



**Model 990 Computer**

**DX10 Sort/Merge  
Object Installation**

31210

**Part No. 939432-9701 \*C  
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**READ FIRST**

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READ THIS DOCUMENT BEFORE ATTEMPTING TO USE THIS SORT/MERGE OBJECT KIT. THIS DOCUMENT DESCRIBES THE SORT/MERGE INSTALLATION MEDIA, PART NUMBER 939071-1601.

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## SECTION 1

## INTRODUCTION

## 1.1 GENERAL INFORMATION

This document describes the procedures for installing DX10 Sort/Merge. Be sure to write-protect this master disk and copy it to a back-up disk before executing any of the following instructions. For copy procedures, refer to Section 15, Volume II, Production Operation, of the DX10 Operating System Reference Manual, part number 946250-9702.

All SCI commands in this document are given in abbreviated form and may be executed by entering the command exactly as is or by using the interactive prompting from the System Command Interpreter (SCI). For a discussion of the abbreviated command form, refer to Section 12, Volume II, Production Operation, of the DX10 Operating System Reference Manual, part number 946250-9702.

## 1.2 MEDIA DEFINITION

Product shipments are made in three formats:

- \* Disk - A DS10, DS25, DS31, DS50, or DS200 disk pack or a dual-sided, double density diskette that contains the Sort/Merge object.
- \* Magnetic Tape - An 800 bpi or 1600 bpi magnetic tape that contains the Sort/Merge object.
- \* Add-On - A disk pack that contains the Sort/Merge object and one or more other products on the same disk pack.

A disk map showing the contents of the media is included in the Product Documentation Package.

Each format is prepared for the installation process as described in the following paragraphs. Read the appropriate discussion for your format.

## 1.2.1 Disk Format

When Sort/Merge is received on a disk, use the following steps to prepare it for installation.

1. Put the disk with volume name SRTMRG10 in an available disk drive on a functioning DX10 3.X system and load it. Be sure to leave the write protection on as you will not be writing to this disk.
2. To install the disk, execute the Install Volume (IV) command as follows:

```
IV UNIT=DSOx, VOLUME=SRTMRG10
```

In this example, DSOx represents the disk drive on which SRTMRG10 has been loaded.

3. Assign the synonym SORTMRG to the disk, using the command:

```
AS SYNONYM=SORTMRG, VALUE=SRTMRG10
```

Now proceed to Section 2 for instructions for installing Sort/Merge.

## 1.2.2 Magnetic Tape Format

When Sort/Merge is received on a magnetic tape, you must first move the files to the system disk or a secondary disk before beginning the installation process. To do this:

1. Create a directory on the system disk or secondary disk, as in the following:

```
CFDIR P=volx.SRTMRG, M=15
```

In this command, volx is the name of the disk on which the directory is to be created, and 15 is the maximum number of entries.

2. Load the magnetic tape on tape drive 1 of a functioning DX10 3.X system.
3. Move the contents of the magnetic tape to the directory you created, using a Restore Directory (RD) command as in the following:

```
RD S=MT01, D=volx.SRTMRG, L=.LISTING
```

The file .LISTING now contains a listing of the directory restored from the magnetic tape. This file can be examined by executing a Show File (SF) or a Print File (PF) command.

4. Unload the tape.
5. Assign the synonym SORTMRG to the pathname of the restored directory using the Assign Synonym (AS) command:

```
AS S=SortMRG, V=volx.SORTMRG
```

In this command, volx is the name of the disk on which the directory was restored.

Now proceed to Section 2 for instructions for installing Sort/Merge.

### 1.2.3 Add-On Format

When you receive Sort/Merge as an add-on package, use the following steps to prepare it for installation:

1. Put the disk, which contains the add-on package, on an available disk drive on a functioning DX10 3.X system and load it. Be sure to leave the write protection on as you will not be writing to the disk.
2. To install the disk, execute the command:

```
IV UNIT=DSOx, VOLUME=volx
```

In this command, DSOx is the disk drive on which the volume will be loaded and volx is the volume name of the disk. The volume name will be marked on the disk or you can execute a Show Volume Status (SVS) command to obtain the volume name.

3. Assign the synonym SORTMRG to the disk, using the command:

```
AS SYNONYM=SortMRG, VALUE=volx.SORTMRG
```

Now proceed to Section 2 for instructions for installing Sort/Merge.

## SECTION 2

## INSTALLING SORT/MERGE

The Sort/Merge disk, SRTMRG10, contains both the object files and the batch stream necessary to install Sort/Merge on DX10 version 3.X. Use the following instructions to install the Sort/Merge package on the system disk.

1. Determine the name of the system program file using the Modify Volume Information (MVI) command as follows:

```
MVI CONTROL ACCESS NAME=ME
```

The following prompt will appear at the bottom left corner of the screen and should be responded to as in the following:

```
DISK? DSO1  
COMMAND(L,C,Q)? L
```

A listing of information about the system disk will then appear on the screen. The name of the system program file is in the listing.

Respond to the prompt following the listing as in the following:

```
COMMAND(L,C,Q)? Q
```

This terminates the MVI command.

2. Assign the synonym PROGF to the name of the system program file, as in the following:

```
AS S=PROGF, V=pathname
```

In this command, pathname is the name of the system program file.

3. Assign the synonym DSC to the name of the system disk, as in the following:

```
AS S=DSC, V=volx
```

In this command, volx is the volume name of the system disk.

