

“LibertyBOSS”

AMALGAM SEPARATOR

Owner’s Manual



Helpdesk 1-866-594-3648
1801 Wentworth St. Unit 1
Whitby, ON, L1N 8M2
Canada

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Included with your “LibertyBOSS”:



“LibertyBOSS”



*1 1/4” Tubing with 1 1/4”
to 1 1/2” Coupler*



1” Tubing with 1” Bar



*1-1 1/2” 90°
Street Elbow*



*Part “A” Quick
Connect*



*1-3/4” Reducer
Bashing*



*Large Clear Bag
with Zip Tie*



*Part “B” Quick
Connect*



*ABS Close Out
Plugs*

LibertyBOSS		WARRANTY		LibertyBOSS	
Recycling/Warranty Registration					
<small>To activate the LibertyBOSS warranty process, this form must be completed and returned to MARS. The practice must be verified as completed and properly signed. Please do not sign this form until you have received the LibertyBOSS control and warranty registration information from the LibertyBOSS kit.</small>					
Model No.	Lot No.	Company No.			
Install Date	EO Start	EO End			
PRACTICE INFORMATION:					
Practice Name	Type of Practice		Practice Address		
Address	City/State		Zip Code		
Equip. Purchase Date	Equip. Purchase Price		Equip. Make/Model		
Practice No.	Practice Name		Practice Address		
Signature	Print Name		Print Title		
					
<small>MARS Bio-Med Processes Inc. 10000 Highway 100, Suite 100, Dallas, Texas 75243-1000 Tel: 972.750.0000 Fax: 972.750.0000 Email: sales@marsbiomed.com</small>					

*Recycling/Warranty
Registration Card*

**** Please note that only the “LibertyBOSS” Close Out Plugs, Large Clear Bag with Zip Tie and Recycling/Warranty registration card are enclosed in the box for a replacement “LibertyBOSS”.**



MARS “LibertyBOSS” Amalgam Separator

The MARS Bio-MED “LibertyBOSS” is a Classification “Type 2” amalgam separator and ISO 11143 Specification No. 108. The “LibertyBOSS” has a maximum fill amount of 3.0 litres with a maximum flow rate of 1,000 ml per minute.

The “LibertyBOSS” does NOT require any daily, weekly, or monthly maintenance. The system is sealed and has no moving parts or expensive filters to change. The “LibertyBOSS” is completely sealed for you and your staff’s protection.

The “LibertyBOSS” separator is designed to operate flawlessly for its entire service life ..

The Service Life of the “LibertyBOSS”

PRACTICES WITH 1 TO 3 CHAIRS: 3 YEARS

PRACTICES WITH 4 TO 9 CHAIRS: 2 YEARS

PRACTICES WITH 10 TO 16 CHAIRS: 1 YEAR

The “LibertyBOSS” is guaranteed to function for the duration of its service life as written on the Certificate of Compliance that is associated with each “LibertyBOSS” installation.

DO NOT OPEN THE AMALGAM SEPARATOR
AS IT MAY CONTAIN BACTERIAL CONTAMINANTS
THAT CAN CAUSE ILLNESS!

This unit may only be opened by a certified recycling facility. Should the unit be opened by anyone other than a certified recycling facility, ALL warranties either written or implied shall become voided immediately. There are no exceptions to this rule. In case of accidental opening or if the zip tie is broken in transit, please contact MARS Bio-Med Processes Inc. immediately at 1-866-594-3648.

Should a spill occur and an accidental discharge of the liquid inside the separator happens, please follow Local and State/Provincial guidelines for a biological and potential toxic discharge. As a key initial response, remove everyone from the immediate area and apply a dry absorbent to cover the spill completely. Do not dispose of absorbed material in standard trash. Do not rinse into drains. **Spoiled material or liquid MUST NOT be allowed to enter the sewer system.** It is assumed that the mercury charge would be added to the separator in roughly the same water to mercury ratio (10L/10G), as would be found in an actual dental office.

To ensure proper function of the “LibertyBOSS” amalgam separator please follow the step-by-step installation instructions directly below and fill out the annual sludge verification report provided in the manual.

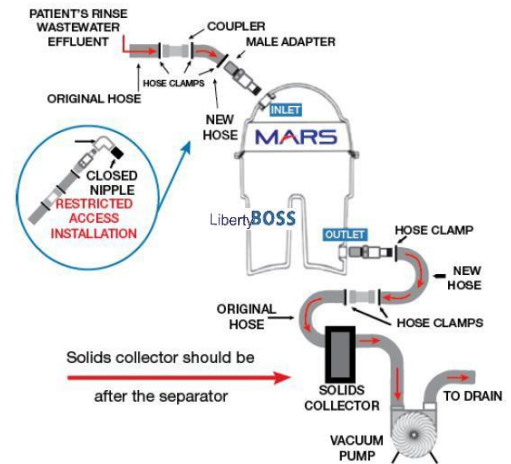
Quick Installation Guide

MARS Bio-Med Processes Inc.

