

CHAPTER 11

Frequently Asked Questions/ Troubleshooting

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Frequent Questions/Troubleshooting

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Which printers does RefleX Support?	See Chapter 10 Page 11
My controller is displaying a frown face or skull & crossbones .	See Chapter 11 Page 4
My controller locks up	See Chapter 11 Page 4
What is a rate error and what can I do about it?	See Chapter 11 Page 5
My part drawing isn't scaling correctly. I can't see the " flying probe "	See Chapter 10 Page 4
My controller won't boot up	See Chapter 11-4
I'm having accuracy problems	See Chapter A9-1
I consistently get an incorrect probe tip diameter .	See Chapter 10 Page 10
Why are the Dial Indicator and XYZ Counter Mode softkeys dimmed?	See Chapter 6 Page 3
How can I get more storage cards ?	See Chapter 5 Page 30
How many programs does a storage card hold?	See Chapter 5 Page 30
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I consistently get a " Can Not Solve " error screen during my first probe qualification.	See Chapter 2 Page 12
I can not hear RefleX's speaker	See Chapter 10 Page 5
I can not see RefleX's screen	See Chapter 10 Page 7
How does RefleX Handle it's volcomp files?	See Chapter 11 Page 6
I can not see the "intersection between two lines " screen.	See Chapter 10 Page 10
I deleted some programs, but my %filled has not gotten any smaller.	See Chapter 5 Page 31
Even with the filters, there is still a lot of oil on my machine. What can I do?	See 10 - 7
My ZMouse only works when I press it left to right instead of up and down.	See Chapter 10 Page 15

Frequent Questions/Troubleshooting



Frown Face Errors

Frown Face Errors

A frown face error is often a sign that a serious hardware error has occurred and the controller must be replaced. There are, however, a few other reasons for these errors to occur.

1. If the ZMouse cable is plugged into the serial port, a frown face error will occur. ("5. EC_UART1") Remove the ZMouse cable from the serial port and plug into ZMouse port.
2. Any defective PCMCIA software card inserted into the controller will cause a frown face error. If this happens, there will be no error code under the icon. Replace any suspected card with a known good card. Be careful not to load a volcomp file from the card and into the controller when the 'Volcomps do not match' screen appears.
3. If there is a short in the ZMouse or extension cable, a frown face error will sometimes appear. To temporarily alleviate the problem, remove the ZMouse cable and contact your local Brown & Sharpe distributor for a new ZMouse and/or extension cable. This problem will also show itself by locking up the system at the first system startup (copyright, language, volcomp, or home) screen, or, by showing a blank screen on startup.
4. Frown face errors: ("19, 20, 21, 22: Measuring System Failed") will be displayed if the RefleX power supply is defective. Contact your local service representative for instructions on how to diagnose and fix this problem. This problem may also show itself by a bright, unreadable screen with little or no contrast.

Note: In older controllers a "skull & crossbones" icon is used in place of the "frown face" icon.

Controller lockups:

Controllers with a defective power supply will lock up sporadically. It is for this reason, when ever returning a controller, always include the power supply. If the controller only locks up at the copyright or language screen, see #3 above.

Controller won't boot:

If the controller will not boot, unplug all external devices and remove both cards. If an alternate power supply is available, use it. Make sure the power cord is plugged in securely. If the box still can not boot to the "Insert Card" icon screen, the box is defective and should be returned (with power supply).

Frequent Questions/Troubleshooting

Rate Errors

What is a Rate error and how is it caused?:

A Rate error is the electronics way of notifying you that encoder signal quality is unacceptable. Because of that, exact machine position may be in error.

There are many variables that can cause Rate errors. These include:

- This is a brand new controller not yet tuned to your machine.
- An encoder cable is not plugged in securely.
- Dust, dirt, oil, etc. on scales.
- The previous AutoTune was not performed correctly.
- An encoder's performance has degraded.
- An encoder has slipped out of alignment.
- The encoder or scale is defective.
- The encoder cable has a broken wire.
- A hardware error has occurred inside the RefleX controller.

Fixing a Rate Error:

- If this a brand new controller, perform an AutoTune as described in section A7.
- Check the encoder cables. Are they all tight? If not, screw them in tight.
- What is the machine's environment? If there is a lot of dust or oil in the air, check to see if the scales are clean. If dirty, clean them with a soft, lint-free cloth and rubbing alcohol.
- Try doing an AutoTune. If it is still not working, there are now only two possibilities. It is either a defective encoder system or a defective controller.
- To check, take the bad axis (the axis giving you the problem) and swap the connectors on the back of the controller with a good axis (one not having problems). Wait for another rate error to appear by starting a normal RefleX operation. Did the rate error switch axes? If so, then there is a problem in your encoder system. If not, there is a problem with the controller. For either problem, contact your local service representative.

Frequent Questions/Troubleshooting

RefleX Volcomp Files

For non-DCC and non-arm systems, the RefleX controller stores its volcomp file in two places: In its internal memory and on the software (upper) PCMCIA card. Do not exchange software cards between systems as you may accidentally load an incorrect volcomp file. On a DCC system, the volcomp is stored in the FB-PC and the screens and procedures below do not apply.

