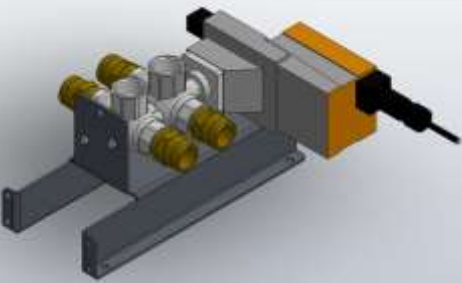
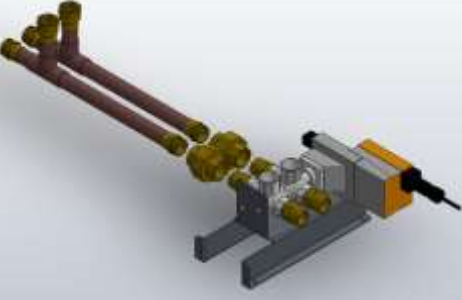

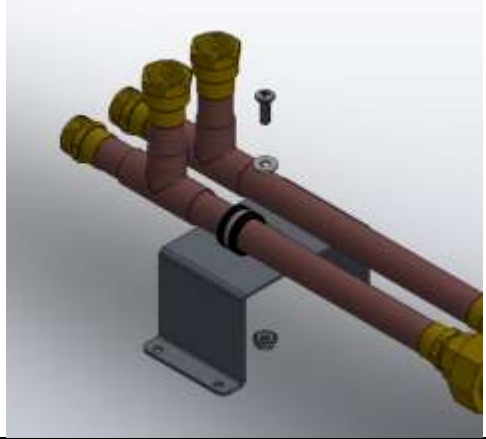
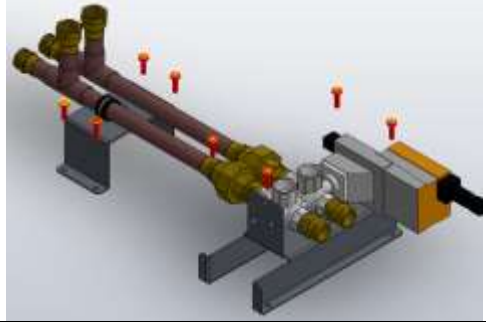
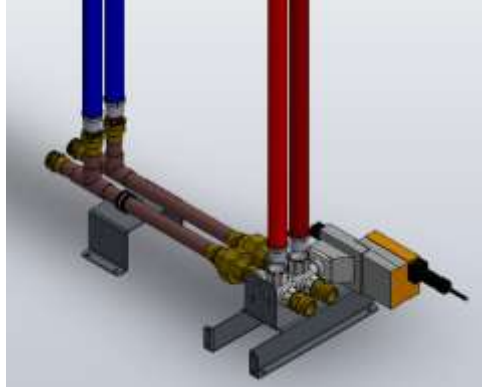

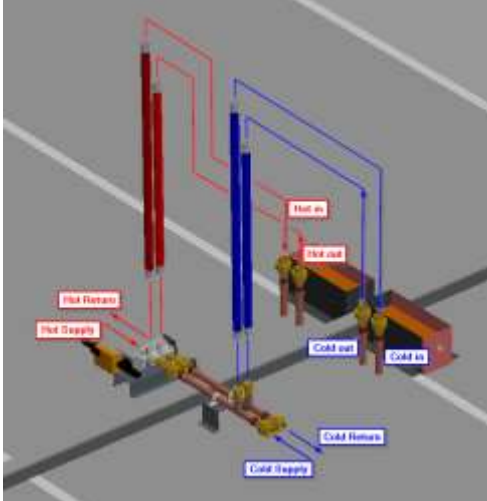

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	<b>Operation Instruction Title:</b> <b>6 Way Valve Retrofit for Platinum Incubators</b>	Revision Dat10/09/2018	Revised By: V. Frail
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<p>Step 2</p> 	<p>Insert 4x PB33378 brass hex nipples into the ports on the 6 way valve.</p>																																																								
<p>Step 3</p> 	<p>Connect the 2x AB33368 manifolds to the 6 way valve using the 2x PB33377 unions. Apply Teflon tape to the threads before connecting.</p>																																																								


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Step (picture)	Step (Instructions)	Step (Tools Required)	Step (Safety & PPE)
<p>Step 4</p> 	<p>Mount the manifolds to the 1000374 piping support bracket using 1x 1000866 clamp, 1x 100797 1/4" bolt, 1x P6220 flat washer, and 1x 1000655 lock nut.</p>		
<p>Step 5</p> 	<p>Mount the assembly onto the cabinet using P6405 screws.</p>		
<p>Step 6</p> 	<p>Connect the hot and cold hoses to the 6 way valve assembly, applying Teflon tape to the threads.</p> <p><b>Note:</b> The shorter lengths of hose will go in the ports shown in front in the image i.e. away from the valve actuator.</p>		

