FCO 512-00222A
Replacing the XY vacuum pump with a vacuum generator

Document number: 719-00395A Rev A

Release date: 16 Feb 2005

Applies to

- Lotem® 800
- Lotem 800 Quantum
- Lotem Quantum Spectrum
- Lotem 850

Notes:

1. This FCO is not applicable for Local2 platesetters.
2. This FCO is ONLY applicable for the following Lotem Controller software versions:
   - 3.61.02 for FH platesetters.
   - 3.72.02 for Lotem 800 Quantum platesetters running Microsoft® Windows® 95.
   - 3.75.01/09 for Lotem 800 II platesetters.
   - 3.80.12 for Lotem 800 II platesetters.
3. Lotem 800 II platesetters with a mainframe Type II already have the vacuum generator preinstalled at the factory.

To implement this FCO, update the Lotem Controller software to the latest version and follow the software version matrix.

Priority: Next failure

Component: XY vacuum pump

Problem: The existing XY vacuum pump requires planned maintenance every six months.

Solution: Replace the existing XY vacuum pump with a vacuum generator. Unlike the existing pump, the vacuum generator does not require planned maintenance every six months, and therefore the service costs are greatly reduced.

Time required 1½ hours

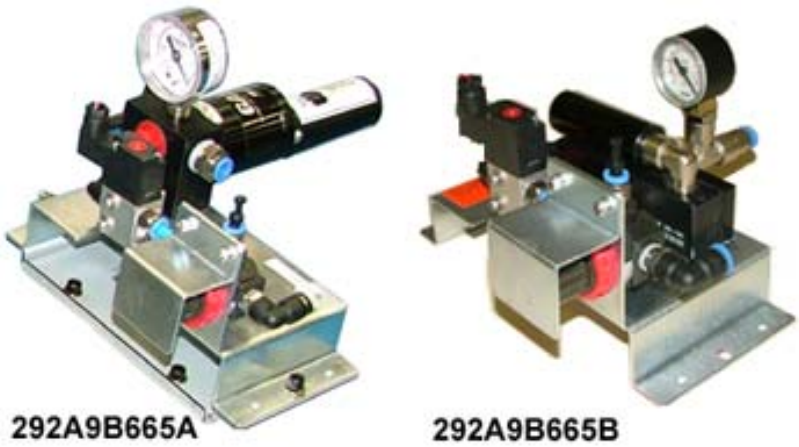
Prerequisites The vacuum generator consumes more air than the XY pump, therefore it is essential that the site's existing air flow and capacity meet the air supply requirements. For more information refer to the Site Preparation Guideline on the Installation page.

Parts included in FCO

Part Number	Part Name	Quantity
203A10050	Standard cable tie 170 mm	8
220-00888A	Vacuum generator cable, L = 2.1 m	1
252-08158A	Vacuum generator FCO adapter	1
292A9B665B	Vacuum generator assembly	1
344F10133	Hose orange, OD = 8 ID = 5 mm polyur	2 m
374A00080	Packing label - white	1
344D25800	Union Y 3 x 8 mm rapid conn	1

Part Number	Part Name	Quantity
380A09064	SOC HD CAP STST ¼-20*½	6
382D17001	Spring L/W STST ¼	6
391A60042	RSC box 330 x 285 x 150	1
651-00252A	FCO diskette	1
719-00395A	FCO document	1

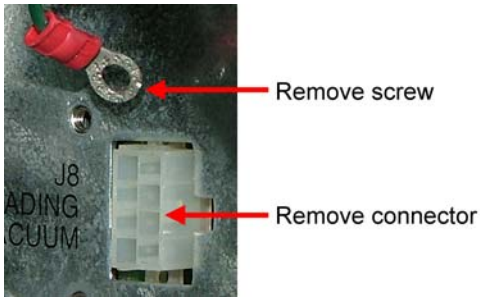
Important: The vacuum generator assembly, part number 292A9B665A has been replaced by part number 292A9B665B in the kit. The pictures in this procedure show part number 292A9B665A - both parts have identical functionality and the procedure is the same for assembling either part. The vacuum generator assembly, part number 292A9B665B, has been selected for manufacturer reliability reasons only (supply).