4. Execute the installation batch stream using the following command:

```
XB INPUT=SORTMRG.SORTIN10, LIST=.LISTING
```

The installation process performs the following:

1. Automatically deletes any previously installed version of Sort/Merge.
2. Installs Sort/Merge and its overlays on the system program file.
3. Recreates the file SMLIB and copies the Sort/Merge library into it.
4. Applies any patches required for the proper execution of the Sort/Merge processor on the system.
5. Generates an output file from the batch stream called .LISTING that may be examined with a Show File (SF) or Print File (PF) command to ensure that Sort/Merge was properly installed. The following errors are considered normal and should be ignored:
  - a. A 0001 error on a Release LUNO (RL) command
  - b. A 0027 error on a Delete File (DF) command
  - c. A 285F or 3158 error on a Delete Task (DT) command
  - d. A 0026 error on a Create Directory (CFDIR) command

It will normally take 3 to 5 minutes for this batch stream to execute. During this time, you may wish to check the status of the batch stream for completion and proper execution. Execute the Show Background Status (SBS) or Wait (WAIT) command for this purpose.

All application tasks that use the Sort/Merge utility must be linked with the new version of the Sort/Merge library .SMLIB when this release of Sort/Merge is installed.

Instructions for the verification of a successful installation are in Section 3.



## SECTION 3

## VERIFYING SORT/MERGE OPERATION

A test program is provided on the Sort/Merge disk to determine if the package has been installed properly.

1. Assign the synonym SORTMRG to the Sort/Merge disk using the command:

```
AS S=SORTMRG, V=SRTMRG10
```

2. Execute the test batch stream using the command:

```
XB INPUT=SORTMRG.FDT.TEST, LIST=.LISTING
```

The test batch stream performs the following:

1. Sorts the test data file, SRTMRG10.FDT.SRTDAT, twice.
2. Performs a summary merge of the two output files generated by the sorts.
3. Automatically deletes the sorted files.

The execution of the batch stream takes approximately five minutes. After completion of the batch execution, you can check the results of the final merge, stored in .SMOUT, by executing a Show File (SF) command or a Print File (PF) command on the file .SMOUT and comparing the result with the correct output listing that follows (spacing is approximate):

\$ 1	F30	09	00010	251894	655	*	77929	B:^2"	9	
	2	A38	24	00025	025514	156	9	41716	OCH@"	4
\$ 3	M78	89	00090	147090	922	:	98329	PO&=K	9	
	4	I01	79	00080	045197	788	0	09607	;I(+J	9
\$ 5	T97	99	00100	966273	279	D	34507	*=T(G	9	

## SECTION 4

## DELETING SORT/MERGE

The Sort/Merge package may be deleted from the disk on which it has been installed as follows:

1. Assign the synonym DSC to the volume name name of the system disk, using the following command:

```
AS S=DSC, V=volx
```

In this command, volx is the volume name of the system disk.

2. Delete the Sort/Merge task from the system program file, using the following command:

```
DT PROG=pathname, TASK=02A
```

In this command, pathname is the pathname of the system program file.

3. Delete the Data Entry System from the system program file, using the following command:

```
DT PROG=pathname, TASK=02D
```

In this command, pathname is the pathname of the system program file.

4. Delete the Intertask Library directory using the following command:

```
DD P=DSC.SMLIB, ARE YOU SURE?=YES
```

5. Delete all System Command Interpreter procedures associated with Sort/Merge using the Delete File (DF) command as follows:

```
DF P=DSC.S$PROC.XSM  
DF P=DSC.S$PROC.XSMF  
DF P=DSC.S$PROC.SM$CRT  
DF P=DSC.S$PROC.SM$HDR  
DF P=DSC.S$PROC.SM$OUT  
DF P=DSC.S$PROC.SM$WKF  
DF P=DSC.S$PROC.SM$SEL  
DF P=DSC.S$PROC.SM$RCN
```

```
DF P=DSC.S$PROC.SM$RFM
DF P=DSC.S$PROC.SM$FF
DF P=DSC.S$PROC.SM$FSM
DF P=DSC.S$PROC.SM$DV
DF P=DSC.S$PROC.SM$SMV
DF P=DSC.S$PROC.SM$SMF
DF P=DSC.S$PROC.SM$VDC
DF P=DSC.S$PROC.SM$DOS
DF P=DSC.S$PROC.SM$SMF
DF P=DSC.S$PROC.SM$IN
DF P=DSC.S$PROC.SM$ALS
DF P=DSC.S$PROC.SM$NX1
DF P=DSC.S$PROC.SM$NX2
DF P=DSC.S$PROC.SM$NX3
DF P=DSC.S$PROC.SM$NX4
DF P=DSC.S$PROC.SM$END
DF P=DSC.S$PROC.SM$EX
DF P=DSC.S$PROC.SM$SMC
DF P=DSC.S$PROC.SM$HD
DF P=DSC.S$PROC.SM$SLC
DF P=DSC.S$PROC.SM$REF
DF P=DSC.S$PROC.SM$CLS
DF P=DSC.S$PROC.XBSM
DF P=DSC.S$PROC.SM$ALT
DF P=DSC.S$PROC.SM$NXT
DF P=DSC.S$PROC.SM$RF
DF P=DSC.S$PROC.SM$SUM
DF P=DSC.S$PROC.SM$V
DF P=DSC.S$PROC.SM$DS
```

After executing these commands, the Sort/Merge package is deleted from the system.