Inlet is the top threaded insert (Dome) (From chairs)

Outlet is the bottom threaded insert (Legs) (To vacuum pump)

PROPER INSTALLATION OF ANY AMALGAM SEPARATOR



New “LibertyBOSS” Separator Installation

1. The “LibertyBOSS” should be installed in the mechanical room where the pump is located.
2. Make a note of the vacuum pump pressure prior to starting the installation.
3. Drain the evacuation line of all fluid before turning the vacuum pump off, to avoid spillage.
4. Turn off the vacuum pump.
5. Access the hose coming from the operatories to allow connection to the “LibertyBOSS” amalgam separator.
6. If a solids collector cup is installed, be sure it is installed **AFTER** the Separator.
7. Find the hose that comes from the operatories in Step 5. Heat the end with a heat gun until pipe is pliable. Do not overheat. Slide the barbed end of the 1 ½” fitting to the 1 ½” male threaded fitting into the cut hose, then secure the screw clamp over the hose. Do the same for the outlet end. **Teflon** tape both threaded 1 ½” fittings.
8. ** Read Optional steps 9 and 10 if an elbow is necessary for restricted access installations. If an elbow is not being installed, proceed now to Step 11.

Using the Elbow

9. Prepare a 1 ½” ID closed nipple (dual male end) with **Teflon** tape and screw the taped nipple into the threaded inlet of the “LibertyBOSS”. Hand tighten.
10. Now attach a 1 ½” ID elbow (45 or 90 degree as required) onto the exposed end of the taped closed nipple referred to in Step 9. Do not over tighten. Proceed to step 10-12 for installing quick connects.

Quick Connects

11. Screw Part “A” onto the 1 ½” male threaded connector attached to hose in Step 7.
12. **Teflon** tape the threads on Part “B”, then screw into inlet and outlet of the “LibertyBOSS” amalgam separator (If elbows are used, screw quick connect into elbow).
13. Connect the quick connects by lifting the arms of Part “B”, then sliding Part “A” into the opening. Be sure to connect inlet hose (From Chairs) at the top of the “LibertyBOSS” and the outlet hose (To Pump) at the bottom of the “LibertyBOSS”. Once the two parts are combined, lock them into place by lowering the arms of Part “B”. Once the inlet and outlet are locked into place, the “LibertyBOSS” amalgam separator is installed.
14. Turn on pump and check visually for water leaks. Feel each connection to assure no air is escaping.
15. Check the pressure gauge to see if it is still the same. Note pressure change, if any.
16. If you have upgraded to a “LibertyBOSS” from another amalgam separator, please visit our website for instructions on how to package the old system properly for recycling and refer to # 12 on page 6.
17. Please refer to the “Recycling/Warranty Card” section on page 6 for the recycling of your old amalgam separator.

Proper Installation of a “LibertyBOSS” amalgam separator illustration is on page 7.

Depleted Separator Replacement Guide

1. Make a note of the vacuum pump pressure prior to starting the replacement and compare to the vacuum pressure after replacement.
2. **All threaded fittings must use Teflon tape to ensure a watertight seal for transport.**
3. Check the inlet and outlet hoses for leaks or cracks. Replace if damaged.
4. To avoid spillage, drain the evacuation line of all fluid before turning the vacuum pump off.
5. Loosen the clamp around the fitting at the inlet (top) of the separator and unscrew the fitting from the separator without removing the fitting from the hose. With the clamps loosened, the fitting should turn while in the hose. Keep the outlet attached. If there are Quick Connects, skip this step and only disconnect the inlet Quick Connect.
6. With the vacuum on, tilt the separator approximately 60 degrees towards outlet (bottom). This will allow excess water that is trapped in the primary chamber to pass through the filter and out to the pump system. Allow enough time for the pump to clear the excess water (about 20 seconds).
7. When the lines have been cleared of excess water, turn off the vacuum pump. Use one of the 2 supplied ABS close out plugs with **Teflon** tape to plug the inlet of the used separator.
8. Repeat steps 5 and 7 for the outlet (bottom). **Teflon** tape **MUST BE USED** to ensure a watertight seal for transport.

Depleted Separator Replacement Guide Cont'd.

