Title:	**Gate falls down 1**		ID:
			0112

Date in:	Response:	Model:	Author:
2004-06-18	*2004-06-18*	*-*	*CMa*

Q:

Since I misunderstanding the problem, please see correct information from Wakenyaku below.

1. This problem happen inside box.
2. The serial number is "S/N SIN0404015".
3. The shovel (orientate and move the micro plate) inside the Steri-Cult R interference with the gate.
4. After a gate goes up, a gate falls immediately.
   The time between start fall and stop at bad position is 3 seconds roughly.
   Inside a handler rotate and shovel moves from inside to outside, top of a handler
   interference with inside gate.

Shingo, who is our tech people in Japan, reported a collision problem in Steri-Cult R. From what he said, I think the door goes up then immediately goes down and crushs the shovel. Is it possible that the PLC gets wrong signal and thinks the shovel is already inside the incubate, so it closes the door while the shovel on the way back to incubate. I notice there is optical sensor over the shovel. could this be the one causing problem? What do you think , any suggestion?

We have a problem with another carousel, Liconic serial number 3142. It's the model with the access door that we use with our Steri-cult incubator. The customer is complaining the door comes down too soon and interferes with the plate mover mechanism. We suspect a problem either with one of the sensors or possibly with the PLC. Have you seen this problem before and if so, what is the most likely cause?

We have a customer with a failing gate mechanism on the Stericult_R incubator. See the description in the attached email (the one from Shingo). Have you seen this problem before? From my understanding of how the door mechanism works, this can only be happening if the door is being powered to close, since there is a high ratio gearbox that can not be back driven (meaning that it can not fall due to gravity).
Can this be a problem with the circuit board that drives the gate, failing? or would this be a problem with a failed gate sensor?

A:

You're right. The gear is self locking.

They should have a look if the Gate runs on its own by sending the ST 1901 and ST 1902 command. There is also a Gate test function in the StxCyt (Option 5) they can run. As pause they should put >5 seconds. This should show if there is a mechanical problem e.g. the gear does not hold the weight of the Gate or if there's a firmware / electrical problem.

They should also check if any of the screws that attach the gear to the rod became lose.