DENTSPLY CALAMUS FLOW

Integrated into ASI Delivery Systems

O&S Manual Supplement

Installation, Repair, and Troubleshooting

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This guide provides important steps for setup, use, and maintenance of the Dentsply Calamus Flow as installed in ASI Dental Delivery Systems. It includes important details which must be followed to ensure safety and proper use.

SYMBOLS & SAFETY PRECAUTIONS

IMPORTANT! Before commencing with any repairs, please read and follow all applicable warnings/cautions listed in section 1 of the delivery system operation and service manual for detailed information about symbols and safety precautions.

PRODUCT DESCRIPTION

Intended Use

Visit manufacturer's website, *https://www.dentsplysirona.com/en-us* for full information.

Warranty

Reference section 3 of the delivery system operation and service manual for detailed information about system warranty.

General Information

- Obturation Delivery Device

Tools Required

- One (1) panel installation

Components

- One (1) wand and cord
- One (1) panel mounted display/control board (units mfg. before 12/17/15)
- One (1) panel mounted main power board with interconnect ribbon cable (units mfg. before 12/17/15)

-OR-

- One (1) panel mounted double stacked display and main power boards (units mfg. on and after 12/17/15)

Voltage Input Requirements

- Voltage from terminal block, 110V/60Hz or 230V/50Hz

Serial Number Identification

- EB1102013-00-40

Manufacture Error Code(s)

- Problem with Calamus wand, see repair process

INSTRUMENT TROUBLESHOOTING & REPAIR

Troubleshooting

Table 1 - Manufacturer's Troubleshooting Guide

Problem	Correction
Device does not turn on	• Check power wires are secured in terminal block. • Check fuse in fuse holder. If fuse is blown, replace with 0.315A, 250V Slo-Blo for 110V or 0.160A, 250V Slo-Blo for 230V.
Can't remove hand piece cartridge nut	• Press the Return button to retract the plunger and to relieve the pressure on the handpiece front cap.
Gutta Purcha doesn't flow through needle	• Verify that the needle is not kinked – avoid over bending the cartridge needle. • Verify the devise has reached operational temperature (numerical LED has stopped blinking). Increase temperature if needed.
Delivery plunger does not retract	• If, after pushing the Return button, the gutta purcha indicator does not fully retract to the end of the indicator window, push the Return button again.
Motor stops turning	• If the motor stops turning, the cannula may have been placed too firmly in the canal. Reduce the pressure applied to the cannula and the motor may begin turning again.

Table 2 - Additional Troubleshooting

Problem	Correction
Wand doesn't heat up, display is on	• Heating element is defective; see repair process.
Display doesn't illuminate	• Check interconnect cable connection between the main power board and display board for a secure connection.
Wand activation cuff doesn't extrude Gutta Purcha	• Wand needs to be cleaned per manufacture recommendations.

Repair Process
If troubleshooting did not resolve the issue, the instrument will need to be sent in for repair, follow the steps below.

1. An RMA will be required for ASI to process the repair. Contact ASI Customer Support to obtain an RMA.

2. ASI does not repair the instrument but works with the manufacture to assist the repair process in a timely manner. ASI receives the components and forwards to the manufacture for evaluation and repair. Once the

instrument is out of ASI's possession, ASI does not have a status of the repair until ASI is contacted by the manufacture's repair department.

3. There is a minimum repair time of 2-6 weeks, which includes transit time.

4. ASI will contact the office for repair approval when the manufacture repair estimate is known, and will contact the sending office when the instrument is received at ASI for repair payment.

Components Required for Full Evaluation and Repair
Important: All items listed below are required to perform a complete instrument evaluation and repair. If all these items are not received by ASI, a delay will occur in the repair process. The sending office will be notified of missing items and the received items will be put on hold until missing items are received.

- One (1) wand and cord
- One (1) panel mounted display/control board (units mfg. before 12/17/15)
- One (1) panel mounted main power board with interconnect ribbon cable (units mfg. before 12/17/15)

-OR-
- One (1) panel mounted double stacked display and main power boards (units mfg. on and after 12/17/15)

ℹ️ *IMPORTANT: All items listed below are required to perform a complete instrument evaluation and repair. A delay will occur in the repair process if all items are not received. The office will be notified of missing items and the received items will be put on hold until missing items are received.*

Identifying Instrument Components for Removal or Installation Tools Needed:

- Phillips head screwdriver or straight blade screwdriver (depending on dental unit model type)
- 1/4" nut driver

REMOVAL OF INSTRUMENT COMPONENTS (FOR REPAIR)