- **Removing the existing pump from the platesetter**
  (Applies to Lotem 800 Quantum, Lotem Quantum Spectrum, Lotem 850)
- **Installing the vacuum generator on the platesetter**
  (Applies to Lotem 800 Quantum, Lotem Quantum Spectrum, Lotem 850)
- **Removing the existing pump from the Lotem 800 platesetter**
- **Installing the vacuum generator on the Lotem 800 platesetter**

Removing the existing pump from the platesetter (Applies to Lotem 800 Quantum, Lotem Quantum Spectrum, Lotem 850)

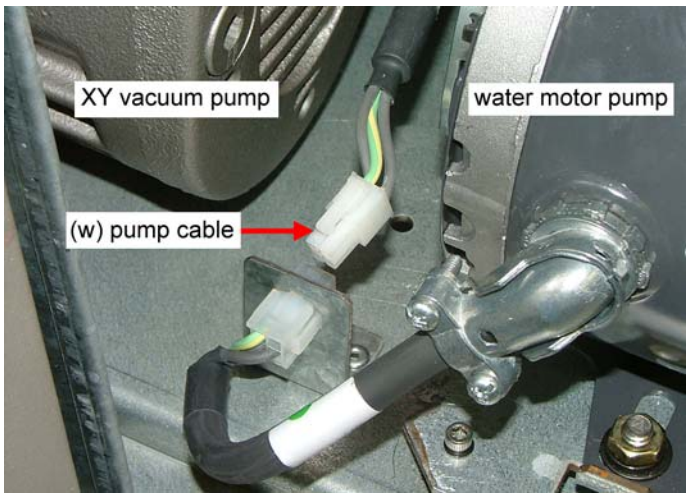
1. On the power distribution box, disconnect the vacuum power cable (part number 504L3D953) from the J8 Loading Vacuum socket. Remove the screw that secures the vacuum power cable to the box:



2. Free the vacuum power cable by cutting all the cable ties that secure it to the cable bundle.
3. The XY vacuum pump and water motor pump are secured to a tray. The tray is secured to the platesetter. Remove the four screws securing the tray to the platesetter:



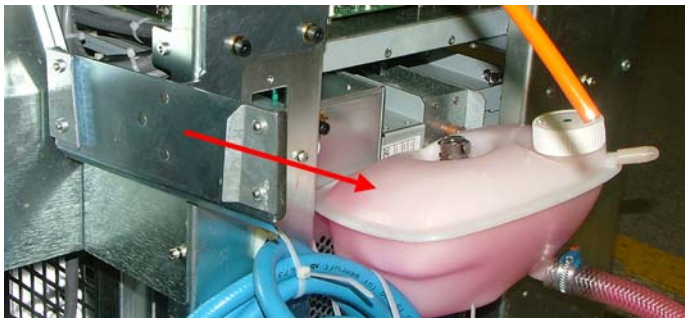
4. Disconnect the (w) pump cable from the back of the water pump motor:



5. Disconnect the orange manifold load tube from the XY pump:



6. Slide out the water tank from its assembly and place it on the side:



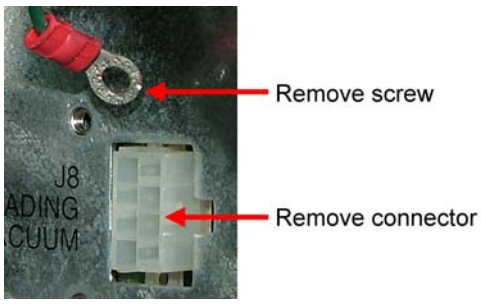
7. For ease of access, slide out the XY vacuum pump/water motor pump tray from inside the platesetter.
8. Remove the four screws securing the XY vacuum pump to the tray, but do not remove the black bumpers:



