M. L. RIECHERS SYSTEMS ENGINEERING 530 Main Street, Hamilton, Ohio 45013 Phone (513) 844- 2220

This is a questionnaire meant to pinpoint troubles with our parts. If you're returning a part to us for a "routine program upgrade" or for "routine hardware upgrade" and you're pretty sure the part is otherwise good, then please just answer the first and last questions.

Otherwise, to assist us with testing your part, we'd like you to answer as many of the following questions as you can. We've had many returns that have shown no fault when we test them. That does not necessarily mean that the part we tested is an OK part -- it may merely mean that we are testing different things.

Or, it may mean that the fault is with some other part of the system that is not obvious to you. If so, then we can point you towards where the fault really lies, or we can take suggestions or design changes to make the system better for everyone.

This is a general purpose questionnaire, meant for OEMs, distributors, resellers, as well as end users. So if some of the questions seem like that don't pertain to you and your situation; just skip them. However, a question may not be directed to you, but may help you remember something that could be important. If it does, then please make a comment in the space provided.

Sometimes a part fails in such a obvious way that answering detailed questions seems silly. If it really doesn't make sense to answer the question, then don't. However, we would ask you to consider the question from our point of view. It might make sense after all.

If you're returning a part "for evaluation" or "on suspicion," then answering as many of these questions as possible is really important.

These questions are designed to help "cover all the possibilities," so we encourage you to answer as many as you can, following somewhat by the examples given. However, if you've got a flair for writing, we don't mind you organizing and summarizing all of this into a narrative.

If a response to any of these questions would be Proprietary or Secret, please tell us what you can. If it's necessary for us to know Proprietary or Secret information, please contact us directly to make the necessary arrangements.

PRODUCT REPAIR FORM

M. L. RIECHERS SYSTEMS ENGINEERING	For MLRSE Internal Use Only	
530 Main Street, Hamilton, Ohio 45013	MLRSE PRF #:	
Phone (513) 844-2220	MLRSE RMA #:	
	Date Received:	

Customer Name:	
Product Type:	
Product Serial #:	
Customer P.O.#:	
Customer IRAD#:	

1. Please give us a short summary of the problem as you see it. Or otherwise as to why you want us to look at it.

For example: This part is in, "for evaluation" or "on suspicion," or "routine program upgrade."

Along with that, please tell us if some other part may have failed at the same time. We are particularly interested in knowing if you're returning, for instance, two parts which had worked together, and you don't know quite which part is failing and which is good. Please put the serial numbers and particulars here, and we'll figure out the problem for you.

The following questions are intended primarily for end users doing production with proved equipment. However, you should look over these questions, and answer what you can.

2. If you can more or less tell us a time and place you think the part might have failed.

For example: Sometimes it's obvious, like "we were in the middle of ..., and a fire started, and now it won't ...," and sometimes very vague, like "when we shut everything down a week ago, everything was fine, but when we powered it up this morning, nothing worked." Please be as specific a possible.

3. Please tell us what was happening when you noticed the problem, and what was happening when you think the problem first started.

For example: We were in the middle of ..., and everything was running fine, when all at once ... happened, or we were doing ... and when we tried to do ..., and we knew we had a problem because we couldn't get ... to work or it wouldn't ... properly.

Also, any unusual conditions or events which happened at the same time or up to a week prior.

For example: "Three hours earlier it was raining, and lightning struck the building."

4. Please tell us how you were attempting to use the part when it failed.

For example: I was applying ... Volts to it when it started to smoke. We are also interested in things like: "I was (adjusting) (fine-tuning) (doing an initial set up) when XYZ (did) (didn't) (sometimes) (wouldn't) happen," etc, etc.

5. Please tell us if there was another component in the system, and if and why you believe that it's "This Part" that's failing, and not the other.

For example: We swapped in a good part, and it worked, and then we tried the failing part in a known working environment, and the problem followed it exactly."

6. Please give us an indication, if you can, of what the the set-ups were set to. This refers mostly to the micro-controllers and their parameter set-ups.

