

# PROGRAM PRODUCT SPECIFICATION

On-Line Diagnostics and  
Maintenance

Type Number: Not Applicable

## SECTION I

The Sperry Univac on-line diagnostic and maintenance programs are a set of comprehensive products developed to diagnose malfunctions in central processing units, peripheral and communications devices, and to determine marginal operations before a failure occurs.

### PRODUCT FEATURES

The on-line diagnostic and maintenance programs run in a multiprogramming environment with minimal impact upon the customer production. In many cases, preset parameters allow the operator to run the basic tests by keying in a few simple parameters when requested by the program. Optional parameters are available for greater flexibility and complex testing.

Each program consists of a control section and multiple test sections. Each test within an OLM program operates independently of the other tests. One test is executed at a time, and each test accepts and generates its own data, regardless of the results of previous tests. Any errors detected by the tests may be recorded on the high-speed printer.

The on-line diagnostic and maintenance programs are divided into the following two categories:

#### ■ ON-LINE PERIPHERAL AND COMMUNICATIONS TESTS

The OLM program for peripheral and communications devices test the control unit logic, the subsystem handler control functions, and data recording and reading. Some tests also verify the subsystem command repertoire, the simulated and nonsimulated modes of operation, reading and writing of data, and proper performance of the device sense and status circuitry.

#### ■ ON-LINE ERROR LOG EDIT AND ANALYSIS

The on-line error log edit program allows the user to retrieve and edit data from the system log file relative to I/O, memory, and processor machine check errors for statistical and historical analysis. The on-line error log analysis program is designed to establish historical trends for device performance. Any analytical results which indicate deviations from the normal operating pattern can then be used to predict impending equipment failures so that correct action can be taken before equipment failures occur or emergency situations arise.

## DIAGNOSTIC/MAINTENANCE PROGRAM SUMMARY

Program Name	Device Tested
ONSRDR	Card Reader Subsystems
ONDMA	Disk Subsystems
ONSPNT	Printer Subsystems
ONSPCH	Card Punch Subsystems
ONSTPE	Magnetic Tape Subsystems
ONCOM2	Data Communications Subsystems
ONSWRK	Workstation Subsystem
ONSDSK	Diskette Subsystem
ONUERL	Error Log Edit
ONELAN	Error Log Analysis
MAINT	Maintenance Information Utility
ONRPNT	Remote Printer Subsystem

## SOFTWARE REQUIREMENTS

On-Line diagnostic and maintenance programs require the following System 80 software products for operation:

- OS/3 System Control Software
- ICAM Terminal Support Facility for Data Communication Subsystem Support

## HARDWARE REQUIREMENTS

On-Line Diagnostics will operate on any System 80 model and configuration that meets the minimal hardware configuration requirements for that specific model and satisfies the main storage requirements specified in the software release documentation accompanying each release.

Additional main memory and/or peripheral devices may be required, depending upon the user's selection of the system's supported features and size of user's programs, files, and/or data bases.

## **SECTION II**

### **SYSTEM DIAGNOSTIC SUPPORT**

Sperry Univac will endeavor to correct any significant error in an unaltered current release of this product which the customer brings to the attention of Sperry Univac in accordance with established correction procedures. Sperry Univac does not represent or warrant that all errors will be corrected. This error correction service may result, from time to time, in update releases which the customer will install. Sperry Univac reserves the right to alter the classification of this product aid to reflect changes to policy or support requirements.

### **ORDERING INFORMATION**

The on-line diagnostic and maintenance programs and their associated documentation are available free of charge to a user who leases or rents Sperry Univac equipment. These products and their associated documentation are distributed with the system control software to sites where Sperry Univac is responsible for maintaining the equipment. These products and their associated documentation may be leased from Sperry Univac at separately stated lease charges for users who purchase Sperry Univac equipment. Upon execution of a lease and service agreement (UD1-1678) for lease/rental customers or a maintenance support lease (UD1-328) for purchase customers, the following will be provided:

1. A magnetic tape, diskette(s) or removable disk media in OS/3 Operating System format containing:
  - On-line Diagnostic and Maintenance Programs
2. One copy of the associated documentation:
  - Software Release Documentation
  - Operator Reference UP-8915