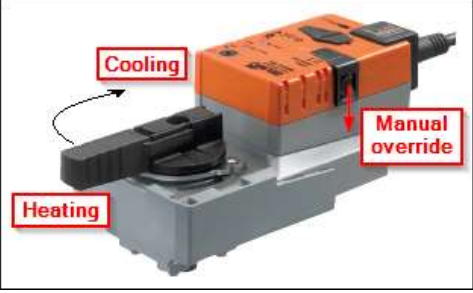
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Step (picture)	Step (Instructions)	Step (Tools Required)	Step (Safety & PPE)																																				
<p>Step 7</p> 	<p>Connect the hoses to the hot and cold water inlets and outlets on the cabinet using 4x PB33377 unions. Use Teflon tape on the threads.</p> <p>Connect to the facility's cold water supply and return, as well as the hot water supply and return, using an additional 4x PB33377 unions.</p>																																						
<p>Step 8</p> <p>Platinum 1.0</p> <table border="1" data-bbox="76 1003 555 1223"> <thead> <tr> <th>Wire</th> <th>Connection Point in Console</th> <th>Connection Point at Terminal Strip</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>TB4-5</td> <td>Match black</td> </tr> <tr> <td>White</td> <td>TB1-22</td> <td>Match white</td> </tr> <tr> <td>Red</td> <td>OPTO22 - Pos 1</td> <td>Match red</td> </tr> </tbody> </table> <p>Platinum 2.0</p> <table border="1" data-bbox="76 1285 555 1478"> <thead> <tr> <th>Wire</th> <th>Connection Point in Console</th> <th>Connection Point at Terminal Strip</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td>TB4-4</td> <td>Match black</td> </tr> <tr> <td>White</td> <td>TB1-22</td> <td>Match white</td> </tr> <tr> <td>Red</td> <td>TB4-6</td> <td>Match red</td> </tr> </tbody> </table> <p>Platinum 2.0 24V DC</p> <table border="1" data-bbox="76 1541 555 1727"> <thead> <tr> <th>Wire</th> <th>Connection Point in Console</th> <th>Connection Point at Terminal Strip</th> </tr> </thead> <tbody> <tr> <td>Black</td> <td></td> <td>Match black</td> </tr> <tr> <td>White</td> <td></td> <td>Match white</td> </tr> <tr> <td>Red</td> <td></td> <td>Match red</td> </tr> </tbody> </table>	Wire	Connection Point in Console	Connection Point at Terminal Strip	Black	TB4-5	Match black	White	TB1-22	Match white	Red	OPTO22 - Pos 1	Match red	Wire	Connection Point in Console	Connection Point at Terminal Strip	Black	TB4-4	Match black	White	TB1-22	Match white	Red	TB4-6	Match red	Wire	Connection Point in Console	Connection Point at Terminal Strip	Black		Match black	White		Match white	Red		Match red	<p>Complete the wiring according to the type of machine.</p> <p>Use the PT2185 cable and terminal strip PB5083.</p> <p>Run the cable through the low voltage side (left side) of the center roof extrusion and down into the console.</p>		
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<p>Step 9</p> 	<p>Change the rotation direction on the damper motor from the default Y1 to Y2.</p>																																						

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Step (picture)	Step (Instructions)	Step (Tools Required)	Step (Safety & PPE)
Step 10	Update the software on the machine to version 4.20 or higher.		
Step 11	<p>For Platinum cabinets, change dip switch 5 to the "ON" position.</p> <p>For Platinum 24V DC cabinets, select Option 5 in the configure machine menu.</p>		
Step 12 	<p>Enable <i>Double Cool</i> on the incubator touchscreen.</p> <p>Setup → Hum Setup → Double Cool</p> <p><b>Note:</b> Dip switch 5 must be in the "ON" position and the software must be version 4.20 or greater for the <i>Double Cool</i> button to appear.</p>		

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Step (picture)	Step (Instructions)	Step (Tools Required)	Step (Safety & PPE)
<p>Step 13</p> 	<p>Test the 6 way valve is operational on the empty cabinet.</p> <ol style="list-style-type: none"> <li>1. Start a profile with current date and time. Confirm heat is on and flowing through hot coils (front and rear) only. Adjust profile temperature if necessary, e.g., 100°F to ensure heat is on. Allow machine to warm up for 15 – 30 minutes before proceeding to next step. (Valve should remain in default heating position)</li> <li>2. Adjust profile temperature to value lower than current cabinet temperature, e.g. 70°F. Confirm cooling is on and flowing through cold coils (front and rear) only.</li> <li>3. Adjust profile temperature to value somewhat higher than current temperature, e.g., 100°F. Allow machine to warm up for 15 – 30 minutes before proceeding to next step.</li> <li>4. Restart profile and back date so Day in Cycle (DIC) is 14.0 or greater. Adjust profile temperature so cooling comes on. Valve will rotate from heating to cooling position. Cold water should flow through all coils (front and rear). Bring temperature down to set-point, e.g., 70°F.</li> </ol> <p><b>Note:</b> The valve takes approximately 150 seconds to switch over to double cooling.</p> <ol style="list-style-type: none"> <li>5. Disable profile and ensure 6-Way valve returns to the default position – Heating.</li> <li>6. Check current cold water pressure, flow and temperature. Reduce water flow to 3 GPM (11.5 L/min) for Platinum P120s.</li> </ol>	<p><b>Note:</b> this is best performed with two people, one on the roof and one at the front of the machine</p>	

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Step (picture)	Step (Instructions)	Step (Tools Required)	Step (Safety & PPE)
Step 14	<p>Perform the Fail-Safe procedure on the empty cabinet.</p> <ol style="list-style-type: none"> <li>1. Repeat step 4 above and ensure the valve is in cooling mode and chilled water is flowing through all coils. Change dip switch to OFF position – valve should return to default position. <b>Note:</b> It is not necessary to turn the machine off.</li> <li>2. Enable dip switch – ON – and allow valve to switch back to double cooling.</li> <li>3. Simulate power failure by turning machine power off. Valve should remain in cooling position.</li> <li>4. Turn power back on.</li> <li>5. Repeat step 1 above and allow machine to warm up. Check coils – only heating coils should have hot water flowing.</li> <li>6. Repeat step 2 above and ensure chilled water is flowing through cold coils only.</li> </ol>	<p><b>Note:</b> this is best performed with two people, one on the roof and one at the front of the machine</p>	
Step 15	<p>Ensure the customer has the 6 Way Valve Technical Bulletin available for additional details on the system.</p>		