

# Instructions for Use

# Floor Boxes

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## Regulatory Information

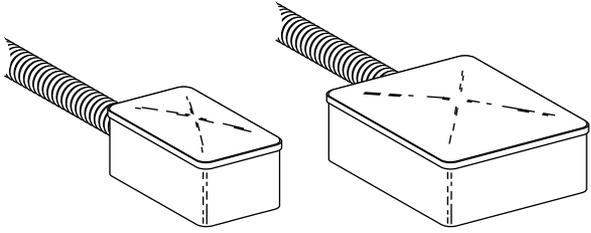
Regulatory information mandated by agency requirements is provided in the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00), which is available in the Document Library at [www.a-dec.com](http://www.a-dec.com).

## Product Service

Product service is available through your local authorized A-dec dealer. For service information, or to locate an authorized dealer, contact A-dec at 1.800.547.1883 in the USA and Canada or 1.503.538.7478 worldwide, or visit [www.a-dec.com](http://www.a-dec.com).

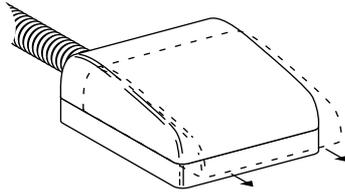
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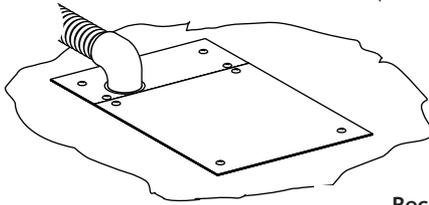


Medium Stainless Steel  
(9" X 14")

Large Stainless Steel  
(14.5" X 17")



Cascade®  
(14.5" X 17")



Recessed  
(14.5" X 18")

Floor Boxes

## About Your Floor Box

Your Cascade, recessed, or stainless steel floor box is mounted over the utilities on the floor or wall of the operatory. Located in the floor box are the air and water manual shutoff valves, filters, and pressure pre-regulators. You will find vacuum or gravity drains as well as electrical outlets.

The stainless steel floor box covers lift off for access to the utilities and optional power supplies and/or water heater.

To remove the cover from your Cascade Floor Box, slide the cover forward a little and lift.

The recessed floor box cover is held in place by four screws. Removing the screws will allow you to lift the cover.