7. Please tell us, specifically or generally, about the job you were running at the time the part failed, the type of equipment you were using, and anything peculiar about the job (such as this part was on a printing press and you were running it with really thin or really thick film, board, on a light or heavy press) etc.

8. Please tell us if you can or how easily you can reproduce the problem, and what it takes to make the problem happen (again). Also state if the problem is infrequent, but recurring. It also helps to know about any weird conditions, such as "we've noticed that this only happens when we do ...," because those type of problems generally turn out to be easily solved.

9. Please tell us if you've had troubles with this part before, and whether it's "been in for repair" for any reason.

The answers to the following two questions may or may not be helpful to us to diagnose and fix your problem. However, they might be extremely important in the sense that we might want to alert you to possible hidden damage to the system that could show up in the future.

10. Please give us an indication of your general environment and working conditions, particularly if you have unusual conditions of atmosphere and weather. It may be possible to make a connection between your environment and equipment failures.

For example: Is it spring, summer, fall, or winter where you are? Are you at some unusually high altitude? Is the weather outside particularly hot, cold, moist, dry, dusty or does it rain a lot? Are the inside conditions particularly hot, cold, moist, dry or dusty?

11. Please give us an indication of your electrical environment as far as you know.

For example: How is your power utility doing? Do you seem to always have clean power, or do the lights periodically get very bright or very dim? Are there lots of other industrial users in your area? Have you been told you have "electrical grounding issues?" Have you had troubles with lightning strikes in the past? Has lightning, utility power, or grounding issues ever caused damage to anyone or anything?

The following questions are primarily directed to OEM's, distributors, and resellers. However, some of these may apply to an end user if you have a new installation or install new parts.

12. Please tell us, as far as you know, if the part has ever worked for you, or did it fail "out of the box?"

13. If it failed "out of the box," please tell us where and how you installed it.

For example: Was it connected to some type of test or end user equipment? If it was on some type of end user equipment, was it equipment that you were in the process of building, or had that equipment been "proven" – i.e. are all the rest of the parts on it known to be good?

14. If the part failed in test, what was the nature of your test? Did it fail against parts in your test system that you know were good, or were you testing other parts at the same time? How did you isolate the fault to this part?

15. Did the part fail in service and was returned by a customer? If so, how long had it been in service? Were there one or more customer complaints? What were the complaints?

16. As far as you know, are there any other complaints against this part?
17. When this part failed, did any other parts fail along with it?
We would appreciate if everyone would answer this question.
10 Are there are other questions or comments that you would like to make?
18. Are there any other questions of comments that you would like to make?

Thank you for taking the time and trouble to answer our questions.

Sincerely,

M. L. Riechers

M. L. RIECHERS SYSTEMS ENGINEERING 530 Main Street, Hamilton, Ohio 45013 Phone (513) 844- 2220

UPON COMPLETION OF THE PRODUCT REPAIR FORM, PLACE THE FORM IN YOUR BOX AND SHIP YOUR PRODUCT TO THE FOLLOWING ADDRESS:

Ship To:

M. RIECHERS SYSTEMS ENGINEERING Attn: Repair Department 530 Main Street Hamilton, Ohio 45013

**** Important Packaging Information ****

Please remember your is very fragile and not all carriers are gentle with your equipment.

- Make sure the service order form is filled out completely and include the for with the product.
- If you believe the product is under warranty please include a copy of the original invoice or provide your original PO number and or the MLRSE Job number. Please note that manufacturer warranties and service contracts do not cover updating and/or No Problem Found.
- Make sure unit is very well packed at least 3 inches of packing material around the entire unit between the unit and the box and on all four sides to include top and bottom.
- For packing material we recommend anti-static bubble wrap or bags. These can be provided to you, if needed.
- Make sure you insure the unit for the full cost of the equipment.
- Label package as Fragile.
- Please avoid plastic peanuts, bubble wrap and foam, unless you know it's antistatic.
- If you are unsure of how to properly pack your unit or do not have proper packing materials to package your unit, you may want to take your unit to a company who offers packaging services.