Date	13 Apr 2015	**Service Note #**	4300-2046	**Updated**	NA
Product	DS/EVO 4300		**Created By**	J. Yangco	
Description	Improved RS-485 Communications				

Release	☒	**Internal**	☒	**Distributors**	☐	**Customers**

Parts Required	**Serial Numbers Affected**
2400-5125 Communication Interface Board Rev. 2.0	ALL

Improved RS-485 Communications

Reason:

RS-485 communication sometimes fails between the 4300 and dissolution unit (6300, 6100, 7100 or 2500). The root cause is when the RS-485 transceiver IC gives a low level signal when the RS-485 bus is in an idle state. The improved communication adds a resistor network on the RS-485 bus/signal.

Pre-requisite:

Service Engineer or person performing this service must have proper training in servicing the instrument.

Solution / Action

Before proceeding, discharge any static electricity from your body by touching a bare screw from the instrument. Turn off the instrument and disconnect the AC power cord.

Step 1	Turn the instrument so that the left side panel is facing towards you. Carefully lift the recycle tray and place it on the side to access the screw that fastens the left panel to the main chassis. **Step 1**

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Step 2

Remove the two screws that fasten the left side panel as shown. Slide out the left cover panel and set it aside.

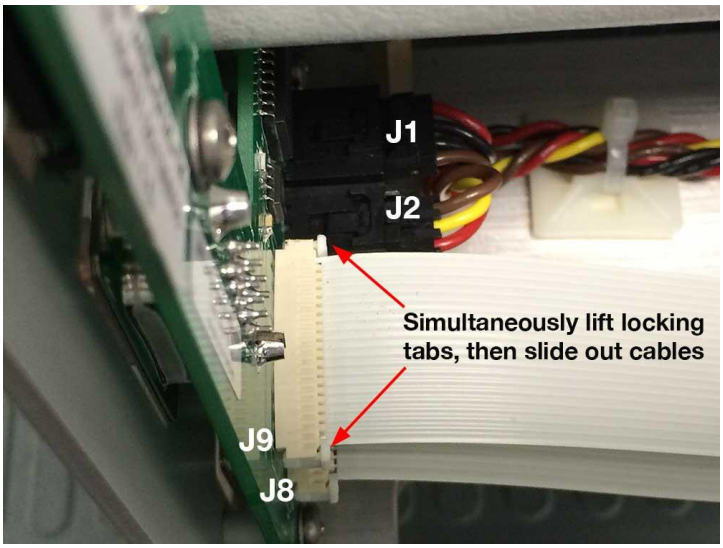
Front Screw Left Panel Cover

Rear Screw Left Panel Cover

Step 2

Step 3

Locate the 2400-5125 board. Remove the 4 connectors (starting with J1, J2, J9 and J8) as shown.



Step 3

- **Mark the flat cables as J8 and J9 respectively.**
- **To remove the flat cables on J8 and J9, simultaneously lift the locking tab on the connector away from the board then slide out the cables.**

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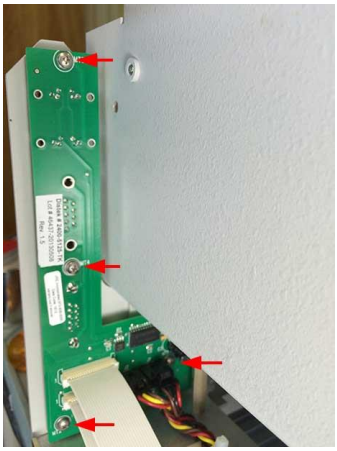
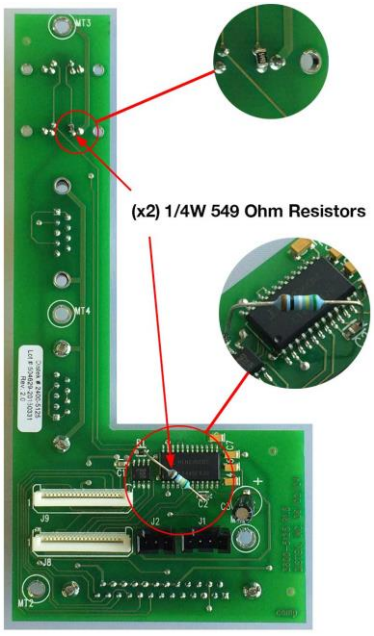
Step 4	Remove the board by removing the 4 screws as shown.  **Step 4**
Step 5	Reverse the above procedure when installing the new communication interface board. • **Carefully connect the flat cables with the right orientation (not twisted).** • **Make sure that locking tabs on the connectors are engaged securely.** • **After securing the flat cables, manually move the collector head carefully back and forth, making sure the flat cables moves without interference.**  **New Communication Interface Board**

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