Coolant Purification Systems ULTRA 360
INSTRUCTION MANUAL
(Original Instructions)

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<table>
<thead>
<tr>
<th>Model</th>
<th>Ultra 360</th>
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<tbody>
<tr>
<td>Serial No.</td>
<td></td>
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<tr>
<td>Manufacture Date:</td>
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</tbody>
</table>

Revision: N
May 2018
Unit Footprint & Layout

N.W: 27.5 KGS  G.W: 30 KGS
N.W: 57 lbs  G.W: 64 lbs

Description of each component

Air Pressure Adjustment

Bubble Gauge
Oil Outlet
Coolant Volume Adjustment
Air Pressure Gauge
Pump Reset Button

Coolant Outlet
Coolant Inlet
Air Connection
Leveling Feet

Read this user manual carefully before you use the appliance.
Installation Guide

Before starting this installation, carefully unpack and clean all unit elements. For proper part identification and location, it will be most helpful to study the assembly and parts instructions included in this document.

Important

**DO NOT CONNECT TO AN AIR SUPPLY THAT EXCEEDS 145 P.S.I.** (10 Bar)

- Disconnect air supply and depressurize all air lines.

- After installation, air and coolant systems should be connected and fully tested for proper function and leaks.

- Please follow the manufacturer's safety guidelines for all power and hand tools used for this installation.

- Installation of this system on any machine other than those listed, voids any and all intended warranties and liabilities by Green Eco Pro INC.

![WARNING]

Adequate eye protection must be used when servicing this equipment to prevent the possibility of injury.

TOOLS REQUIRED: The installation of this unit can be accomplished with basic machine service tools.
1. Please verify all peripheral accessories.

2. Installation Instruction Procedure

1.1 Install the filter element - be sure to retain the O-Ring.
2. 1. Connect the 1” Coolant Return hose to the Coolant Outlet port using the large hose clamp.

3. 1. Connect the Coolant Inlet hose to the Coolant Inlet port using the small hose clamp.

4. 1. Connect the Air Supply hose.

5. 1. The bracket that holds the float tubes must be attached on the 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” if required, please add coolant.
8.1. 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.

9.1. Adjust the machine leveling feet, utilizing the leveling gauge. Refer to the diagrams above.

10.1. 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 page 1.
11.1. 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.

12.1. 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 while in operation.
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. 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. 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.


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. 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.
Faulty Recovery Procedure – Page 1

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.
## Inspection Sheet - Page 1

<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><strong>Filtration System</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean filter element,</td>
<td>Apply high pressure purified air thru or clean it with soap and water</td>
<td>●</td>
<td></td>
<td></td>
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<tr>
<td>canister and O-Ring</td>
<td></td>
<td></td>
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<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>
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</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>
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<tr>
<td><strong>Pneumatic &amp; Coolant Circulating System</strong></td>
<td></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>
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</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 flotation 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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## Inspection Sheet - Page 2

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<tr>
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<th>Weekly</th>
<th>Monthly</th>
<th>Quarterly</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit interior &amp; exterior</strong></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>
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</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.
Safety information

The machine is peripheral products of CNC machine; no part of other area may be used.

The optimum installation area
CE regulations and standards
We GREEN ECO PRO CO., LTD. (No.12-19, Ln. 183, Sec. 4, Chongde Rd., Tanzi Dist., Taichung City 427, Taiwan) declare under our sole responsibility that the products Coolant Purification Systems, model ULTRA 360 series described under this manual is in conformity with the following Directives/ or standardization documents:

Ÿ Machinery Directive 2006/42/EC
Ÿ EN ISO 12100
Ÿ EN ISO 4414

Ambient Noise Information
Equivalent A-weighted Sound pressure level according to EN ISO 3746: 75.32 dB(A)
Uncertainty, K in decibels: 4.0 dB (A) according to EN ISO 4871

The figure quoted is emission levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required.

Factors that influence the actual level of exposure of the workforce include characteristics of the work room, the other sources of noise, etc. i.e. the number of machines and other adjacent processes. Also the permissible exposure level can vary from country to country, This information, however, it will enable the user of the machine to make a better evaluation of the hazard and risk.
VERIFICATION OF COMPLIANCE
to the requirements of
Machinery Directive 2006/42/EC

Verification Report No.: RA/2018/50007C
Representative Model: ULTRA 360
Series Model(s): ULTRA 90, ULTRA 90S, ULTRA 1200
Product Name: Coolant Purification Systems
Applicant: GREEN ECO PRO CO., LTD.
Address of Applicant: No.12-19, Ln. 183, Sec. 4, Chongde Rd., Tanzi Dist., Taichung City
427, Taiwan
TCF Number: TR18050901
Date of Issue: June 04, 2018
Date of Expiry: June 04, 2023

Conclusion
Based upon a review of the Technical Construction File, the apparatus is deemed to
meet the requirements of the above standard(s) and hence fulfill the requirements of:

Machinery Directive 2006/42/EC

Note: This verification is only valid for the apparatus and configuration described and in conjunction
with the technical data detailed above.
The CE mark as shown below can be used, under the responsibility of the manufacturer, after
completion an EC Declaration of Conformity and compliances with all relevant EC Directives.

Authorized Signatory:

Jason Lin
Technical Manager

SGS TAIWAN LTD.
GREEN ECO PRO CO., LTD.

Confirmation

6/4/2018

We, GREEN ECO PRO CO., LTD. confirm that

The Product name: Coolant Purification Systems
The Representative type/model: ULTRA 360

The Series type/model: ULTRA 90, ULTRA 90S, ULTRA 1200

We, the manufacturer, will follow new machinery 2006/42/EC directive in Annex VII and Annex VII for mass production according to CE rules. The series type/model will use the same mechanical structure, mechanical functions, electronic circuit diagram, electronics and control system as the representative type/model: ULTRA 360

We take full responsibility of the Representative and Series type/model in the CE market.

我們製造商確認會根據歐洲CE機械指令在附件七及附件八的要求確實作到量產的機器與原認證的機械型號在機械結構，機械功能，安全保護蓋及安全電路和其他相關元件與迴路都同於原認證主型號: ULTRA 360作生產管控。我們也確認對我們公司的量產機器對CE市場負完全的責任。

Company Stamp

Authorized Signature and Date