

**Installation**  
**Operation**  
**Maintenance**  
**Troubleshooting**  
Version Dec/17



## Table of Contents

<b>WARRANTY</b> .....	3
<b>Important Information</b> .....	4
Technical Specifications.....	4
Weight & Dimensions .....	5
Dimensions.....	6
Operator’s Instructions .....	10
Purging Your System.....	12
Troubleshooting Guide .....	13
Installation Instructions.....	14
Utility Center Plumbing Layout.....	15
Utility Center Tubing Diagram .....	16
Cabinet Parts List.....	17

## 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:	Warranty Period:
Chairs, Delivery Units, Cuspidors, Lights	5 Years
Zipclave Sterilizer	3 Years Limited Parts
Control Block Diaphragm (part of Delivery Unit)	Lifetime
All Upholstery, Stools, All Plastic Covers, and Cabinets	1 Year
Zipclave Heating Element & Zipclave Gasket	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 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 27<sup>th</sup> 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:

<b>Owners' Name:</b>	<b>Phone #:</b>
<b>Model #:</b>	<b>SDS Serial #:</b>
<b>Dealer:</b>	<b>Phone:</b>
	<b>Purchase Date:</b>

## Important Information

### Technical Specifications

Air Regulator Pressure: 80 PSI

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 cart 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 or 954-730-3636 (Outside USA).

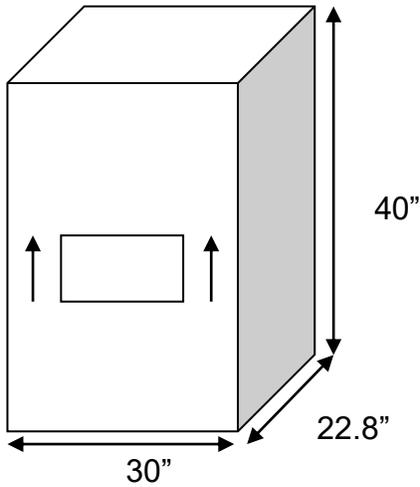
#### Product Label Location

The product label can be located inside the handpiece control door.

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

## Weight & Dimensions

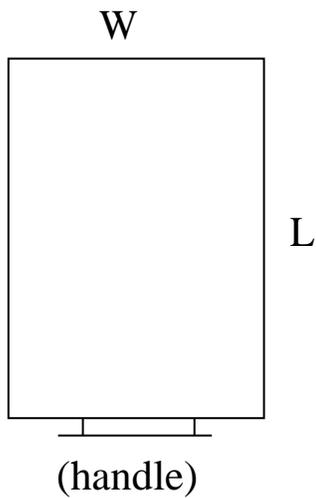
### Shipping Information



Model 900SH Series Delivery Carts

Shipping Weight: 130 lb.

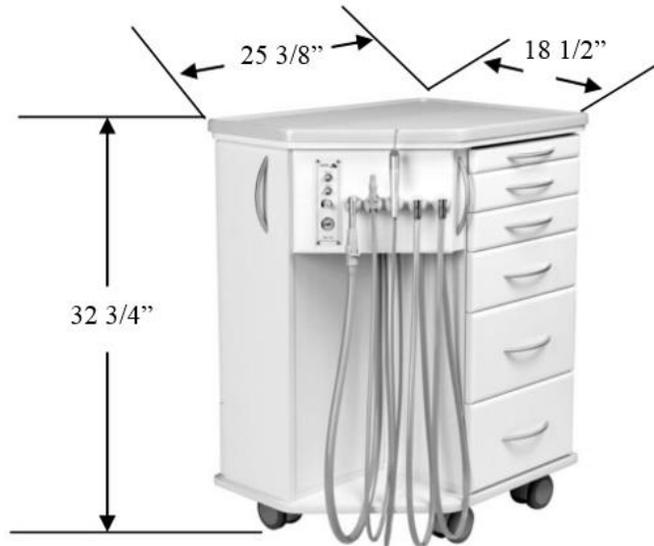
### Inside Drawer Dimensions



Small: 13 ½" L x 10 1/16" W x 1 3/8" H  
 Medium: 13 ½" L x 10 1/16" W x 2 5/8" H  
 Large: 13 ½" L x 10 1/16" W x 5 3/8" H