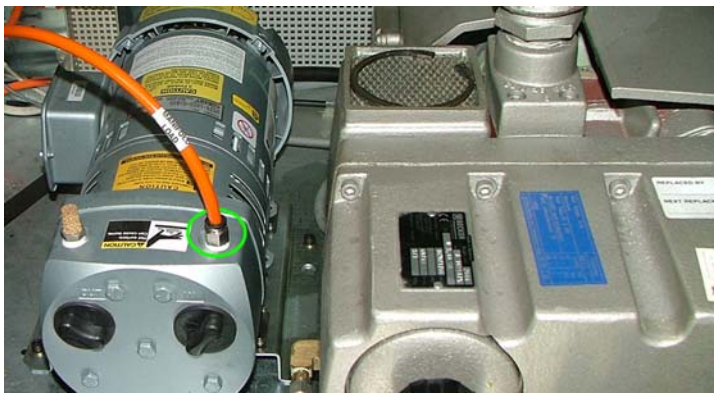


Removing the existing pump from the Lotem 800 platesetter

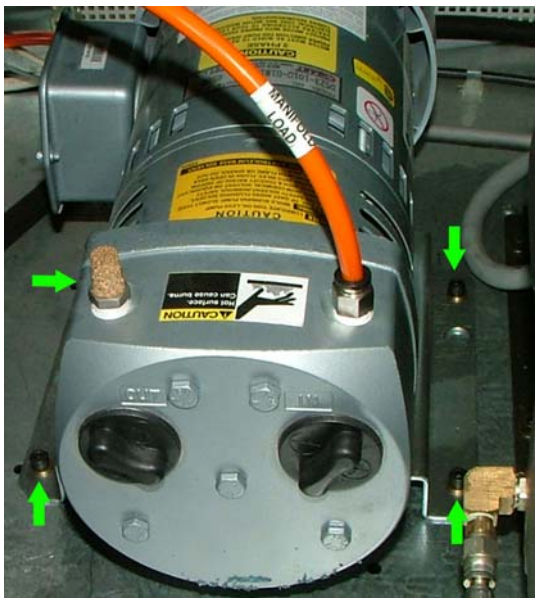
9. On the power distribution box, disconnect the vacuum power cable (part number 504L3D953) from the J8 Loading Vacuum socket. Remove the screw that secures the vacuum power cable to the box:



10. Free the vacuum power cable by cutting all the cable ties that secure it to the cable bundle.
11. Disconnect the orange manifold load tube from the XY pump:



12. Remove the four screws securing the XY vacuum pump to the tray, but do not remove the black bumpers:

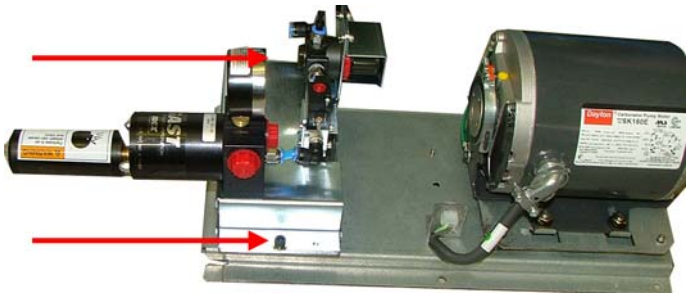


Installing the vacuum generator on the platesetter (Applies to: Lotem 800 Quantum, Lotem Quantum Spectrum, Lotem 850 models)

13. Install the vacuum generator adapter (part number 252-08158A—included in this kit), to the bumpers on the platesetter.
    Secure the adapter to the bumpers by inserting four ¼-20*½ screws (part number 380A09064—included in this kit), coated in Loctite® 242 and washers, through the existing holes on the base:



14. Install the vacuum generator assembly (part number 292A9B665B—included in this kit), to the adapter.
    Secure the assembly to the adapter by inserting two ¼-20*½ screws (part number 380A09064—included in this kit), coated in Loctite® 242 and washers, through the two existing holes on the adapter:

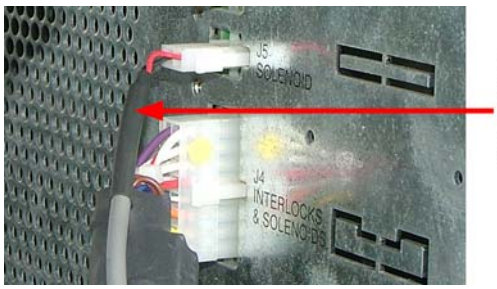


15. Connect one end of the vacuum generator cable (part number 220-00888A—included in this kit), to the electronic valve on the vacuum generator assembly.

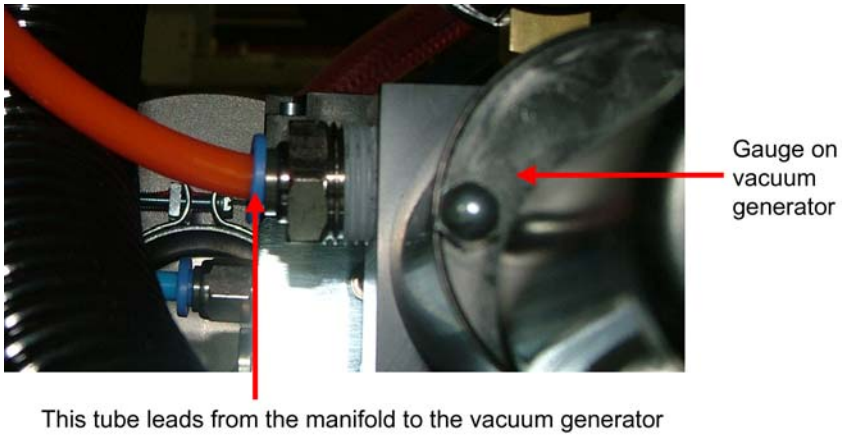
16. Slide the tray holding the pumps halfway into the platesetter. Make sure you insert the tray far enough inside the platesetter to be able to reinstall the water tank to its assembly:



