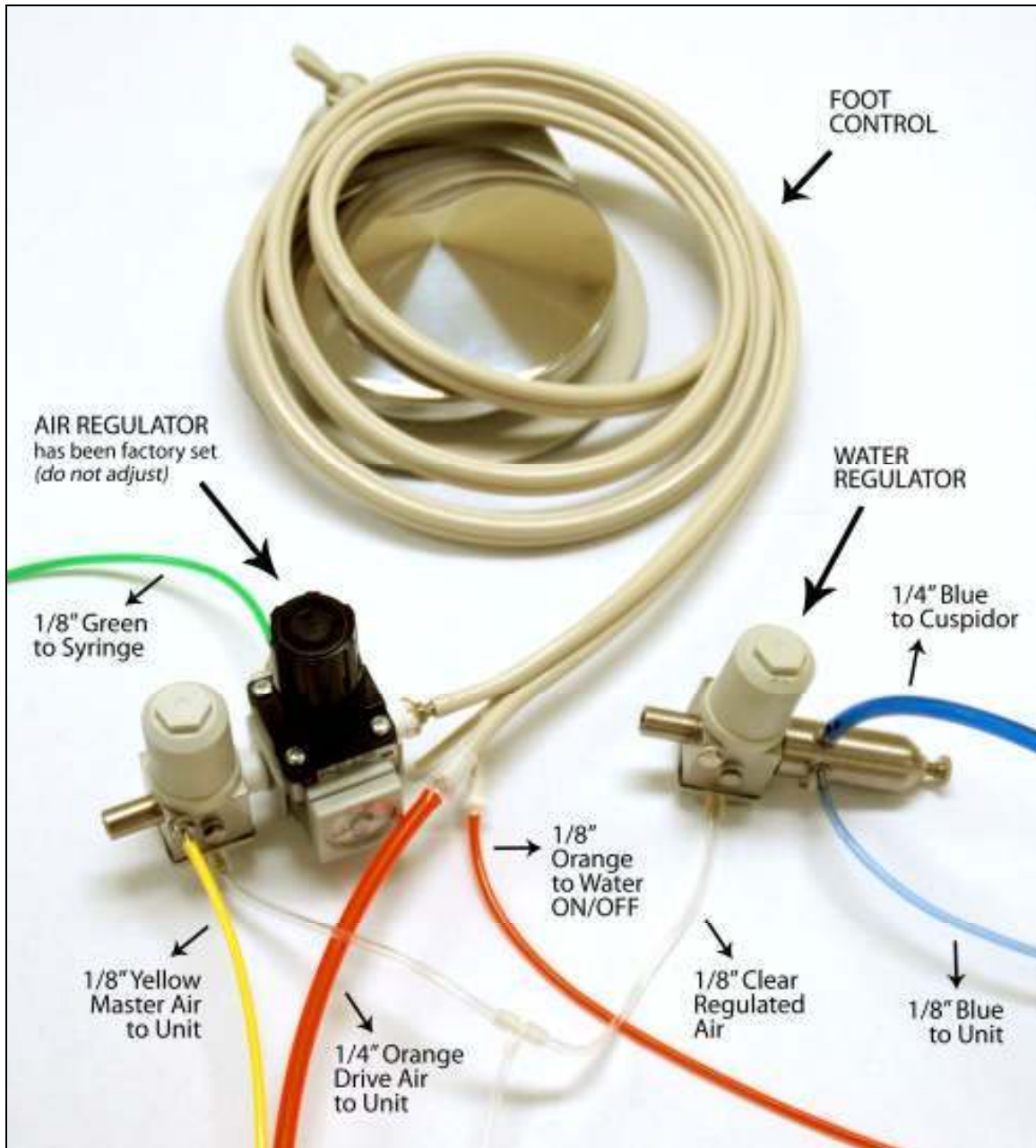
Outlet

Disconnect the foot control from the orange 1/4" tubing of the cut away portion of the umbilical. Leave the plastic 1/4" barbed in-line connector on the foot control tubing. Reconnect the free end of this barb to the 1/4" orange tubing from the unit.