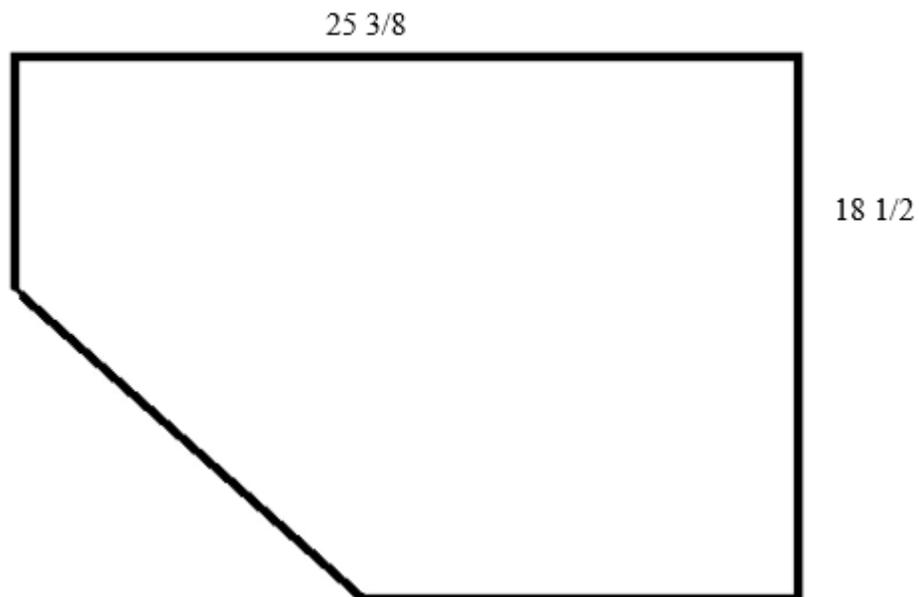
## Dimensions

### 900SH Cabinet Dimensions



- Cabinet top width 25 3/8"
- Cabinet top depth 18 1/2"
- Cabinet height 32 3/4"
- Drawers: 2 large, 1 medium, 2 small

### 900SH Cabinet Base Dimensions



## Dimensions

### 900SHC Cabinet Dimensions



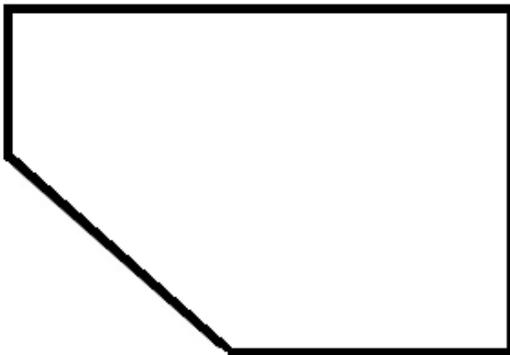
- Cabinet top width 25 3/8"
- Cabinet top depth 18 1/2"
- Cabinet base width 26 1/8"
- Cabinet base depth 29 1/2"
- Cabinet height 32 3/4"
- Drawers: 2 large, 1 medium, 1 small, 1 keyboard flip drawer
- Mini Keyboard Dimensions: 11 3/8" x 8 1/2"



### 900SHC Cabinet Top and Base Dimensions

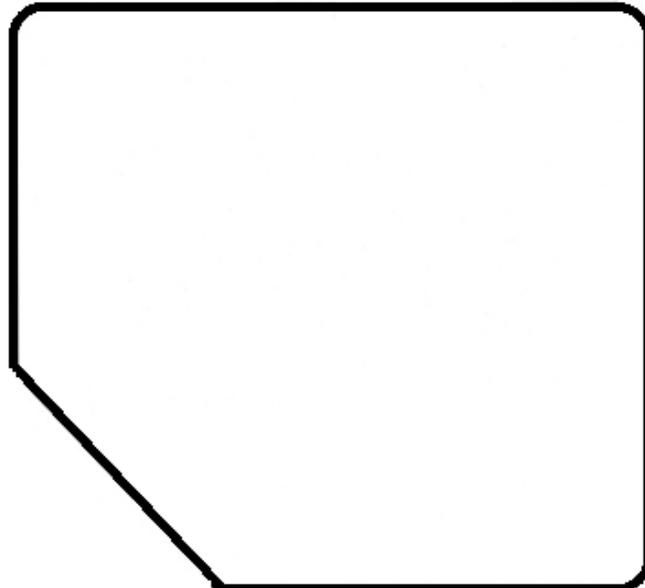
#### Top Dimensions

25 3/8"



#### Base Dimensions

29 1/2"



