

ECO II AMALGAM SEPARATOR



EQUIPMENT LOGBOOK ASSEMBLY, OPERATION AND MAINTENANCE

PureWay Compliance, Inc.

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877.765.3030

www.PureWay.com

Equipment Log Book

- To be filled in by the technician, or the person maintaining the separator
- Service and maintenance must be carried out as per the instructions for the installation, operation and maintenance

MONTH 1

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

MONTH 2

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

MONTH 3

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

MONTH 4

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

MONTH 5

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

MONTH 6

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

MONTH 7

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

MONTH 8

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

MONTH 9

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

MONTH 10

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

MONTH 11

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

MONTH 12

Name of the person who inspected:	
Date of Inspection:	— — — — —
Was the system operating properly?	<input type="radio"/> Yes <input type="radio"/> No
Was the system needing to be replaced?	<input type="radio"/> Yes <input type="radio"/> No

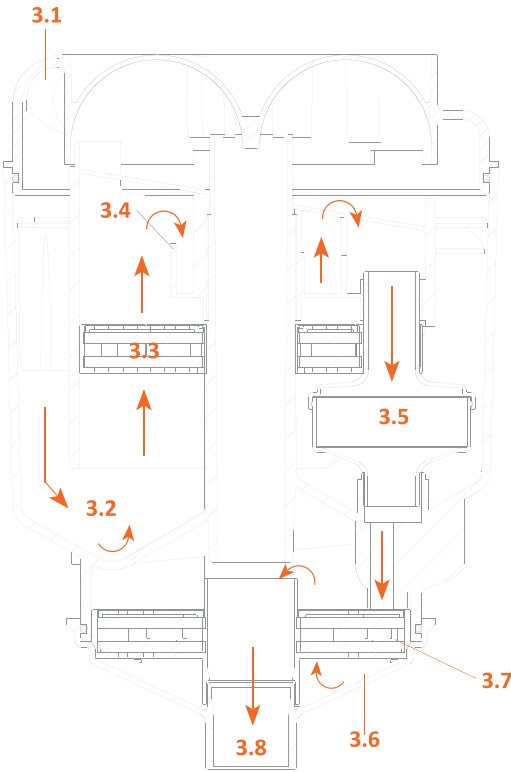
ECO II AMALGAM SEPARATOR

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ECO II Application and Explanation of Components



Explanation of how the system works

The amalgam separator ECO II works on the principle of sedimentation, divided into several sections.

With dry vacuum systems the waste water from the dental units runs from the air/water separation tank into the inlet nozzle **3.1** of the ECO II.

In wet ring systems, the water flows from the suction line into the inlet nozzle.

From there the waste water is led through the first large sedimentation chamber **3.2**. Afterwards it is led through the first sedimentation cartridge **3.3**, through cascades **3.4** and the second sedimentation cartridge **3.5** into the second sedimentation chamber **3.6**. Through the third sedimentation cartridge **3.7** the cleaned water is led directly into the sewage pipe **3.8**.

In wet ring systems, the clean water is led into the wet ring pump.

Technical Data

Low pressure range	50mbar - 300mbar
Separation rate	> 99% in accordance with ISO 11143
Collection container volume	0.4 gal (1.5 liters), 4.5 lb (ca. 2 kg), > 0.18 gal (700 ml) amalgam waste
Max. ambient temperature	104° F
Possible vacuum systems	wet or dry
Max. airflow rate	400 gal/min, 1,514 l/min
Max. water flow rate	0.264 gal/min, 1 l/min
Dimensions (HxWxD)	12.2 x 7.7 x 8.4 in (309 x196 x 213 mm)
Exchange interval	approx 12 months

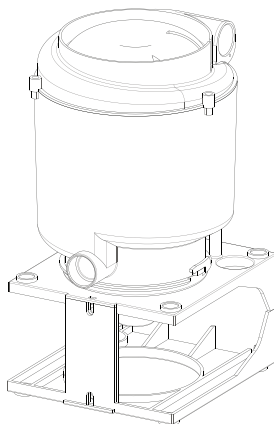
Application

The **Economy System Type II (ECO II)** is a sedimentation amalgam separator.