9. Install new "LibertyBOSS" amalgam separator, reapplying **Teflon** tape on all connections attached to the "LibertyBOSS".
10. Turn on pump and check for water or air leaks.
11. Check the pressure gauge to see if it is still the same. Note pressure change, if any.
12. Line the box that contained your new "LibertyBOSS" with supplied large clear bag and then place the depleted "LibertyBOSS" in the box. Tie off bag with zip tie provided and tape box closed for shipping. Always store depleted separator in upright position.
13. When the depleted separator is boxed and ready to be shipped, send your completed "Recycling/Warranty Registration Card" either by email (info@marsbiomed.com) or by fax (905-723-9610) and MARS Bio-Med will email your dental office a Certificate of Compliance and a prepaid waybill, allowing YOUR OFFICE to call the Courier for a pickup. The waybill must be attached to the box.
14. For pick-up of your depleted "LibertyBOSS", please be sure the Practice's hours of operation and all contact information is included. This is a requirement of our Couriers.
15. Shipping Boxes that are wet or leaking may not be accepted. This will be at the Courier's discretion. Also, if the shipping box starts to leak during transport, the box maybe returned to the sender at the Courier's discretion.

****Note:** the maximum fillable volume is 3.0 litres.

Required Recycling/Warranty Registration Card Procedures

In an effort to clarify the installation of the MARS "LibertyBOSS" amalgam separator, provided are the steps that need to be followed in order to return the depleted MARS "LibertyBOSS".

Removal instructions are enclosed in every box.

After the installation of a new "LibertyBOSS" separator, the depleted separator with airtight ABS close out plugs in the inlet and outlet (using Teflon Tape), it is then placed in the strong plastic bag and zip tied. It is then placed into the box that was supplied with the new separator.

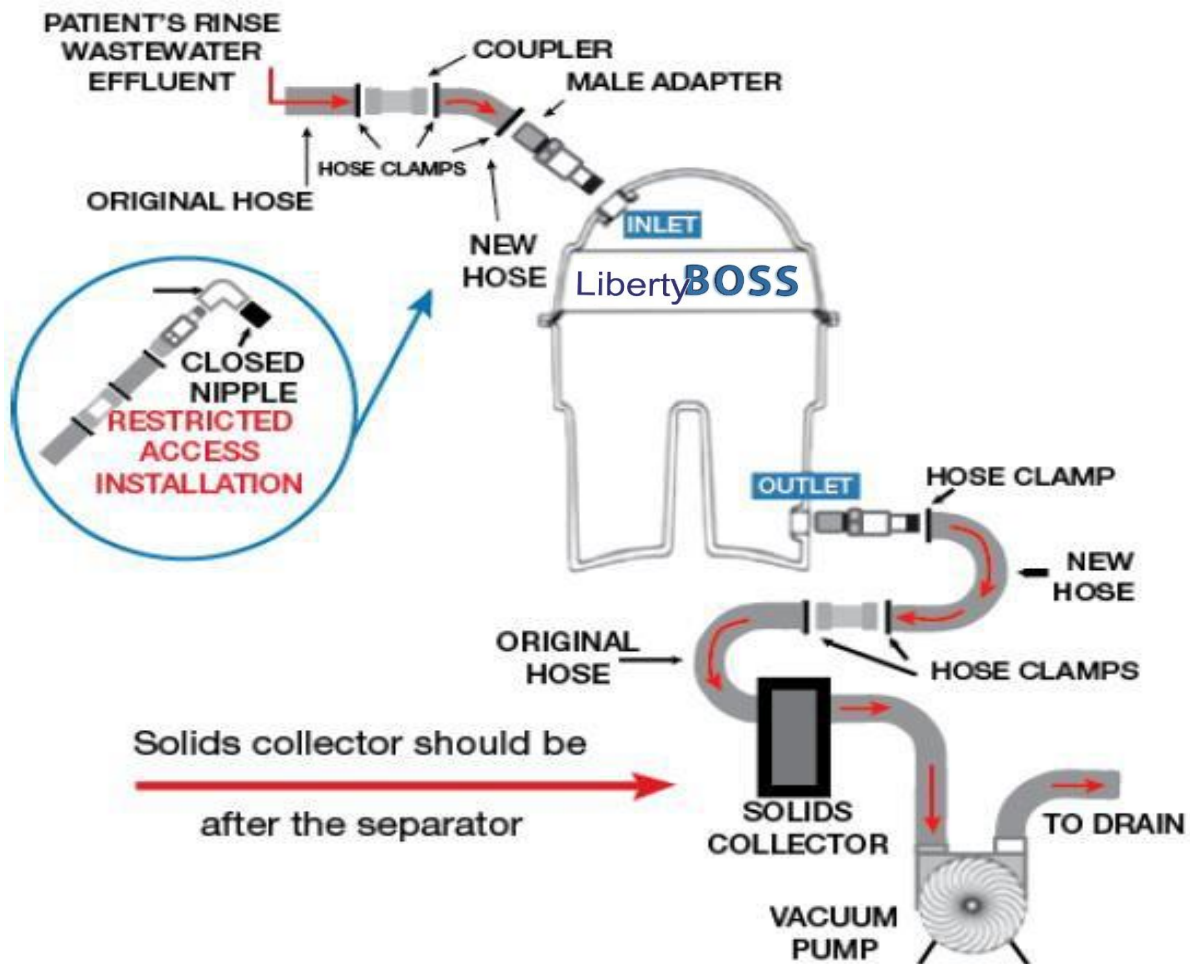
The "Recycling/Warranty Registration Card" must be completely filled out including the Doctor's name, address, new "LibertyBOSS" serial number, etc. Please ensure the "Hours of Operation" are also completed, including the days of the week as well as opening and closing times. If the office is closed through lunch, we require those times as well to advise the courier. The Technician must write their information in the correct sections of the "Recycling/Warranty Registration Card".