## Controls

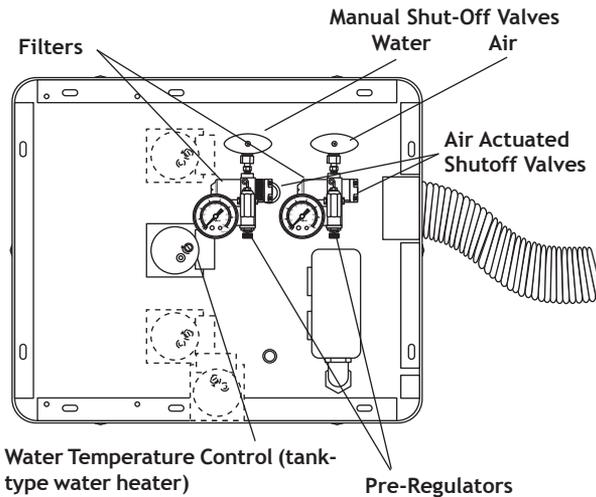


Figure 1. Cascade and Large Floor Boxes

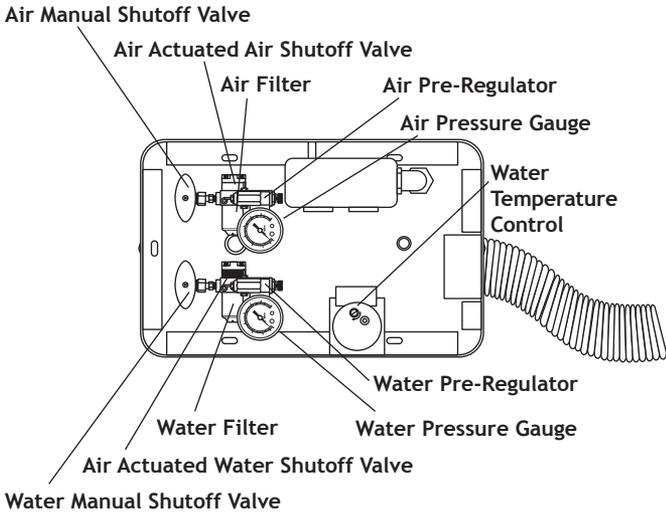


Figure 2. Medium Floor Box

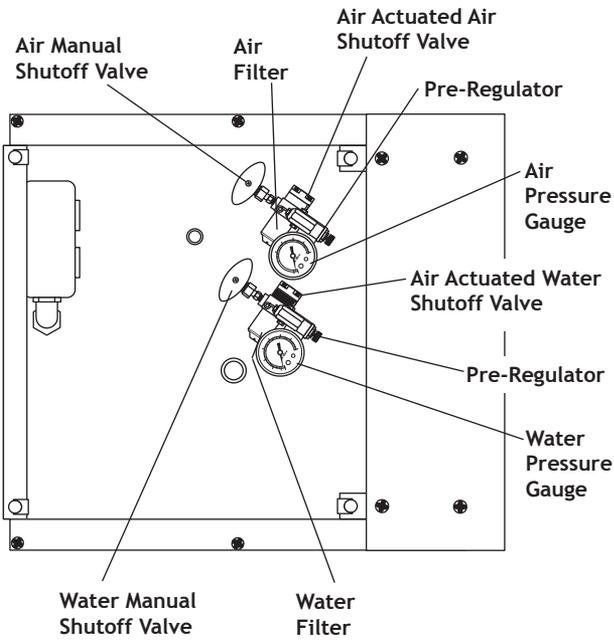


Figure 3. Recessed Floor Box

## Air and Water Manual Shutoff Valves

Shutoff valves control the air and water to the unit. To prevent leaks, these valves should remain fully open (turned counterclockwise) except while your unit is being serviced.

## Air-Actuated Air and Water Shutoff Valves

The air-actuated air and water shutoff valves automatically shut off air and water to the system when the master on/off toggle is in the Off position. This safety feature prevents water damage in the event the unit should develop a water leak while the unit is unattended.

## Air and Water Filters

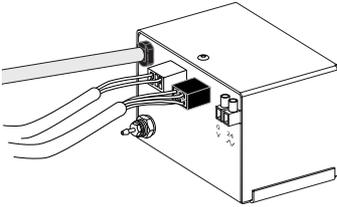
Filters prevent solids from entering the unit. The procedures for checking and replacing the filters are given beginning on page 8.

## Air and Water Pressure Pre-Regulators

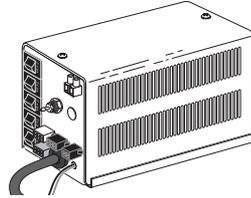
Pre-regulators control the air and water pressures in the unit. The procedure for adjusting system pressure begins on page 6.

## Power Supply

Your system may include A-dec's 25 watt power supply or 300 watt power supply. No cleaning or maintenance is required to maintain the power supply.



25 Watt Power Supply



300 Watt Power Supply



**NOTE** The master on/off toggle switches the control head, dental light, auxiliary cable, and the indicator light on or off.

If a problem arises with the power supply or an A-dec electrical accessory to the power supply, call your authorized A-dec dealer.

## Gravity Drain and Air Vent

The Gravity Drain (a "T" fitting) (see Figure 6) is connected to the office waste drainage system and provides for the disposal of water and debris from the unit.

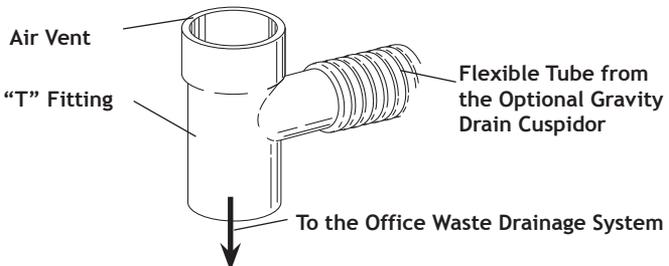


Figure 4. Gravity Drain and Air Vent

The Air Vent (the open end of the “T” fitting) prevents air being trapped in the office waste drainage system. If the vent becomes obstructed, waste water and debris may backup into the unit.