When Controller volcomp and Card volcomp do not match. Case 1:

Software SN: 123456

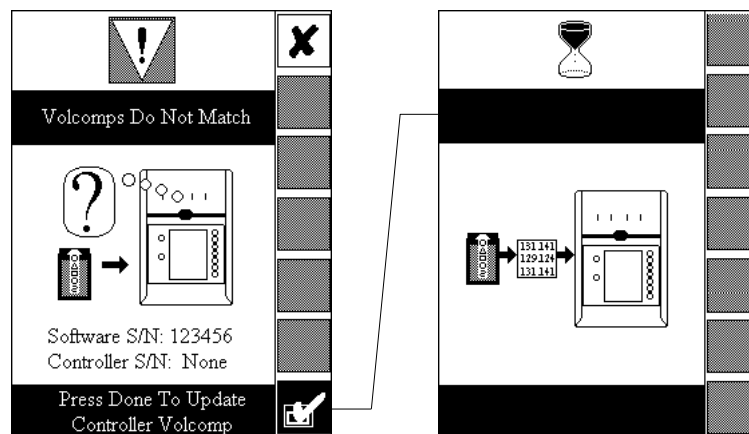
Controller SN: None

Default action - System will prompt user to upload from software card to the controller.

Reasoning - Facilitate Replacement of Controllers. If you are given a new controller, when you place your old card in the new controller, all you must do is press Done and your volcomp file will be loaded.

Loading Procedure:

1. Install RefleX controller as shown in manual (cables, mounting, etc.).
2. Remove PCMCIA cards from old RefleX controller (software and storage).
3. Insert old PCMCIA cards into new RefleX controller.
4. Turn on your new RefleX controller.
5. Wait for language screen to appear. Select a language and then press the Done button.
6. The volcomp load screen (shown below) appears. Press Done and your volcomp file is automatically loaded from the old card.



Note: The volcomp number, displayed at the upper left section of the homing screen, will now match the machine serial number found on the back of the RefleX machine.

Frequent Questions/Troubleshooting

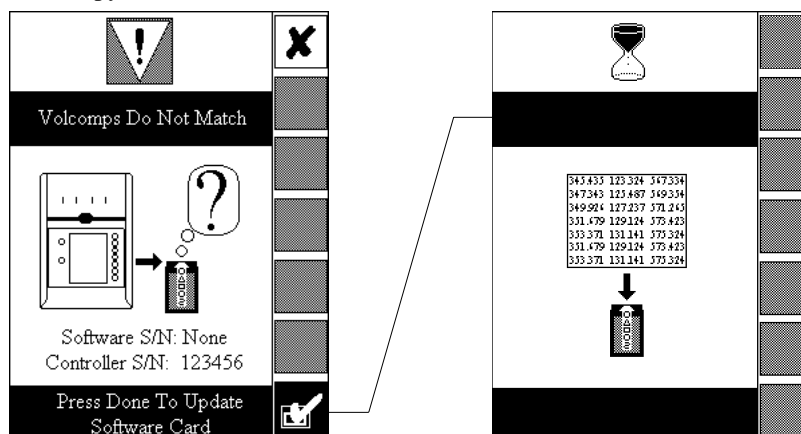
RefleX Volcomp Files

When Controller volcomp and Card volcomp do not match. Case 2:

Software SN: None **Controller SN:** 123456

Default action - System will prompt user to download volcomp file to software card.

Reasoning -Facilitate RefleX software updates. After a volcomp has been loaded into the controller via the doflex.exe program, the next time the controller is restarted, when the Done button is pressed, a duplicate copy is created on the software card.

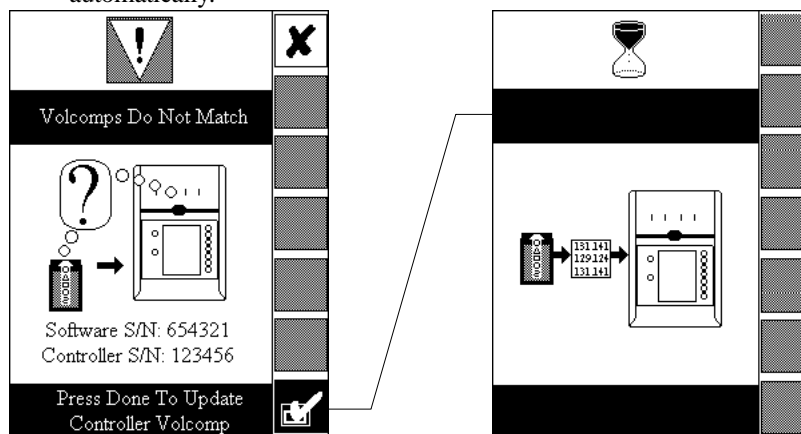


When Controller volcomp and Card volcomp do not match. Case 3:

Software SN: 123456 **Controller SN:** 654321

Default action: - System will prompt user to upload volcomp file from software card to the controller.

Reasoning: - No matter where a RefleX replacement controller comes from (or what volcomp file it has) you should be able place your old card (with your good volcomp file on it) into the controller and have it load automatically.



Frequent Questions/Troubleshooting

Alternative -If you want to download a volcomp file from the controller to the software card when volcomp files exist on both, do the following:

1. When above screen is shown, press cancel.
2. At the homing screen, record the number at the top left portion of the screen.
3. Press the service utilities button (ambulance).
4. At the password prompt, enter the last 5 digits of the recorded number reversed.
5. Press the "Squareness Corrections" button.
6. Press the "Save Volcomp to Software card" button. This procedure is only available when two non-zero volcomps are shown in the above screen.