

SERVICE PROFILE

RepairTrakSM

THE REMANUFACTURING DIFFERENCE

RepairTrak is a unique service which provides the tools to operate a reliable electronic remanufacturing program. It is critical to keeping your plant up and running...that starts with the right parts when you need them! RepairTrak includes our World Class Remanufacturing service as the foundation backed by a 3-Year Warranty exclusive to RepairTrak customers. RepairTrak provides the tools to better understand your usage, what caused your module to fail and even locate the status of your repair(s) currently in the remanufacturing loop. Your local distributor will pick up your repairable items through our BoardRunner service to begin the process.

RepairTrak FEATURES *Enhanced Access to RepairTrak Online*

- Access Plant Specific Reports
- Determine status of your repairs in remanufacturing loop
- Track Shipments back to your facility
- Request / Access Remanufacturing & Repair Prices

World Class Remanufacturing

- Original Component Replacement
- Product Updates / Revisions / Engineering Change Records
- Testing to Rockwell Automation design specifications

Plant Specific Pareto Analysis & Probable Cause & Warranty Reports

- Better understand plant usage patterns
- Uncover corrective engineering opportunities
- Understand reasons for circuit board failures
- Review parts replaced in Remanufacturing Process



Automatic Warranty Tracking

- Automatic tracking for both new or remanufactured
- No more lost warranty due to claim processing
- Probable Cause report on repairable warranty items

BoardRunner Pick-up Service

- Distributor pick-up service (where available)
- Available for non-Rockwell Automation repairs
- Simple call to your local distributor and we'll take care of the rest

Featuring a 3-Year Remanufacturing Warranty On Rockwell Automation Products



RepairProbable Cause Report

WELCOME TO THE ROCKWELL AUTOMATION REMANUFACTURING, REPAIR AND EXCHANGE PARTS

July15/04

RepairProbable Cause Report

There are no items in this list.

AUTOMATION WORLD, INC.
1 FOSBROCK DRIVE
TUCSON, AZ 85728 USA

Phone Number: 4222800101
Fax Number: 4222800101
Revision From Customer: 04c20040
Revised at Repair Facility: 04c17504
Shipped to Customer: 04c20040
Availability: availability

Country Number: 1771-002
Part Number: 1771-002A
Part Description: 1771-002A ANALOG INPUT MODULE

Incident Information from Site
MACHINE DOWN

Probable Cause/Finding Summary Information			
Probable Cause:	Damaged by Insertion/Removal Under Power		
Affected Area:	System-wide power circuitry		

What happened to your remanufactured unit:

- Your product was verified and tracked by a unique barcode serial number from the time it was received at our ISO9000 / ISO14000 certified facilities.
- Warranty validation, previous repair history, and symptoms from the customer were reviewed.
- Visual inspection for physical damage, contamination, revision levels, and initial power change checks were completed.
- Your unit was thoroughly cleaned using the appropriate method, based on type of product.
- Product Update / Revision: Rockwell Automation may determine that hardware and/or firmware changes, which upgrade or improve the overall performance or functionality, are useful.
- Replaced Component(s) (if necessary): Rockwell Automation uses only components that meet or exceed all Rockwell Automation quality standards. Rockwell Automation maintains copyrights on its intellectual property contained in its firmware. This copyright prohibits anyone from making remanufactured copies.
- Full functional testing and/or full load testing (where applicable) were performed, as specified by Rockwell Automation design engineers. Engineering specified environmental and functional tests were performed as applicable.
- Performed a Final Inspection: A technician or inspector reviews the product against product manuals and information, testing procedures, and components that have been replaced onto each product.
- Your product was placed in a specially engineered container with an anti-static foam insert and depending upon the product, an anti-static bag.
- Upon completion, the unit was inspected and repackaged for shipment with a 12 month warranty applied.

Sub-Asy No	Reference Location	Component Description	Incident Information
00010001			The location of the product was identified (internal or external to the product) and entered in the product information file. The product information file is updated and printed upon completion of the repair process.

Conclusion: One or more components were replaced or updated due to an engineering change notice.

Sub-Asy No	F1	FUSE, 0.01V-0.01A	An open circuit or component was found
00010001			An open circuit or component was found

Conclusion: One or more components were replaced due to a fault or being out of manufacturer's specification.

Probable Cause/Finding Summary Information			
Probable Cause:	Damaged by Insertion/Removal Under Power		
Affected Area:	System-wide power circuitry		

Probable cause assessment is based on examination of the product, and accuracy and completeness of the information concerning the related product. Rockwell Automation is not responsible for conclusions resulting from missing or inaccurate data.

THE ROCKWELL AUTOMATION REMANUFACTURING PROCESS INCLUDES:

Original Component Replacement

Your boards will be updated with components that meet or exceed rigid Rockwell Automation quality standards. These components are pre-screened, burned in, qualified, and specifically selected for industrial applications. Additionally, copyrighting on intellectual property contained in its firmware prohibits others from making unauthorized copies.

Product Updates / Revisions / Engineering Change Records

Your module is cleaned, inspected and updated to the latest applicable hardware and copyrighted firmware revisions. This helps extend the life expectancy and permits integration with newer, more sophisticated products. Rockwell Automation provides these changes at no additional charge to the customer.

Product Enhancements

Utilizing a proactive preventive maintenance approach to Remanufacturing Services. Your suspect electronic and mechanical parts are replaced with Rockwell Automation specified quality components, based on current knowledge and evaluation.

Testing

Full functional testing and full load testing (where applicable) are utilized on each and every unit, as specified by Rockwell Automation design engineers. Stress testing is utilized to push products to functional and environmental limits. Only Rockwell Automation knows the difference between the Rockwell Automation design specifications and functional limits for testing.

Quality

Rockwell Automation warranty rates prove that our methodologies for remanufacturing and repair are superior to 3rd party repair houses. Our studies show that utilizing third-party repair houses can expose the customer to warranty failures more than 3 times that of our Remanufacturing process.



RELATED LITERATURE

Asset Management Services Brochure - GMSA10-BR001A-EN-P

RAAMP - MRO Process Management and Parts Management Services overview

Remanufacturing Service Profile - GMSA10-PP008B-EN-E

View literature at <http://literature.rockwellautomation.com>

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