17. Reconnect the (w) pump cable to the back of the water pump motor.
18. Slide the tray holding the pumps all the way into the platesetter. Use the four screws removed earlier to secure the tray to the platesetter.
19. Connect the end of the of the vacuum generator cable to the J5 connector on the distribution box (D-box):



20. Connect the orange manifold load tube (remaining from the previous XY vacuum pump) to the vacuum generator outlet. The outlet is located on the vacuum generator, near the gauge:



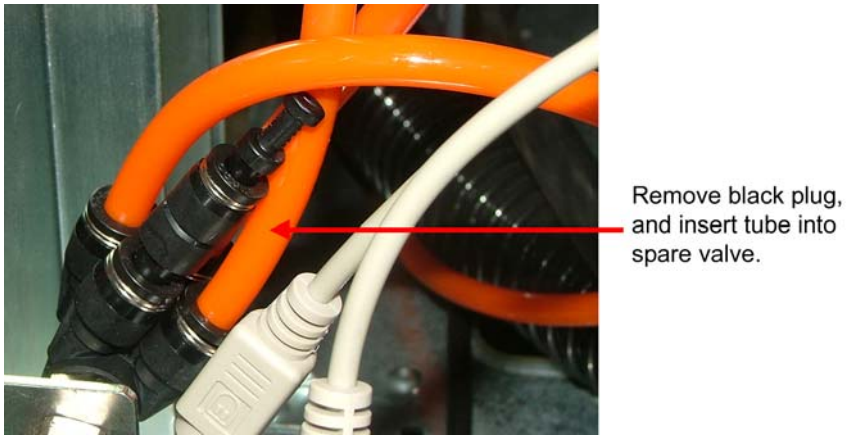
21. Connect one end of the orange tube (part number 344F10133—included in this kit) to the vacuum generator air pressure inlet. Feed the tube along the platesetter towards the manifold:



22. Remove one of the black plugs from the external air tubes:



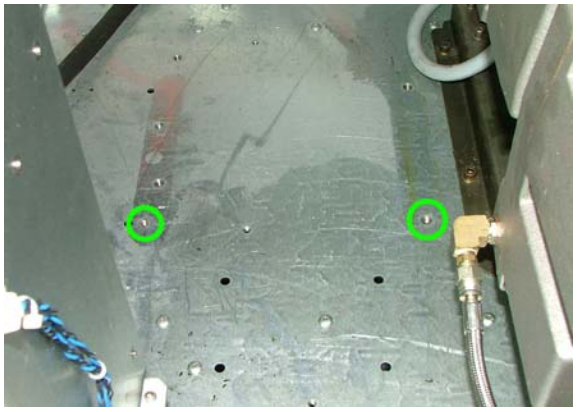
23. Connect the other end of the orange tube (part number 344F10133) to the empty valve that contained the black plug, or alternatively, connect it to the Y connector (part number 344D25800).



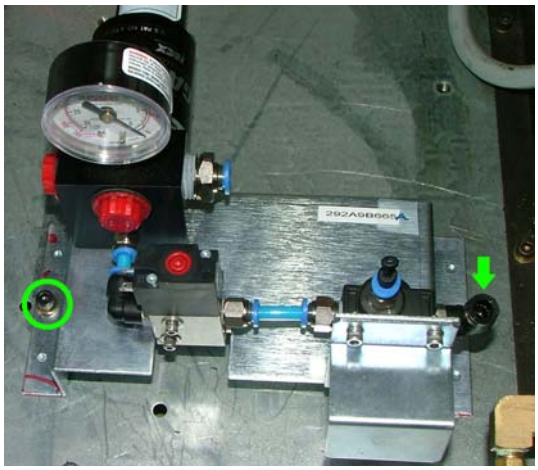
24.

Installing the vacuum generator on the Lotem 800 platesetter

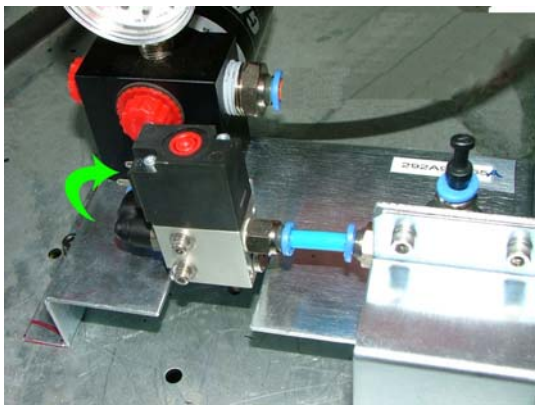
25. Install the vacuum generator assembly to the lower deck of the Lotem 800 platesetter.



