Coolant Purification Systems
GREEN ECO PRO CNC Coolant Purification Systems
Ultra 1200 INSTRUCTION MANUAL

Model: Ultra 1200
Serial No.
Manufacture Date:

Revision: E
2018
Unit Footprint & Layout

Description of each part

- Oil Outlet
- Oil Tank
- Coolant Volume Adjustment
- Air Pressure Gauge
- Air Regular unit
- Second Filter
- Cover Window
- Oil Window
- Filter Indicator
- Alloy Spirit Level
- Coolant Outlet
- Air Connection
- Coolant Inlet
- First Filter
- Machine Leveling Feet
1. Install the filter element - be sure to retain the O-Ring
2. Connect the 2 inch Coolant drainage pipe to the Coolant Outlet port by large clamp.

3. Connect the Coolant Inlet hose to the Coolant Inlet port by small clamp.

4. Connect the Air Supply hose

5.1. The bracket that holds the float tubes must be attached on edge of the coolant tank in order to keep it away from the existing chips or debris.

6.1. The Float Tube Inlet must face in the upward position.
   If there are any suspended solids or floating debris on the surface of the coolant, be sure to remove them before operating the unit.

7.1. In order to keep the Inlet on the surface of coolant, adjust the bracket that retains the float inlet accordingly to an appropriate position.
   To keep the float tubes balanced, the coolant level must be maintained above 2 inch if required, please add coolant.
8. The above diagrams indicate the position of the Coolant Outlet hose. This is also known as the coolant return hose. Do not jam or bend the hose, gravity will allow the coolant to flow down automatically. The coolant outlet port must be kept above the coolant tank. If required, add a riser block under the leveling support feet. The coolant outlet hose must be kept below the coolant outlet port, as illustrated above.

9. Adjust the machine leveling feet, utilizing the leveling gauge. Refer to the diagrams above.
10. For the Ultra 360, Check the Coolant Volume Adjustment knob. Turn the knob Counter Clockwise (ON). The factory recommended Coolant Volume is to set the pump frequency at 1 pulse per second. Please set at 2 pulses per second if there are any suspended solids in the coolant. Refer to Operation & Safety
11. If the recycled oil exceeds the oil reservoir capacity, you can remove the reservoir and then connect the drain hose to a larger recycle tank. Be sure the oil outlet valve is in the “On” position.

12. In order to obtain the best performance, this coolant purification unit must be installed within 3 Feet from the CNC machine. Once installed, do not remove the unit When it operates.
Operation & Safety

1. Air Pressure & Coolant Volume Adjustment

1.1. After connecting the air supply hose, check the incoming air pressure by reading the gauge. The factory default is set at 35 P.S.I. If the actual air pressure is above/below the factory recommended value, adjust accordingly. The air pressure regulator is located below the oil recycle reservoir. Lowering the air pressure will cause the flow of coolant to stop as well as the pump to not work properly.

NOTE: To get a proper reading of air pressure gauge, please turn the coolant volume switch On/off then “On” again.

2.1. The factory recommended coolant volume control is to set the pump frequency at 1 pulse per second.

3.1. In the event of the pump clogging up or if the unit has been sitting idle for a long period of time, this may cause the pump to not function properly. You may have to adjust the air pressure above 35 PSI. Once the pump resumes operation, readjust the air pressure to the factory recommended value of 35 PSI.

2. Relocating the unit

1.1. In case relocation is required, be sure to shut off the oil outlet valve, once it is moved to a desired location please relevel this unit. When foam or bubbles occur in the coolant, please stop the operation of this unit or turn the coolant volume adjustment down.
Filter Indicator

Under normal condition/operation the filter indicator will read between the Green and Yellow zone.

When processing a higher viscosity of way lube oil, the filter indicator may reach the Red zone. Please verify the operation of the float tubes.

If the filter indicator stays in red zone, check the condition of float tube hose for obstruction.
Please refer to the instructions in the maintenance guide for recovery procedure.
1. Clean the Filter element as illustrated below

1.1. Be sure to turn off the coolant unit by disconnecting the Air supply hose.
2.1. Use the filter wrench to remove the filter canister, turning the filter as indicated.
3.1. Clean the filter element and the canister by applying high pressure air, as illustrated above.
4.1. Remove, clean, and reinstall the O-ring
5.1. Reassemble the filter element, the canister, and the O-ring. Install it on the unit. Be sure not to over tighten. Apply appropriate force to lock the filter canister.
   A missing O-ring will cause the disruption of proper operation.

2. Cleaning the oil and coolant ports

Once the filter maintenance is completed, be sure to check all of the coolant and oil ports as well as the float tubes for obstructions. See above illustration
3. The location of Oil Lubrication & Filtration

1.1. Check the level of the oil lube on the air regulator unit by removing the side panel. If required, please refill with O.E.M. recommended oil - TURBINE OIL ISO VG32.