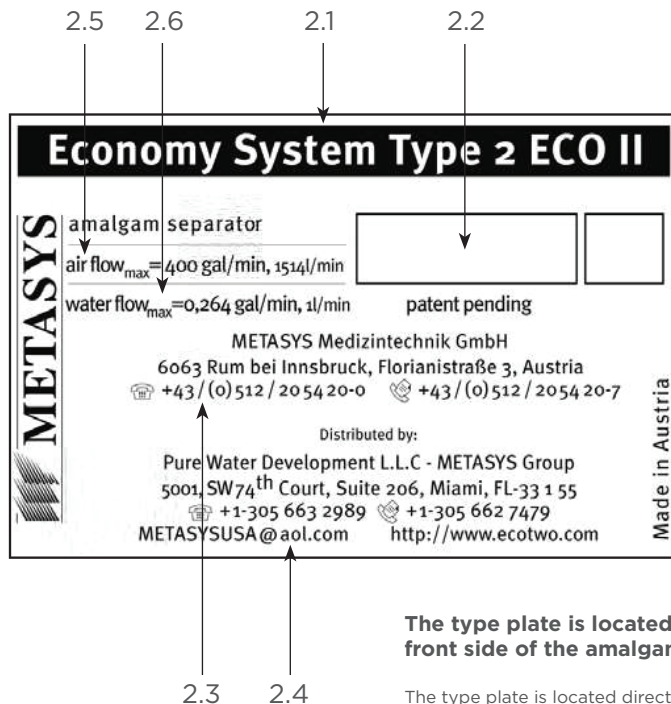
When used in a wet ring system, the ECO II can be installed in the vacuum line before the wet ring pump.

Possible Vacuum Systems

- dry vacuum system with air/water separation
- wet ring systems



Type Plate



The type plate is located directly on the front side of the amalgam separator.

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- 2.1 Equipment type
- 2.2 Serial number
- 2.3 Manufacturer's address
- 2.4 Distributor's address
- 2.5 Max. suction volume
- 2.6 Max. water flow rate

ECO II Assembly Instructions

The ECO II Amalgam Separator requires minor assembly before ready to install to a dental vacuum system. Follow the instructions below to assemble your ECO II and then proceed to install instructions.

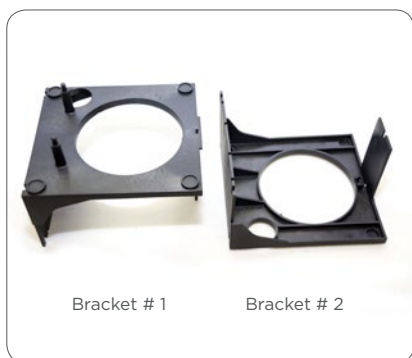
STEP 1

Remove all contents from the ECO II. Each system comes with the following components

- 2 x black foundation brackets
- 1 ECO II Canister filtration system (blue top, clear cylinder)
- 6 Screws & nuts
- 2 x right angle 3/4" fittings
- 2 x 3/4" straight fittings
- 2 x 1" straight fittings
- 2 x 1.5" straight fittings
- 2 x adaptors
- 8 x black O-rings
- 2 x grey U-clips to secure fittings onto the ECO II
- Two stainless steel cylinders

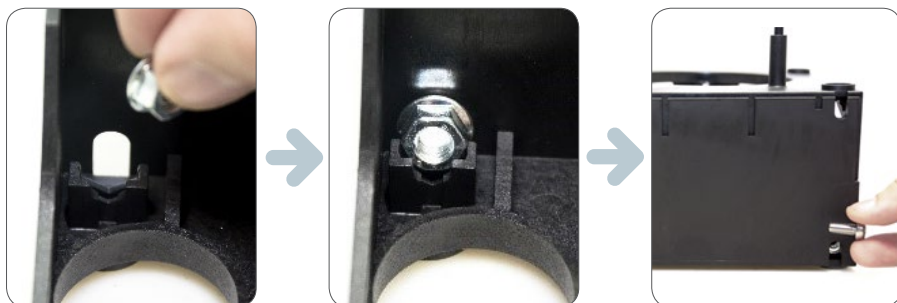
STEP 2

Secure the black foundation brackets by placing bracket 1 on top of bracket two as shown below ensuring the brackets fit securely into the alignment grooves.