Connect 1/8" orange tubing to purge tubing on wet & dry foot control.

(Note): If the on/off water coolant toggle is located on the foot control, connect the 1/8" gray tubing from the foot control to the 1/8" orange tubing from the unit.

Utility Center Tubing Diagram



Water and Air Regulator Assembly

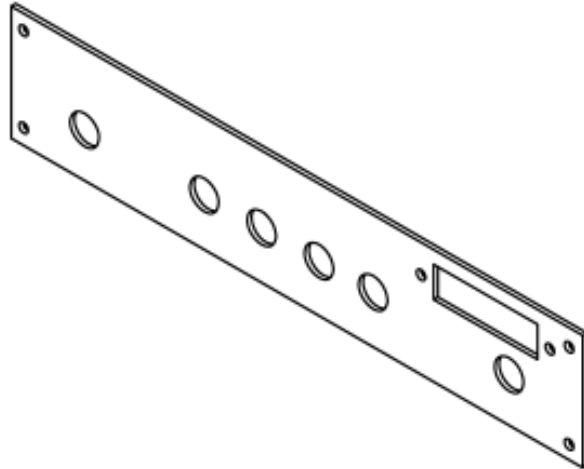
Description	Part #	Description	Part #
Wet & Dry Ft Ctrl	5-020-0058	1/8" Blue Tubing	5-070-0090
Tubing, Sand 4H	5-070-0025	1/8" Clear Tubing	5-070-0027
Water Regulator	5-070-0103	1/4" Orange Tubing	5-070-0047
Filter Shut-Off Block	5-070-0102	1/8" Green Tubing	5-070-0083
Air Regulator	5-070-0111	1/8" Orange Tubing	5-070-0123
1/8" Yellow Tubing	5-070-0026	1/4" Blue Tubing	5-070-0049

Troubleshooting Guide

SYMPTOM	PROBABLE CAUSE
1. Handpiece Lacks Power	<ul style="list-style-type: none"> A. Check regulator adjustment (80 psi). B. Check handpiece pressure adjustment on control block. C. Plugged air filter. D. Pinched supply tubing. Check for kinks. E. Bad handpiece gasket at connection with tubing. F. Defective handpiece.
2. Water coolant does not shut off when Foot Control is released.	<ul style="list-style-type: none"> A. Adjust air pressure to 80 psi – water pressure to 40 psi. B. Foot Control is not exhausting. C. Defective water relay in valve
3. More than one handpiece is operating.	<ul style="list-style-type: none"> A. Handpiece is not completely in the hanger. B. Improper adjustment of Pilot Valve in the hanger. C. Kinked or pinched signal line from the Pilot Valve.
4. Insufficient water coolant.	<ul style="list-style-type: none"> A. Adjust coolant flow valve. B. Water filter may be plugged. C. Plugged handpiece. D. Kinked or pinched tubing. E. Improper adjustment of water relay.
5. Water coolant is running from handpiece while in holder.	<ul style="list-style-type: none"> A. Water pressure is too high. B. Air pressure is too low. C. Handpiece holder out of adjustment.
6. Water coolant is running continuously.	<ul style="list-style-type: none"> A. Purge switch is on (on applicable systems). B. Water pressure is too high. C. Handpiece holder out of adjustment. D. Improper adjustment of water relay.