## 900CWS Cabinet Dimensions



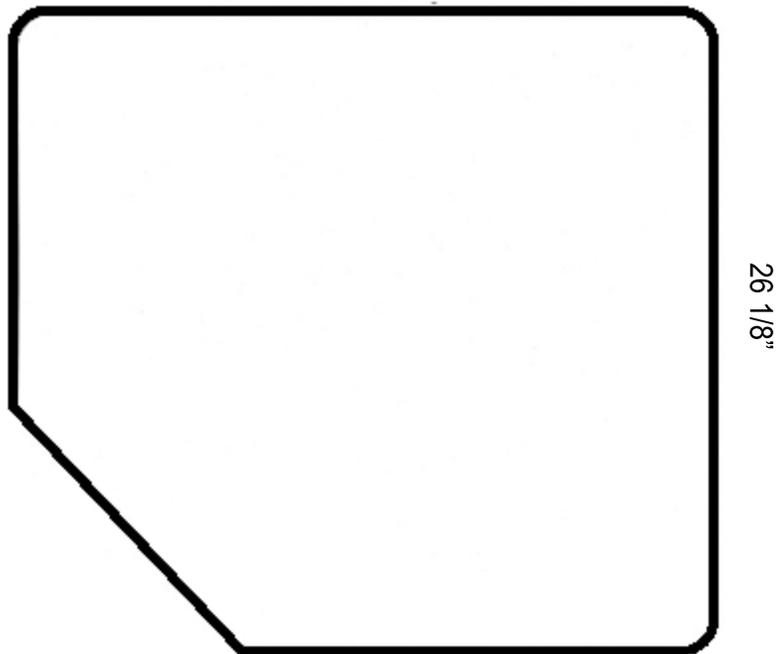
- Cabinet top width 26 1/8"
- Cabinet top depth 29 1/2"
- Cabinet height 32 7/8"
- Computer Storage Area: 17" L x 9 6" D x 27" H
- Drawers: 2 large, 1 medium, 1 small, 1 keyboard flip drawer
- Mini Keyboard Dimensions: 11 3/8" x 8 1/2"



## 900CWS Cabinet Top Dimensions

### Top Dimensions

29 1/2"

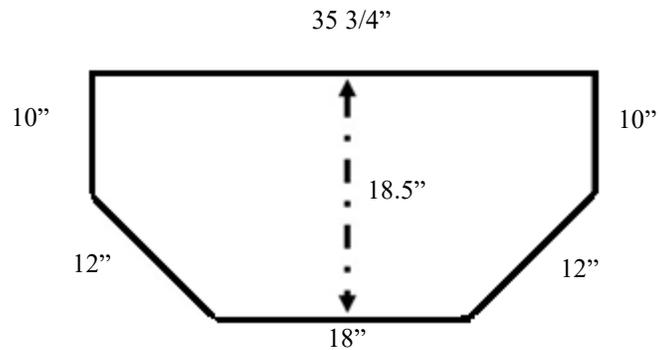


## 910 Rear Delivery Cabinet Dimensions

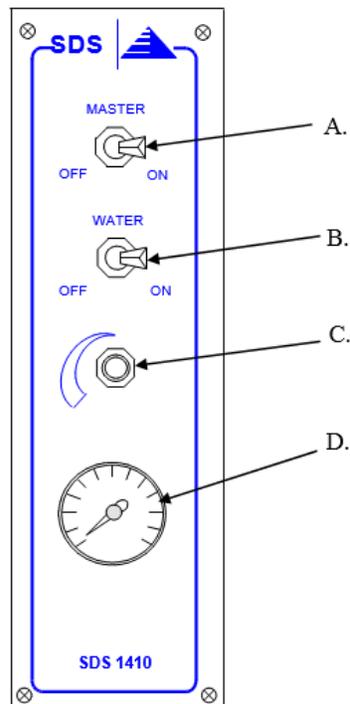


- Cabinet max top width 35 3/4"
- Cabinet max top depth 18 1/2"
- Cabinet height 32 1/2"

## 910 Rear Delivery Cabinet Top Dimensions



## Operator's Instructions



### A. MASTER ON/OFF SWITCH

Opens and closes the valves in the floor-mounted Utility Box, supplying air to the complete system. Shut off nightly.