Tools Needed
- Phillips head screwdriver or straight blade screwdriver (depending on dental unit model type)
- 1/4" nut driver

Removal Instructions

1. Turn off main power and unplug dental unit.

2. Open the cover to the delivery system, according to the unit model type.

   For dental units mfg. before 12/17/15:
   a. Disconnect the interconnect ribbon cable from the display board.

   b. Disconnect the white wand cord connector from the main power board and the green grounding wire from the dental unit's grounding stud.

   c. Disconnect the brown terminal block power wire at the bullet connector from the black power wire attached to the main power board. Connectors on the wires will pull apart to disconnect.

d. Disconnect the blue terminal block power wire at the bullet connector from the white power wire attached to the main power board. Connectors on the wires will pull apart to disconnect.

e. Remove the (4) nuts, using a 1/4" Nut Driver, attaching the display board adapter panel to the dental unit. Set nuts aside for reinstallation.

f. Remove the (4) nuts, using a 1/4" Nut Driver, attaching the main power board to the mounting plate on the dental unit. Set nuts aside for reinstallation.

g. Remove the white wand cord from the dental unit, pull to the outside of the dental unit.

For dental units mfg. on and after 12/17/15:
a. Disconnect the white wand cord connector from the main power board and the green grounding wire from the dental unit's grounding stud.

b. Disconnect the brown terminal block power wire at the bullet connector from the black power wire attached to the main power board. Connectors on the wires will pull apart to disconnect.

c. Disconnect the blue terminal block power wire at the bullet connector from the white power wire attached to the main power board. Connectors on the wires will pull apart to disconnect.

d. Remove the (4) nuts, using a 1/4" nut driver, attaching the double stacked display and main power boards adapter panel to the dental unit. Set nuts aside for reinstallation.

e. Remove the white wand cord from the dental unit, pull to the outside of the dental unit.

f. Carefully package removed components being sent in for repair in bubble wrap. Insert RMA sheet and ship to ASI Medical, Inc.

3. Carefully package all removed components being sent for repair in bubble wrap. Insert RMA and ship to ASI.

ASI Dental Services | Attn: Repairs/RMA# | 8811 American Way, Suite 120 | Englewood, CO 80112

Reinstallation of Repaired Instrument

1. Reverse above steps to remount boards, board adapter panel, cables, power wires and wand cord into the dental unit.

2. After reinstallation, test Calamus for proper function. Refer to manufacture's manual for calibration and settings.

3. Turn the power on and check that the display lights up.

4. Press either preset button and allow the wand to come to temperature, display will flash while coming to preset temperature and stop once temperature is reached.

5. Press the temperature increase and decrease buttons, observing if the temperature display changes up and down. While the temperature changes, the display will flash.

6. Press the Flow Rate % increase and decrease buttons, observing if the flow rate % display changes up and down.

7. Press the Return button to check if plunger motor in wand is functioning. The motor can be heard when it is activated.

8. Place the wand back into its holder on the dental unit holder bar.

INSTALLING A REPLACEMENT PANEL PREPPED CALAMUS FLOW

Tools Needed
- Phillips head screwdriver or straight blade screwdriver (depending on dental unit model type)
- 1/4" nut driver

Installation Instructions

1. Turn off main power and unplug dental unit.

2. Open the cover to the delivery system, according to the unit model type.

3. Install Calamus adapter panel with the double stacked display and main power boards attached, using (4) nuts to secure the adapter panel to the dental unit window.

4. Feed the white wand cord connector and cord through the baseplate to the top inside portion of the dental unit and attach the cord connector to the main power board and the green ground wire to the dental unit grounding stud.

5. On the outside of the dental unit, pull the wand cord to the proper length to match the other hand piece tubing on the dental unit. Tighten strain relief to baseplate.

6. Connect the black power wire bullet connector from the main power board to the brown power wire coming from the Calamus on/off switch. Connectors on the wires will push together to connect the two wires.

7. Connect the white power wire bullet connector from the main power board to the blue power wire coming from the terminal block. Connectors on the wires will push together to connect the two wires.

8. After installation, test Calamus for proper function. Refer to manufacture's manual for calibration and settings.

9. Turn power on and check that the display lights up.

10. Press either preset button and allow the wand to come to temperature, display will flash while coming to preset temperature and stop once temperature is reached.

11. Press the temperature increase and decrease buttons, observing if the temperature display changes up and down. While the temperature changes, the display will flash.

12. Press the Flow Rate % increase and decrease buttons, observing if the flow rate % display changes up and down.

13. Press the Return button to check if the plunger motor in the wand is functioning. The motor can be heard when it is activated.

14. Place the wand back into its holder on the dental unit holder bar.