Unload Table Traveler Upgrade

Document number: 512-00218A-B

Product	FCO priority
Magnus VLF	Next visit

Machines affected Machine serial numbers MT067 and before.

Background

The suction cup adjustment mechanism on the unload table traveler has been improved.

Solution

Replace the unload table traveler suction cup arm assemblies.

Parts required

Part Number	Part Name	Quantity
512-00218A	FCO CA05631 upgrade kit	1

Tools required

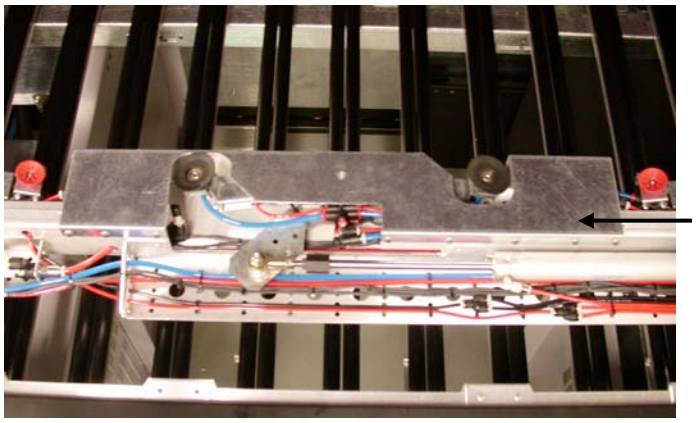
- Hex keys
- Ruler

Procedure

1. Before turning the device power off, move the unload table traveler close to the front of the device for easy access. To do that, type `>>unloadtable move 1200.`
2. Turn the compressed air supply and the device power off.
3. Open the front hood.

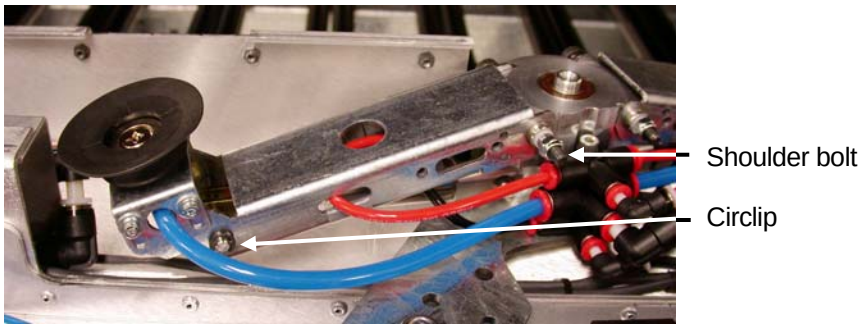
To replace the six suction cup arm assemblies:

4. Remove the center unload table panels to get access to all six suction cup arm assemblies.
5. Remove the metal cover to get access to the two center suction cup arms—8 screws in the front, 7 screws at the back, and one screw on top.

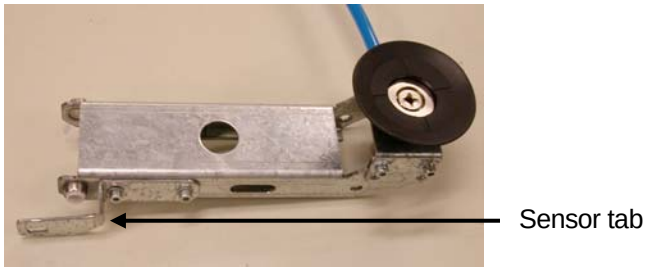


6. Remove the shoulder bolt securing the suction cup arm to the traveler.

7. Disconnect the cylinder clevis from the suction cup arm by removing the circlip on the clevis shaft.



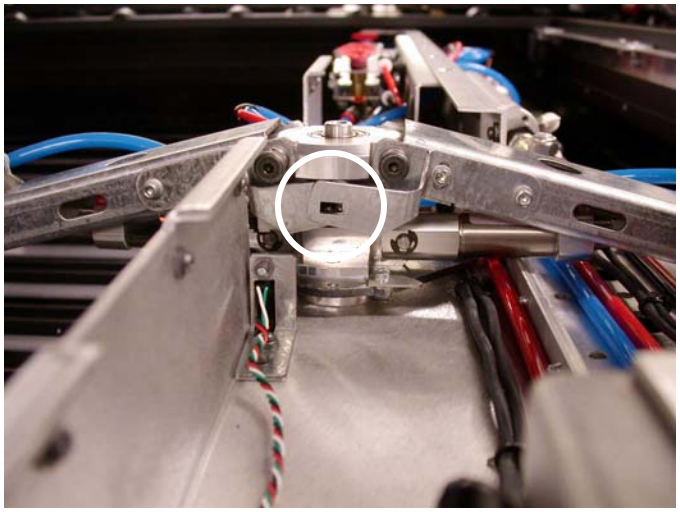
8. Disconnect the two air tubes from the suction cup arm and remove the old suction cup from the unload table traveler. Take note of the routing of the red tube for installation of the new arm.
9. Remove the sensor tab from the old suction cup arm and install it on the new suction cup arm.