### B. WATER ON/OFF SWITCH

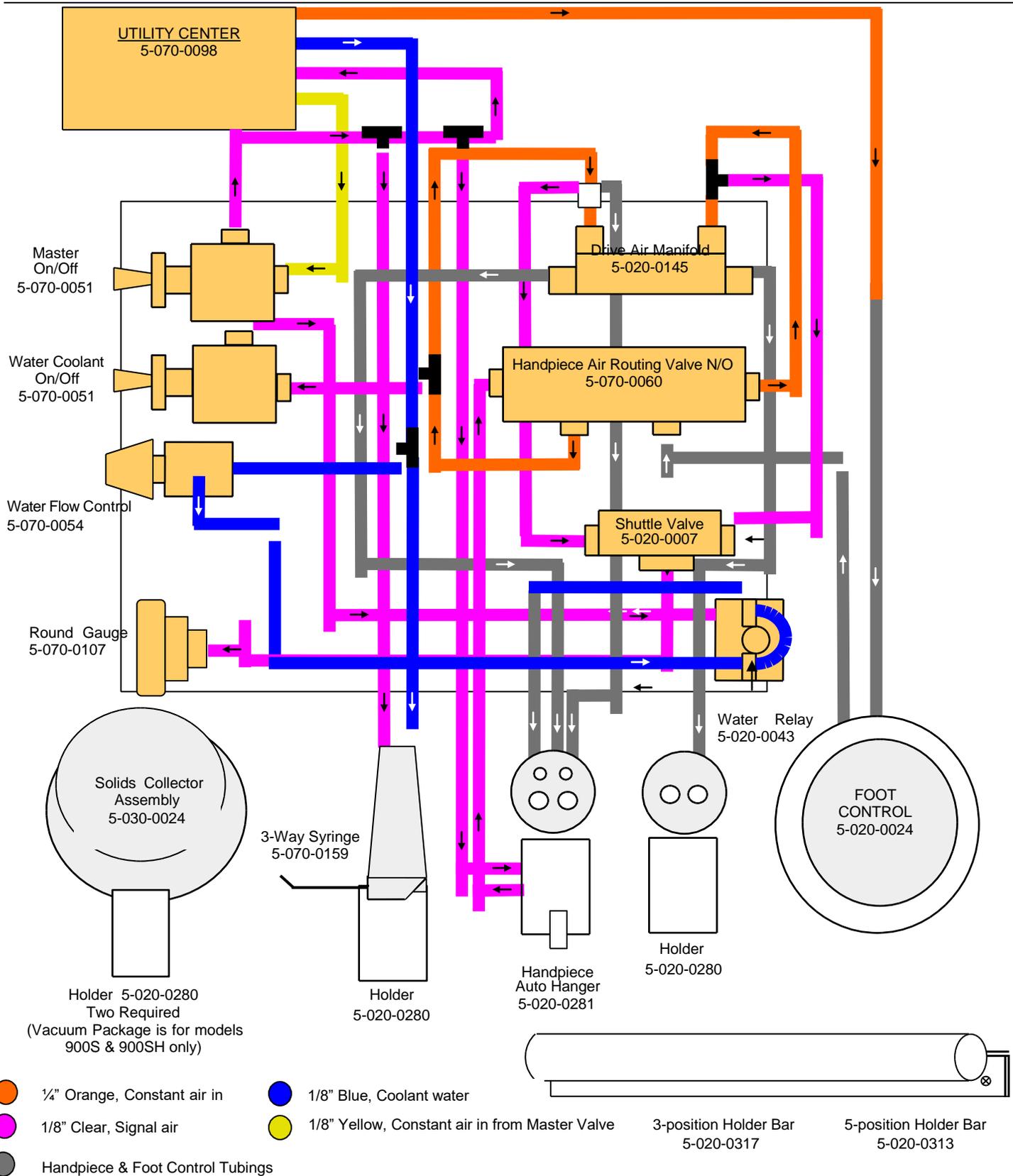
Opens and closes the valves in the floor-mounted Utility Box, supplying water to the complete system. Shut off nightly.

### C. 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.

### D. 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).



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## 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.