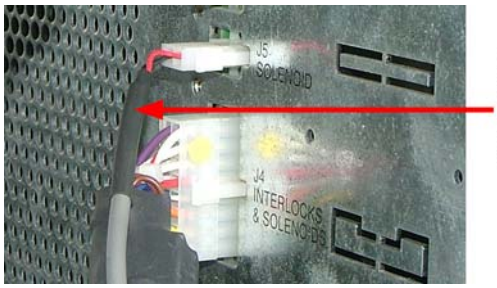
26. Apply Loctite® 242 to the two ¼-20*½ screws (part number 380A09064—included in this kit) removed earlier. Secure the vacuum generator assembly to the platesetter by inserting the screws and their washers through the existing holes on the lower deck:



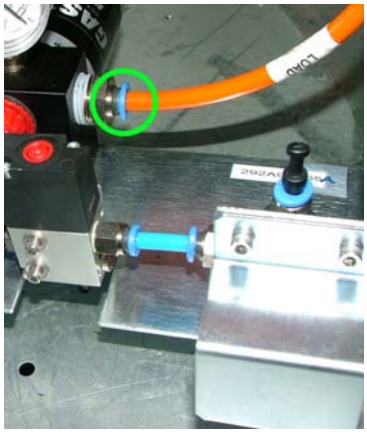
27. Connect one end of the vacuum generator cable (part number 220-00888A—included in this kit), to the electronic valve on the vacuum generator assembly:



28. Connect the end of the of the vacuum generator cable to the J5 connector on the D-box:



29. Connect the orange, manifold load tube (remaining from the previous XY vacuum pump), to the vacuum generator outlet. The outlet is located on the vacuum generator, near the gauge:



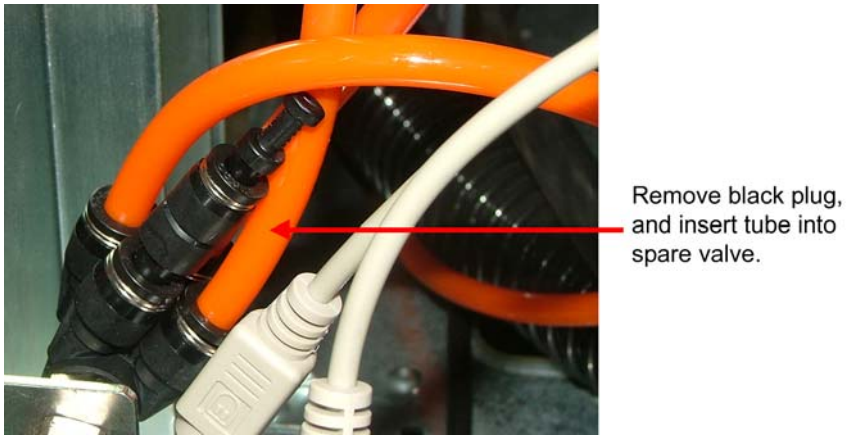
30. Connect one end of the orange tube (part number 344F10133 – included in this kit) to the vacuum generator air pressure inlet. Feed the tube along the platesetter towards the manifold:



31. Remove one of the black plugs from the external air tubes:



32. Connect the other end of the orange tube (part number 344F10133) to the empty valve that contained the black plug, or alternatively, connect it to the Y connector (part number 344D25800).



Upon completion

- Divert power from the previous pump motor to the vacuum generator:
- Navigate to the **Is VG installed** parameter:
  run\regedit\scitex\project\Lotem800v\machine\Is VG installed
- Amend the **Is VG installed** parameter value to **1**.

Install FCO Updater

Insert the diskette and double-click the **.exe** file, or download the file from the FCO page. For more information, refer to FAQ: FCO Tracker.

Logistics

Approved quantities:

CSC	Quantity
CAM	100
CEMEA	100
CAP	6
CJP	10

Schedule supplies for first lots:

	CSC			
Schedule	**CAM**	**CEMEA**	**CJP**	**CAP**
February	12	12	3	3
March	20	20	7	3
April	25	25		
May	25	25		
June	18	18		
Total	100	100	10	6

Inventory:

Lead time: The lead time for ordering extra kits is one month.

Material disposition

Return the old vacuum pump to Creo stock.

See also

Site Preparation Guideline on the Installation page.

Technical contact

Moshe Arviv

Date submitted

16 Feb 2005

Last updated

19 Apr 2005