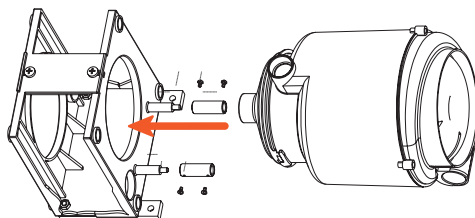
STEP 3

Place the hexagonal fastening nuts inside the brackets in the secure area below and secure with the screws provided as shown below. There are 4 secure points on the back of the brackets and 2 on the front.



STEP 4

Fit the stainless-steel cylinders onto the two-canister base support as shown in the illustration below. Then fit the ECO II canister on top of the base support cylinders and then secure with the small screws.



STEP 5

Identify the appropriate fittings you plan on using during installation and fit the O-rings on to the applicable fittings as shown below. You are now ready to start the installation.

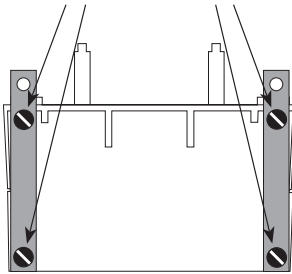


Optional Wall Bracket Installation

If you would like your ECO II to be mounted on a wall you must request these wall mounts at 877.765.3030 or go to www.PureWay.com contact page and request.

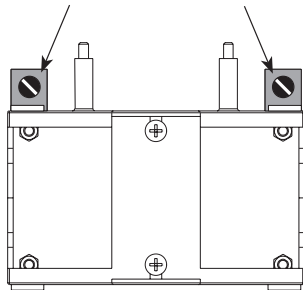
STEP 1

Stainless steel rectangular wall mounts are affixed on the back of the foundation brackets using existing screws.



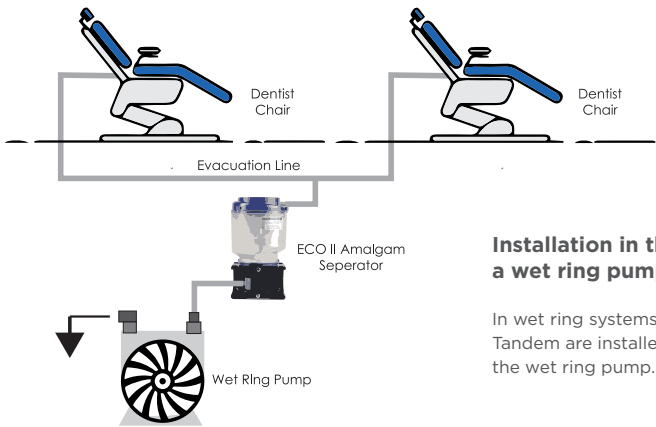
STEP 2

The stainless steel wall mounts are affixed to a wall using screws provided.



Installation Options of ECO II

The ECO II allows a variety of different installation options. Please check if there is a wet ring / water ring vacuum system, or a dry vacuum system.

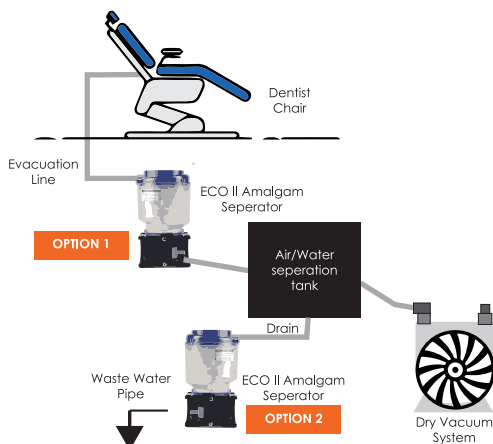


Installation in the suction line before a wet ring pump

In wet ring systems, the ECO II and the ECO II Tandem are installed in the vacuum line before the wet ring pump.

Installation with a dry vacuum system

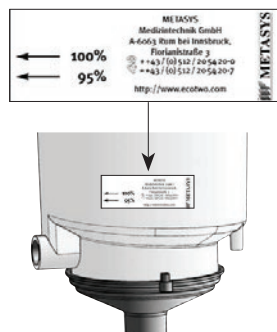
The ECO II / ECO II Tandem can be installed before (option 1) or after (option 2) the air/water separation tank (waste water outlet).