## Troubleshooting Guide

### SYMPTOM

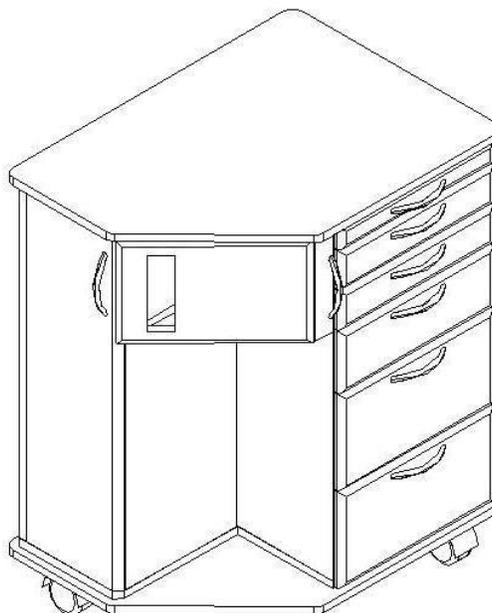
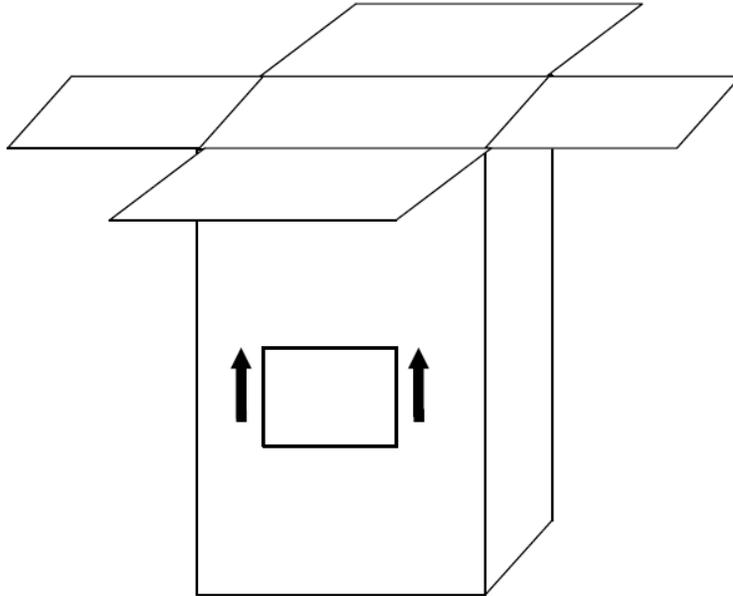
1. Handpiece Lacks Power
  
2. Water coolant does not shut off when Foot Control is released.
  
3. More than one handpiece is operating.
  
4. Insufficient water coolant.
  
5. Water coolant is running from handpiece while in holder.
  
6. Water coolant is running continuously.

### PROBABLE CAUSE

- 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.
- 
- A. Adjust air pressure to 80 psi - water pressure to 40 psi.
  - B. Foot Control is not exhausting.
  - C. Defective water relay in valve.
- 
- 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.
- 
- 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.
- 
- A. Water pressure is too high.
  - B. Air pressure is too low.
  - C. Handpiece holder out of adjustment.
- 
- 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.

If you continue to experience difficulties, please call Technical Service Team at 1-800-275-3368.