Once the installation is complete, the depleted separator is boxed and the "Recycling/Warranty Registration Card" is completed, please then send it by email at info@marsbiomed.com or fax to **905-723-9610**. MARS Bio-Med will then email the office a prepaid waybill allowing YOUR DENTAL OFFICE to call the courier for pick up. The waybill must be attached to the box.

Required Procedures For Recycling Cont'd.

Should the courier be unable to pick-up the separator during the listed Hours of Operation, the rescheduling of the pick-up and any additional charges will become the responsibility of the practice.

PROPER INSTALLATION OF ANY AMALGAM SEPARATOR



For questions regarding installation or recycling and warranty procedures, please call us directly...Toll free 1-866-594-3648.

Verification Report Instructions

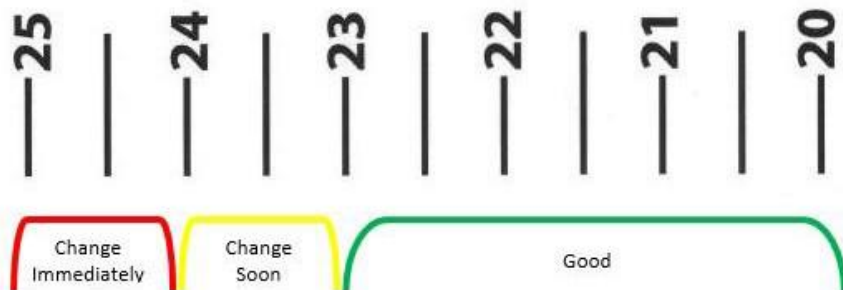
How to inspect the sludge level in a “LibertyBOSS” amalgam separator.

- 1. Ensure that the pump system has been off for 6 to 8 hours.**
2. Identify the inlet side of the separator (directly below the inlet on the blue dome at the top of the unit).
3. Below the blue upper dome section, on the inlet side, is the sedimentation chamber of the separator.
4. You must use an LED light (a cell phone flashlight is ideal) and aim it back into the sedimentation chambers. To do this place the light on the corner of the sedimentation section where the front and back sections split. For a demonstration of this please refer to the SludgeReport video on our website at www.marsbiomed.com
5. Note that you will be looking for the line of dark grey material, this is the level of the sludge. Above the sludge level will be a lighter band of liquid, this is the wastewater and above that is air.
6. Take the reading and mark the volume on the Separator Sludge Weight scale at the bottom of the Annual Sludge Verification Report. There are separate level indicators marked in green for optimal operation, yellow for change soon and red for change immediately. The service life of the “Liberty Boss” is determined by the number of operatories per unit. 1-3 chairs/ 3-year system, 4-9 chairs/ 2-year system, 10-16 chairs/ 1 year system. We recommend completing this test annually unless you have a 1-year system, in which case after 6 months. Always verify both the sludge level and the official “LibertyBOSS” service life guide. Use either of these 2 indicators that occurs first.
7. Keep a copy in your records, as it may be required to show compliance with the local water treatment plant standards. Please see page 10 for the annual sludge report document.

Annual Sludge Verification Report

<p>Please complete all fields below and return to info@marsbiomed.com or fax to 905-723-9610 to complete your "LibertyBOSS" annual verification.</p>	
<p>IMPORTANT: Must be done without pump running and at the beginning of the day when water and sludge levels have settled.</p>	
<u>Date:</u>	<u>Tech Name:</u>
<u>Address:</u>	<u>Office Name:</u>
<u>City/Prov:</u>	<u>Phone #:</u>
<u>Postal Code:</u>	<u>Email:</u>
<u># of Chairs:</u>	<u># of Hygiene only:</u>
<u>Tech Signature:</u>	<u>Sludge Amount:</u>

SEPARATOR SLUDGE WEIGHT (IN POUNDS)



Please refer to Service Life Sticker as well



MARS BIO-MED PROCESS INC.
CUSTOMER SUPPORT
CANADA & UNITED STATES OF AMERICA

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