If A-dec’s optional circulating warm water syringe is included with your unit, a water drip tube will be positioned over the drain air vent. The drip tube is the outlet for warm water supplied to your syringe by the water heater. For more information about your syringe, refer to your *A-dec Syringes Instructions for Use*, p/n 85.0680.00.

If your A-dec unit includes a support center with cuspidor, a flexible tube from the cuspidor will be connected to the gravity drain. For information about the cuspidor, refer to the *Cascade 7284 and Radius 7284 Owner's Guide*, p/n 85.2069.00, or the *A-dec 300, 400, and 500 Delivery Systems Service Guide*, p/n 86.0382.00.

## Vacuum Outlet

The office central vacuum system outlet is located in the floor box. A flexible tube connects your vacuum instruments and optional Decade vacuum cuspidor to the outlet.

## System Air and Water Pressure Adjustments

The air and water pre-regulators are located in the floor box. Before making any adjustments, verify that the air compressor is turned on, and that it maintains 80–100 psi pressure in the tank. If it doesn't, refer to the compressor instructions.



**NOTE** When decreasing system air or water pressure, you will not see the air or water pressure gauge in the floor box change until you relieve pressure from the system. Activate the syringe for a few seconds, then check the gauge. Repeat this process each time you make an adjustment to decrease pressure.

1. Be sure that the manual shutoff valves are fully open (counterclockwise). Turn the system on and check the pressure gauges in the floor box (see Figures 7 and 8). Air pressure should be 70–80 psi while water pressure should be 35–40 psi.

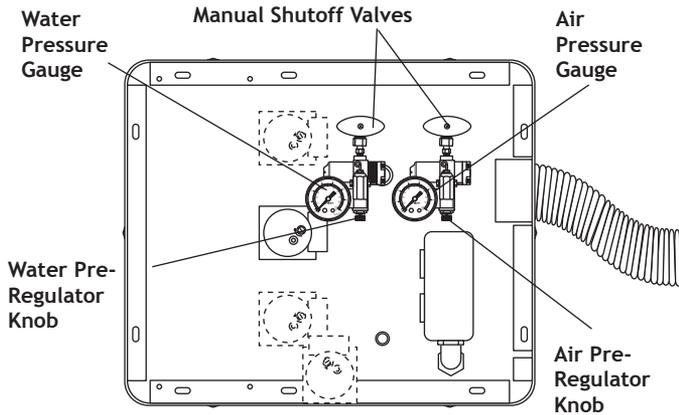
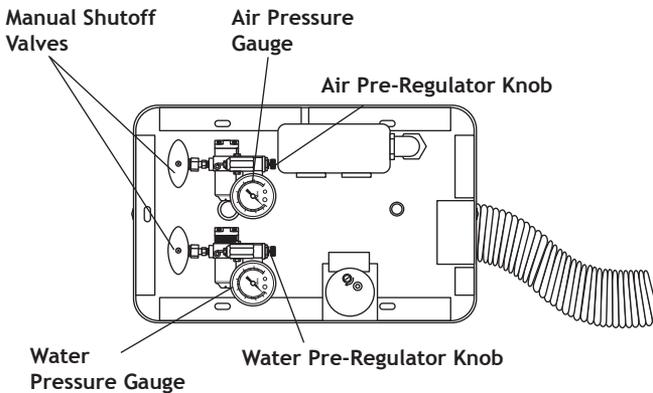


Figure 5. Cascade and Large Floor Box



**Figure 6. Medium Floor Box**

2. While watching the gauges, operate the syringe. If the system air pressure drops by any more than 15 psi, or water pressure by more than 10 psi, check for clogged filters.
3. If adjustment of either the air or water pressure is required, turn the appropriate pre-regulator knob clockwise to increase pressure, or counterclockwise to decrease.

Air and water pass through separate filters before entering the regulators. A filter must be replaced when it becomes sufficiently clogged causing restricted flow to the regulator.