2.1. When disconnecting the air supply hose, the air regulator will drain some mist automatically. Be sure to check the incoming air supply. The supplied air should be dry and free from contamination.

3.1. Do Not Connect An Air Supply That Exceeds 145 P.S.I. (10 Bar)

4. Cleaning the Coolant Reservoir and the S.T.P.M Module

1. To maintain high performance of the unit, a seasonal maintenance is recommended. Remove the side panel and turn on the valve (see the illustration above) to drain any residual coolant.

2.1. Remove the top cover and loosen the bolt to separate the STPM module. Keep the STPM in one piece and then rinse with clean water or high pressure air to remove dust, once completed, apply the same procedure on coolant reservoir before reinstalling the STPM module.

Do not apply any chemical products or water with a temperature that exceeds 194 degrees (F) to STPM module.
5. Location of the Pump Reset Button

1. In the event of the pump clogging, temporarily set the air pressure higher and reset the pump. See the illustration above. Once the fault recovery is completed, readjust the air pressure value to recommended value of 35 P.S.I.

2. Lack of oil lubrication may cause the pump to malfunction intermittently. Add the recommended oil, TURBINE OIL ISO VG32, and press the pump reset button.

6. Discharge Tramp oil Adjustment Screw

1. You can control the height of tramp oil discharge by this screw. It will affect the concentration of tramp oil discharge.
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<table>
<thead>
<tr>
<th>Maintenance Check Items</th>
<th>Maintenance &amp; Recovery Procedure</th>
<th>Weekly</th>
<th>Monthly</th>
<th>quarterly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean filter element, canister and O-Ring</td>
<td>Apply high pressure purified air thru or clean it with soap and water</td>
<td>●</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Float Tube hose check</td>
<td>Check if cracks or physical damage have occurred</td>
<td>●</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Float Tube unit check</td>
<td>Check if cracks or physical damage have occurred</td>
<td>●</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Check the STPM Module</td>
<td>Apply high pressure purified air thru or flush with clean water</td>
<td>●</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Air pressure leak check</td>
<td>Check air inlet hose if cracks or physical damage have occurred</td>
<td>●</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Check pump oil level</td>
<td>Add oil if needed. Recommended Oil: TURBINE OIL ISO VG32</td>
<td>●</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Air filtration system</td>
<td>Check if there is water in the reservoir bowl</td>
<td>●</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Check connecting hoses</td>
<td>Check coolant inlet hose, coolant return hose, and floatation inlet hose for cracking/leaking or deterioration.</td>
<td>●</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Check Air pressure gauge</td>
<td>Readjust air pressure to 35 P.S.I.</td>
<td>●</td>
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<td></td>
</tr>
</tbody>
</table>
# Inspection Sheet - Page 2

<table>
<thead>
<tr>
<th>Maintenance Check Items</th>
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<th>Weekly</th>
<th>Monthly</th>
<th>Quarterly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit interior &amp; exterior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Check unit exterior</td>
<td>Clean the exterior of the unit with towel</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>2. Check the window glass</td>
<td>Clean with towel</td>
<td></td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>3 Oil recycling reservoir</td>
<td>clean with towel, replacement is required if cracks occurred</td>
<td></td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>
WARRANTY STATEMENT

Terms & Conditions
In the event that a fault occurs with the machine or any parts supplied with it due to workmanship or defective materials, Green Eco Pro will replace any faulty components (other than consumable components) for a period of 12 months from the date of installation.

Provided the following:
1. You have notified us of the relevant fault within 7 days of discovering it.
2. The machine has been used in accordance with our instructions.
3. The fault is not due to reasonable wear and tear and does not relate to consumable components (including, without limitation, filters, filter element, hand tool, O-ring).
4. Should the machine require relocation, make sure that the oil outlet valve is in the Off position. Relocate and level the unit. Otherwise, while cycling, the coolant purification unit shall not be moved.
5. We shall be entitled to have returned any components replaced by us under this warranty.
6. The warranty shall be deemed void if the customer or a third party modifies or repairs the equipment without having Green Eco Pro’s previous approval.

The warranty offered on these products provides coverage against defective parts or faulty workmanship subjected to all routine maintenance and run up procedures being observed and carried out within these periods as detailed by Green Eco Pro Co. The warranty does not cover for replacements in the event of accidental such as natural disasters or malicious damage or damage caused by misuse of the product.

Part Warranty
With the exception of easily worn parts mentioned above, all other repair parts, when replaced, shall have a 6 month factory warranty period on the part itself regardless of the machine warranty term.