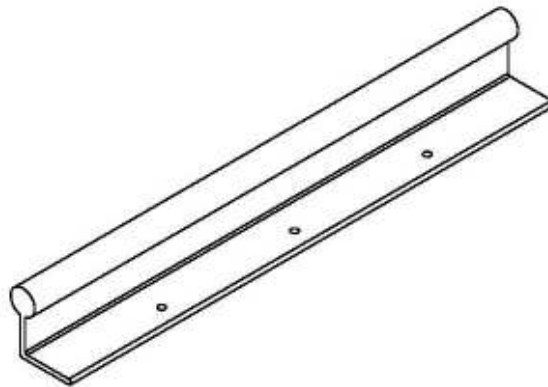
PARTS LIST

Chassis, Bar Holder and Junction Box



Chassis

5-020-0012



8" Bar Holder
10" Bar Holder

5-020-0305
5-020-0304

Junction Box, 9"X 14"X 4 1/2 Shell
Junction Box Cover

5-070-0113
5-070-0114

Miscellaneous

Description	Part #
Wet & Dry Foot Control	5-020-0058
Foot Control with Cable Assembly	3-020-1015
Standard Syringe	5-070-0159
Standard Syringe with Cable Assembly	3-020-1014
<i>Spare Parts for Syringe</i>	
O-Ring 10,78x1,26	4-070-0036
O-Ring 2,84x2,62	4-070-0009
O-Ring 1,15x1,00	4-070-0021
O-Ring 4,47x1,78	4-070-0024
O-Ring 1,07x1,27	4-070-0039
O-Ring 1,42x1,62	4-070-0041
Air Button	5-020-0268
Water Button	5-020-0269

** All item numbers for cream color delivery unit*

WARRANTY

Summit Dental Systems (SDS) warrants its products against defects in materials or workmanship from the date of shipment to the Buyer as follows:

Summit Dental Systems (SDS) Equipment:

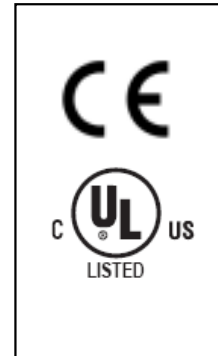
Chairs, Delivery Units, Cuspidors, Lights
 Zipclave Sterilizer
 Control Block Diaphragm (part of Delivery Unit)
 All Upholstery, Stools, All Plastic Covers, and Cabinets
 Zipclave Heating Element & Zipclave Gasket

Warranty Period:

5 Years
 3 Years Limited Parts
 Lifetime
 1 Year
 1 Year

Summit Dental Systems' sole obligation under the warranty is to provide parts for repair, or at its option, to provide a replacement product (excluding all labor and shipping fees). "In any action, BUYER'S remedies are limited to the warranty described above. BUYER shall not be permitted to claim lost profits, reliance, special, incidental, or consequential damages in any proceedings." The warranty does not cover damage from improper installation or maintenance, accident or misuse. The warranty does not cover damage resulting from the use of cleaning disinfecting or sterilization chemicals and processes. Failure to follow instructions provided in Summit Dental Systems' Operation and Installation Manuals (Owner's Guides) may void the warranty. In the event Warranty service must be performed to correct any defect, only an authorized Summit Dental System dealer may perform any and all warranty repairs. Any repairs by unauthorized dealers, technicians, or repairmen may void the warranty.

- In the case of a defective warranty item, a copy of the replacement invoice, model and serial number of the product under which it was replaced, and a description of symptoms of the defect must be returned with the part within 30 days of the replacement invoice date to Summit Dental Systems, 1280 SW 27th Ave, Pompano Beach, FL 33069, USA, in order to receive credit. Any and all expenses for freight, labor to perform warranty service, and purchase of spare parts are the responsibility of the buyer. Any fraudulent claims made may void the warranty. Any additional warranty that may be provided by an authorized Summit Dental Systems dealer is the sole responsibility of said dealer.
- SDS reserves the right to make changes or improvements on any products without being required to modify existing equipment in a like manner.



Please complete and retain for your records the following Information:

In case of warranty part replacement/repair or when ordering a part, please call your authorized Summit Dental Systems dealer and have the following information available:

Owners' Name:	Phone #:
Model #:	SDS Serial #:
Dealer:	Phone:
	Purchase Date:



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