### Checking for a Clogged Air Filter

To check for a clogged air filter, flip the master on-off toggle to the ON position and remove the floor box cover. While watching the air pressure gauge in the floor box (see Figures 7 and 8), press the syringe air button. If the air pressure indicated by the gauge drops by more than 15 psi, the filter element is clogged and must be replaced.

### Checking for a Clogged Water Filter

To check for a clogged water filter, flip the master on-off toggle on the control head to the ON position, then remove the floor box cover. Watch the water gauge, press the

syringe water button. If the water pressure drops by more than 10 psi, the water filter is clogged and must be replaced.

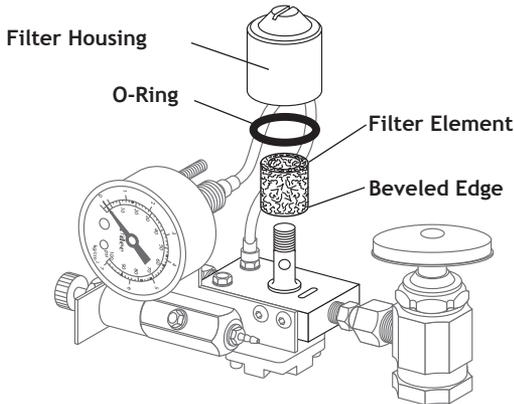
## Filter Maintenance

### Air and Water Filter Elements

#### Inspecting the Filters

To inspect or replace a filter element, flip the master on-off toggle to the OFF position, then close the manual shutoff valves. Bleed the system of air and water pressure by operating the syringe buttons until air and water no longer flow. Using a standard (flat-blade) screwdriver, remove the filter housing from the air and/or water pre-regulators assemblies (see Figure 9) and remove the filter.

If the filter is visibly clogged or discolored, you will need to replace it.

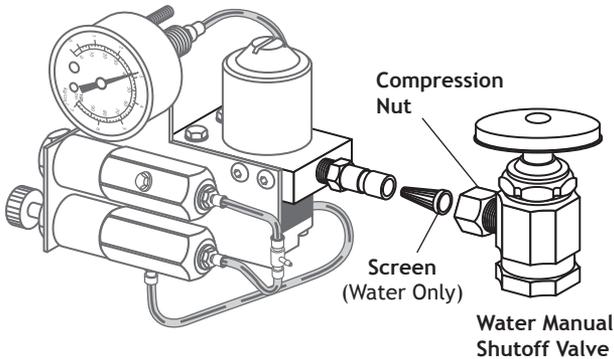


**Figure 7. Air or Water Filter Replacement**

When installing a new filter, notice that one end of the filter has a beveled edge. Install the filter with the beveled edge facing the manifold (see Figure 9). The system will not work properly if the filter is installed incorrectly.

## Water Screen

The manual water shutoff valve in your floor box (see Figure 10) is equipped with a screen to prevent debris from entering the system. You should periodically check and replace this screen to ensure unrestricted water flow to your unit.



**Figure 8. Water Screen Replacement**

To remove or replace a screen, first move the master on/off toggle to the OFF position and close the manual water shutoff valve.

Now, using a 5/8" or adjustable wrench, loosen the compression nut on the manual water shutoff valve and pull the water regulator out of the shutoff valve (see Figure 10). Remove the screen and install the replacement screen.

Reposition the water regulator in the manual shutoff valve outlet and tighten the compression nut. Open the manual water shutoff valve and flip the master toggle to the ON position. Check the fittings for leaks.

## Maintenance

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Filter Maintenance .....	page 8

## Adjustments and Specifications

Minimum air, water, and vacuum service requirements for proper unit operation:

- Air: 2.50 cfm (70.80 l/min) at 80 psi (551 kPa).
- Water: 1.50 gpm (5.68 l/min) at 40 psi (276 kPa).
- Vacuum: 12 cfm (339.84 l/min) at 8 inches (27 kPa) of mercury.



**NOTE** Specifications are subject to change without notice. Some requirements may vary from country to country. For more information, contact your authorized A-dec dealer.

**Warranty**

Warranty information is provided in the *Regulatory Information, Specifications, and Warranty* document (p/n 86.0221.00), which is available in the Document Library at [www.a-dec.com](http://www.a-dec.com).



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