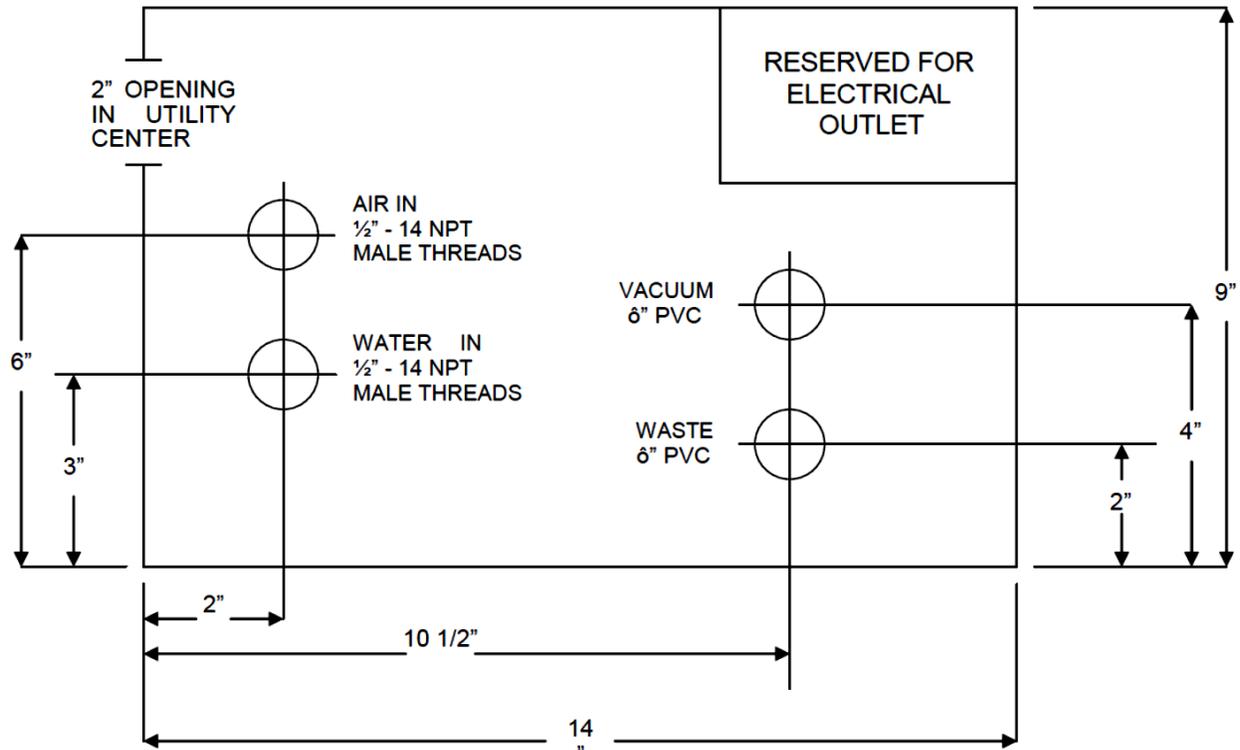
## Installation Instructions



1. Your 900 Series Delivery Carts are pre-assembled for your convenience. Just open the box, take out the cart, assemble the (4) caster wheels to the bottom of the cart with the washers and flat-head screws provided, place it on the floor and hook-up the utility center (see pages 11& 12).

## 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.

## Utility Center Tubing Diagram

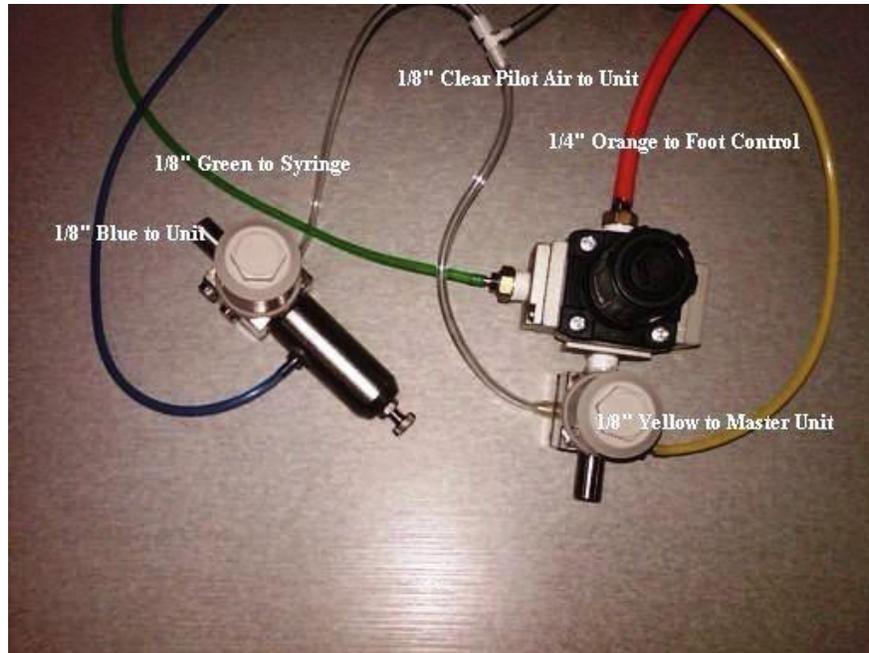
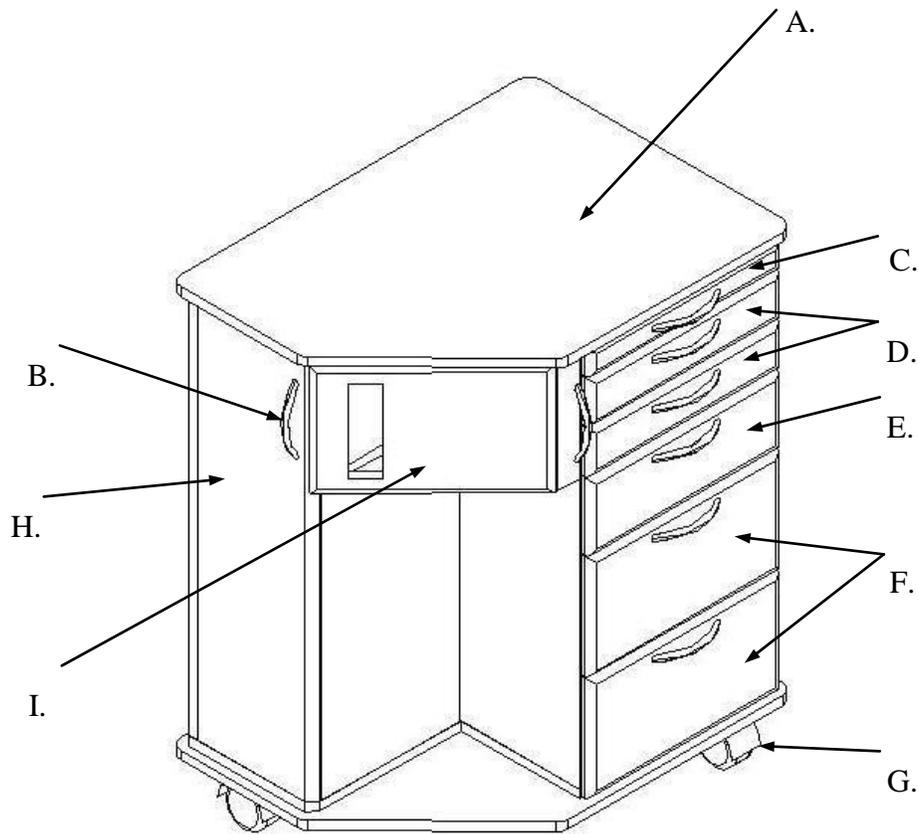