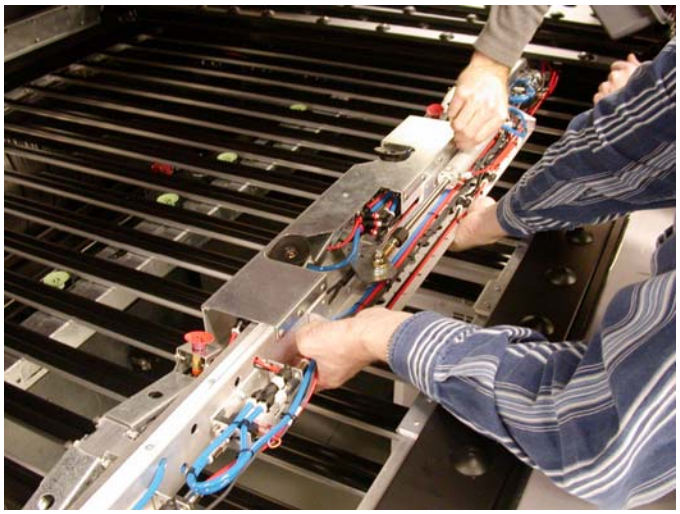
10. Connect the tubes to the new suction cup arm—route the red tube through the suction cup arm as it was before.

Note: The blue tube may need to be cut shorter. Before cutting the tube, make sure there is enough play to allow for the full range of movement of the suction cup arm.

11. Connect the cylinder clevis to the suction cup arm with the clevis shaft and circlip.
12. Install the suction cup arm to the traveler with the shoulder bolt.
13. Check that the sensor tab hole is open when the suction cup arm is down. When the suction cup arm is raised, the sensor tab must block the sensor opening.



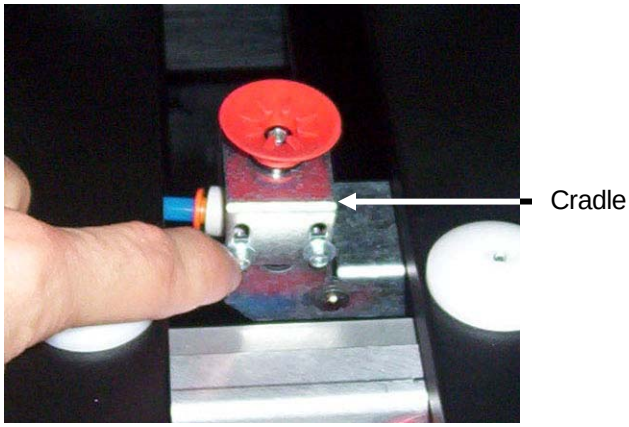
14. Replace all six suction cup arms as described in steps 6 to 13.
15. To install the metal cover over the two center suction cup arms:
    a. Put the cover in place and screw in all the front and back screws—do not tighten them yet.
    b. To remove any sag in the unload table traveler, lift the traveler up and tighten all the back screws. The aid of a helper makes this job easier.
    c. Still holding the traveler up, tighten the front screws.
    d. Install and tighten the top screw.



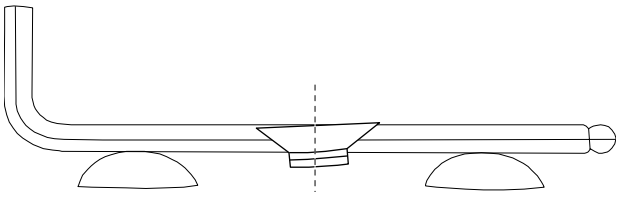
16. Install all the unload table panels.
17. Turn on the device power and open the air supply regulator.
18. Turn the service override key to the Interlock Override position.

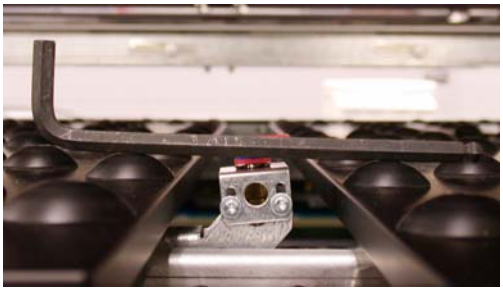
To adjust the height and angle of the suction cups:

19. Type `>>unloadtable leftrightcups up` and `>>unloadtable centercups up` to raise the suction cups above the unload table panels.
20. Loosen the four screws on the suction cup cradle. The screws must be loose enough to adjust the cup height and angle, but snug enough to prevent the cradle from moving too easily.

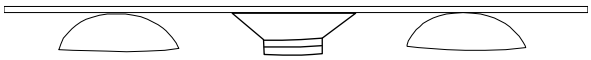


21. Place a 6 mm hex key across two table darts closest to the suction cup you are adjusting. Adjust the height of the cup so that the centerline across the top of the cup is level with the top of the 6 mm hex key—the tolerance for the height adjustment is ± 2 mm.
    At this height, the suction cup should be at a slight angle. The exact angle will be adjusted in the next step.





22. Push the suction cup arm down and place a ruler across the table darts above the suction cup. Slowly let the arm up until the suction cup makes contact with the ruler. Adjust the angle of the cup so that it is square with the ruler.





Note: It is important to get the cup angle correct because when a plate is laying on top of the darts, the cup must contact the plate squarely to ensure that it latches onto the plate as the cup moves upward.

23. Check that the height of the suction cup was not affected when adjusting the angle.
24. Tighten the four screws on the suction cup cradle.
25. Repeat steps 20 to 24 for all six suction cups.
26. Type `>>unloadtable leftrightcups down` and `>>unloadtable centercups down` to lower the suction cups.
27. Turn the service override key to the Normal Operation position.
28. Close the front hood.

Test

To test the operation of the new suction cups, get the customer to pick a few plates and monitor the operation.

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