Replacement Intervals

Filling level

As soon as the solid content of the collection container has reached the maximum filling level, the ECO II must be replaced. However it has to be replaced at least once a year even if the maximum filling level has not yet been reached.



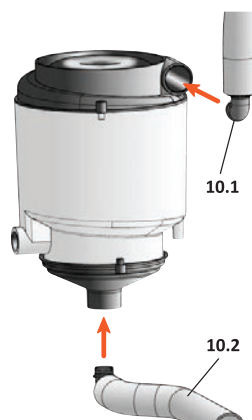
Installation of ECO II

In order to guarantee a trouble-free connection of different sizes of hoses, hose adapters supplied along with the device must be inserted in the inlet and outlet openings. In any case ensure that all connections are properly secured!

The waste water must be able to drain freely into the sewage pipe!

10.1 Waste water inlet: waste water from the dental unit or from air water separator

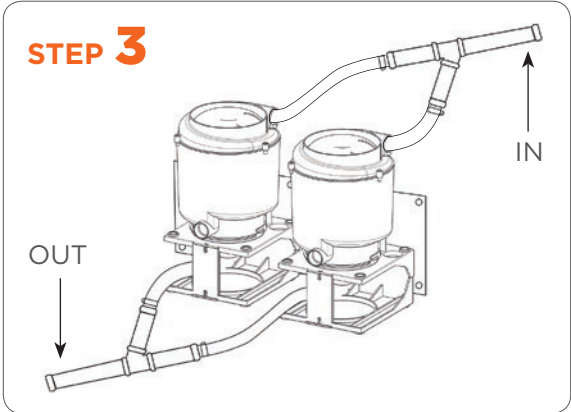
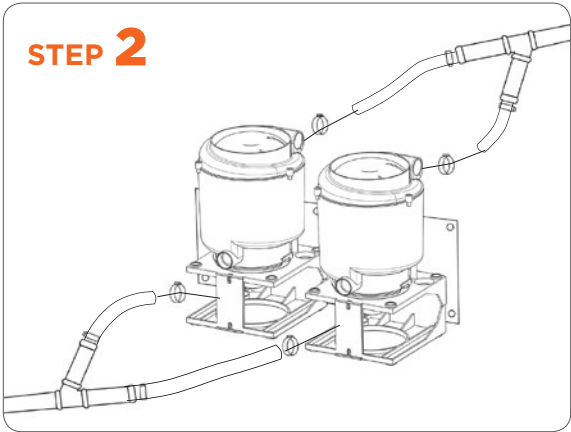
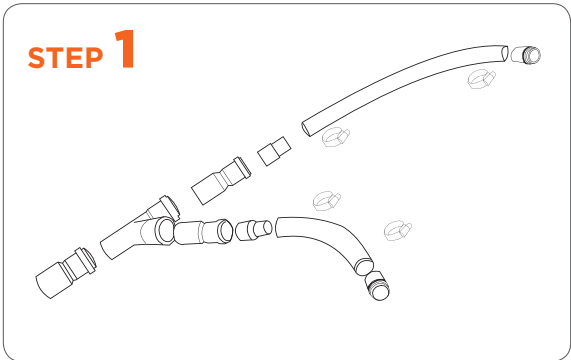
10.2 Waste water outlet: cleaned waste water directly to the sewage pipe



ECO II Tandem Installation Instructions



In order to connect the ECO II in tandem configuration, take two ECO II systems and connect them using a Y-Connector as shown in the illustrations below.



Maintenance and Replacing the Collection Container

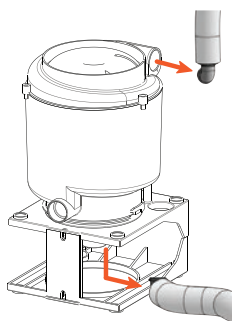
The ECO II collection container must be exchanged according to the replacement intervals as defined in the replacement interval table (cf. page 8, chapter 6).



Wear protective gloves and face mask! Avoid contact with the contents of the amalgam separator!