figure 1  
Air Side  
Air Regulator (Part # 5-070-0111)

## Cabinet Parts List



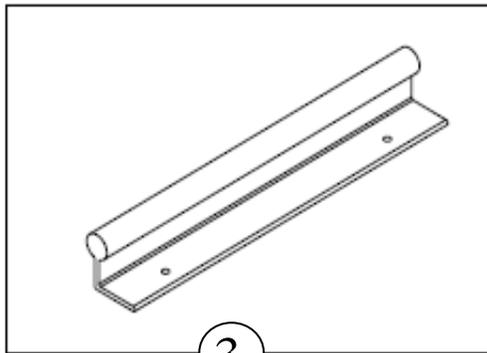
Description	Part Number
A. Removable Plastic Surface Tray for 900SH/SHC	1-020-0101
B. Aluminum Handles	5-020-0034
C. Breadboard	2-020-XXXX (specify color)
D. Small Storage Drawer	2-020-XXXX (specify color)
E. Medium Storage Drawer	2-020-XXXX (specify color)
F. Large Storage Drawer	2-020-XXXX (specify color)
G. Dual Caster Wheels	2-020-0106
H. Cart Frame	2-020-0020
I. Handpiece Control Door	2-020-XXXX (specify color)
J. Door Hinge (not shown)	5-020-0020
K. Drawer Glide Kit (not shown)	2-020-0108



①



②



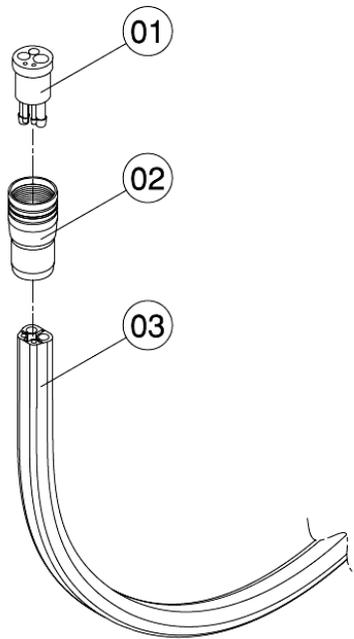
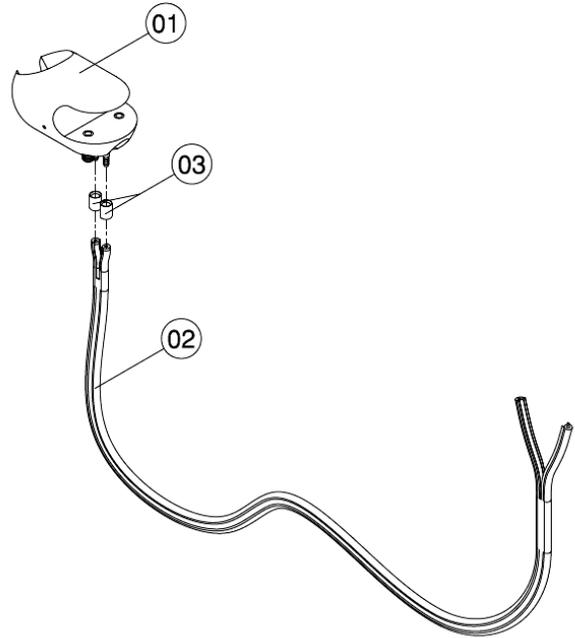
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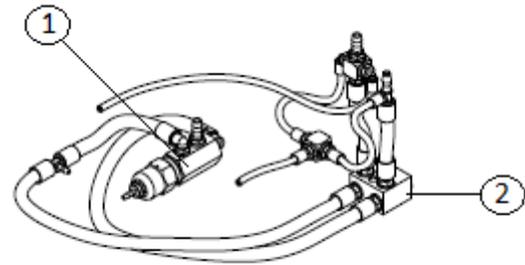
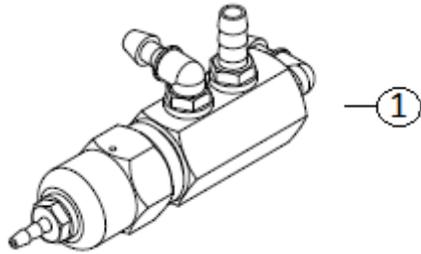
④

