AIR–VAC

WORK INSTRUCTION

Accurately Teaching the Laser Pointer Position on an Onyx29

STEPS	WORK INSTRUCTIONS
(1)	Install a PC board with 1mm graph paper attached to it into the carrier system (place a small dot at the intersection of two cm lines).
(2)	Install a Camera Calibration nozzle into the head of the robot.
(3)	Load the *Laser Pointer Test_20051229* profile.
(4)	Follow the Infotech Onyx29 Initial Operation Guide instructions for teaching the correct position (use the small dot that you made in step #1).
(5)	Run the *Laser Pointer Test_20051229* profile to verify correct position.
	a. This profile will first have you teach the dot location (or BZF) using the Laser Pointer. Using Manual Motion, place the Laser dot directly over your dot (from step 1). When done, hit Enable (on the Operator Panel) then Resume (in the Execution View). b. The Vision Unit will deploy and the CamCal nozzle should be centered directly (±.5mm) on your dot (see Figure B). If not, repeat procedure from step 4. Hit Resume. c. Then it will lower the nozzle down to the paper. Verify that the nozzle is centered on your dot. There should be approx 2.5mm on all four sides of the nozzle tip to the next bold cm line. Hit Resume. d. Hit Resume to Park the robot.

Laser pointer position

- Click the **Move Park Position** button in the maintenance view of the **Vision Unit**.
- Move with the camera calibration nozzle onto the mm paper and move in x/y-direction to a defined position.
- Enable the robot axes on this position (exit the manual motion mode).
- Click the **Move Laser Position** button.
- Measure the offset from the defined point to the laser point in Y-direction.
- Move the vision X-axis using the slider to the correct defined X-position.
- Change to the configuration view of the **Vision Unit** (do not click **OK** in the maintenance page).
- In the **Vision-X Axis** panel, hit the **Teach** button next to **LP Position**.
- In the **Vision-Y Axis** panel compute the new offset value for the **LP Position** (New Offset = old offset + measured offset).
- Store the values by clicking **OK** or **Apply** and verify it in the maintenance view of the **Vision Unit** (Move to **Park Position** and back to the **Laser Pos**

Figure A

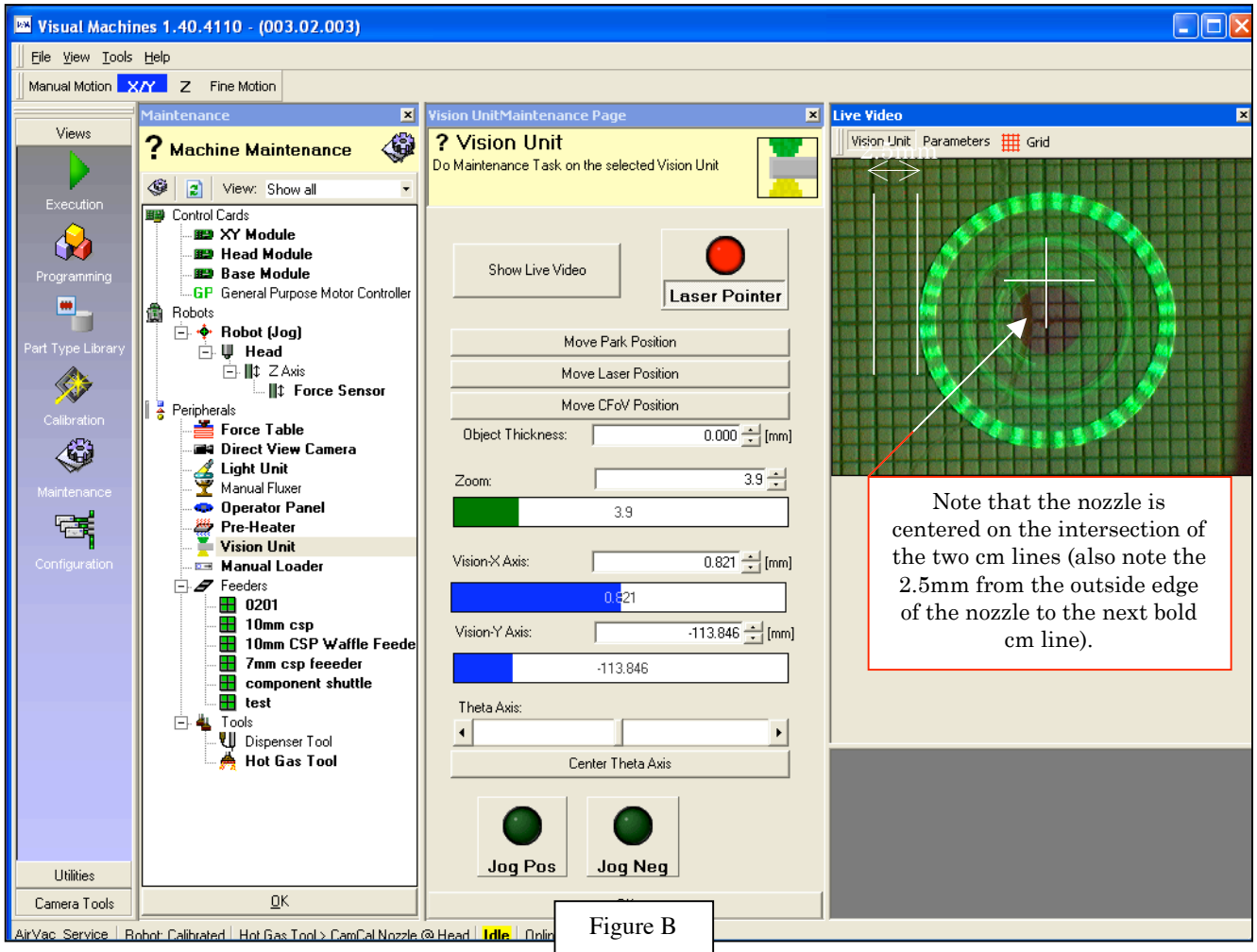

Figure B