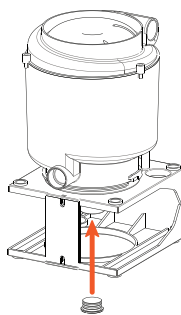
It is not possible to open the ECO II and reuse it! Every attempt to open the amalgam separator results in the malfunction of the device. Moreover, the required separation rate will no longer be achieved!

STEP 1



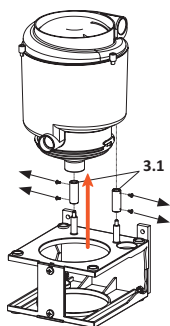
Remove the adapter with the tube at the waste water inlet and waste water outlet.

STEP 2



Tightly close the outlet of the full ECO II with the sealing plug (supplied with the amalgam separator).

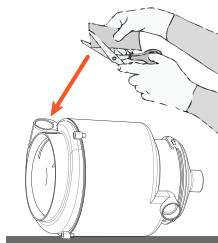
STEP 3



Detach the screws from the bolts 3.1 and take out

the full amalgam separator by lifting it off upwards.

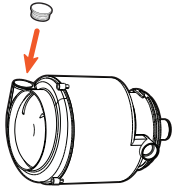
STEP 4



Position the full amalgam separator horizontally onto an even surface, make sure that the inlet opening is pointing upwards!

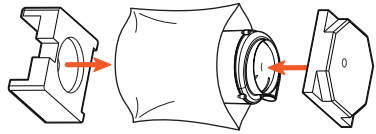
Cut open the sanitizing pouch (supplied with new amalgam separator) at one corner and pour its content into the inlet opening of the full amalgam separator.

STEP 5



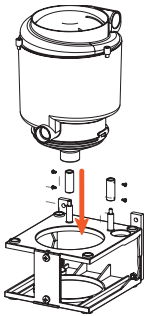
Afterwards also tightly close the inlet opening with the sealing plug.

STEP 6



Put the amalgam separator into the plastic liner (supplied with the new amalgam separator), place it into the styrofoam shells and then into the cardboard box.

STEP 7



Install the new amalgam separator and secure it with the bolts and screws.

STEP 8



Reconnect the adapter with the tube to the "IN" and "OUT" openings.



Check inlet and outlet of the ECO II for tightness!

Suck in a large quantity of water (at least 0.5 gal or 2 l) to check the system for leakages. If leakages are found, check the hose connections.

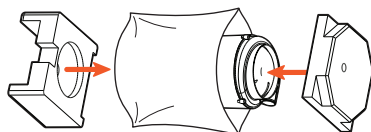
Disposal of the full collection container

For technical and hygienic reasons the collection container is designed for single use. The reuse of a used container can lead to malfunction and violates the warranty regulations!



Wear protective gloves and face mask!
Avoid contact with the contents of the container!

STEP 1



Place the properly sealed amalgam separator into the plastic liner and then into the two styrofoam shells.

The recycling of the full amalgam separator will be handled by a certified mercury recycling.

The prepaid return label will ship your canister to our recycling facility and you will receive a certificate of recycling as soon as it is ready. To sign up for e-certificates please visit www.pureway.com

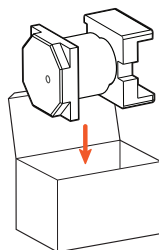
Certificates of recycling need to be stored according to national law.

For installation and replacement how to videos, please visit www.pureway.com/ecoi-amalgam-separator

Need assistance installing your ECO II? Call **877.765.3030** and PureWay can assist you in finding a qualified technician to install your system!

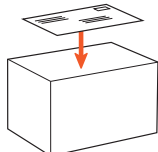
To access your e-certificates online and to sign up to receive your e-certificates via e-mail, please visit www.PureWay.com

STEP 2



Put the amalgam separator and the styrofoam shells into the box and close it.

STEP 3



Find the prepaid return UPS shipping label inside the box, and place the label on top of the box. You are now ready to return your system.

Please give the box to your regular UPS carrier or you can contact PureWay to schedule a free pickup by calling **877.765.3030** or e-mailing us at support@pureway.com



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Contact Us

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