	Part #	Description
1	5-020-0286	Egg, Handpiece Auto holder Oval
2	5-020-0285	Egg Syringe Holder Oval Gray
3	1-090-0102	Egg Bar Holder 8"
4	5-030-0009	Saliva Ejector Plastic

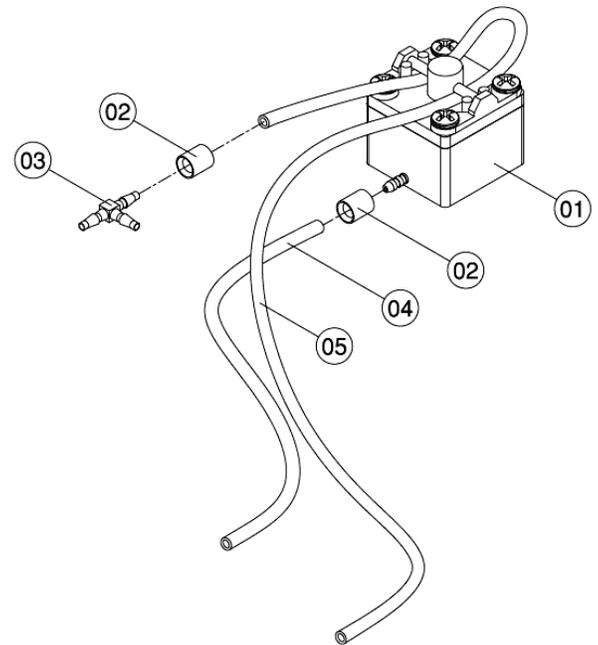
Item	Part #	Description
1	5-020-0286	Egg, Handpiece Auto Holder, Oval
2	5-070-0039	Tubing Gray 2H Syringe Straight
3	4-070-0047	Plastic Sleeve 1/8"



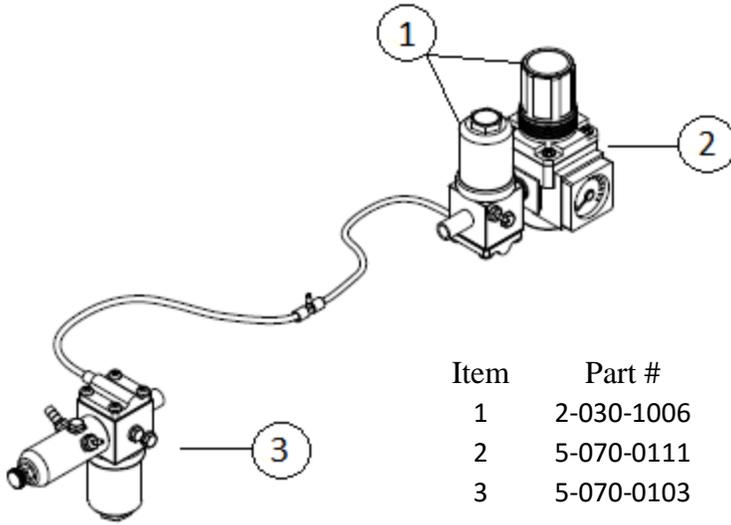
Item	Part #	Description
1		
2		
3		



Item	Part #	Description
1	5-070-0257	Air Routing Valve Assembly
2	5-020-0145	Manifold, Flow Control , 2 Ports



Item	Part #	Description
1	5-020-0047	Relay Water Pinch
2	4-070-0047	Clamp - Plastic Sleeve 1/8"
3	5-030-0032	Tee Palstic 1/16" X 1/16" x 1/16"
4	5-070-0123	Tubing Orange 1/8"
5	5-070-0090	Tubing Blue 1/8"



Item	Part #	Description
1	2-030-1006	Air, Valve Regulator Deluxe Assembly
2	5-070-0111	Air regulator with Gauge
3	5-070-0103	Water Regulator, Master Shut Off



Item	Part #	Description
1	5-020-0024	Foot Control Disc Type, Standard, Gray w/7, 2H Gray Tubing



Summit Dental Systems

1280 SW 27<sup>th</sup> Ave - Pompano Beach - FL 33069

Toll Free: (800) 275-3368

[www.summitdental.com](http://www.summitdental.com)