Release Note for 6250-bpi Tape Dump

RLN12005-1XA

July 1989

This Release Note, RLN12005-1XA, contains update pages that document 6250-bpi tape dump support at Master Disk Revision 22.1 (Rev. 22.1). The update pages supplement the CPU handbooks listed on the next page.
Insert the update pages contained in this release note at the end of the chapter titled, *Handling Halts and Hangs*, as listed below. If Rev. 22.0 update pages exist for your CPU handbook, make sure that you have first inserted those update pages into your handbook.

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6250-bpi Tape Dumps

Previous to Rev. 22.1, all full and partial crash tape dumps were done at 1600 bits per inch (bpi). At Rev. 22.1, support has been added to PRIMOS for performing tape dumps at 6250 bpi for both full tape dumps and partial tape dumps. (Full tape dumps are also known as complete tape dumps.)

To perform 6250-bpi tape dumps, your system must have a tape drive that can write at 6250 bpi. If you do not have a 6250-bpi tape drive, you can still perform 1600-bpi tape dumps as documented in your CPU handbook.

6250-bpi tape dumps require fewer tape reels than 1600-bpi tape dumps. For example, a full tape dump on a system with 64MB of memory requires three tape reels at 1600 bpi, while a 6250-bpi tape dump uses only one reel. Fewer reels also mean faster tape dumps, because a fair amount of the time is spent in rewinding and mounting the additional tapes.

The 6250-bpi tape dumps are initiated with a new VCP command, RUN 773. The RUN 773 command works on all 50 Series™ machines.

Note

Any VCP command that initiates a 1600-bpi tape dump cannot perform a 6250-bpi tape dump. These commands include the TAPEDUMP and PARTIAL_TAPEDUMP commands (which are not available on earlier Prime machines) as well as the RUN 775, RUN 776, and RUN 777 commands.

Procedure for 6250-bpi Tape Dump:  The RUN 773 command initiates a 6250-bpi tape dump to tape drive 0 (MTO). See the next section for tape dumps to other tape drives.

The procedure for a 6250-bpi tape dump, which is performed at the CP> or CP1> prompt, is as follows:

1. Mount a tape on tape drive 0. Make sure that the write-enable ring is on and that the drive is online. You do not have to manually set the density because the software will set it.

2. Issue the SYSCLR command.

3. Issue the RUN 773 command. The following prompt will be displayed:

   Enter P for a partial dump, Enter F for a full dump:

4. Enter P for a partial tape dump or F for a full tape dump. If you enter any other response, it will be ignored and the prompt will be displayed again. After you enter a correct response, a message is displayed informing you that the tape dump is starting.

5. The CPU writes the data to the tape, rewinds the reel, resets the tape density (if it was not manually set to 6250 bpi), and halts. A successful tape dump is indicated by the message Dump completed. An unsuccessful tape dump caused by a tape error is indicated by the message Fatal tape error, dump failed. This error is often caused by the tape being write-protected because of a missing write-enable ring.
6250bpi Tape Dump

6. If the tape dump requires more than one tape reel, the CPU halts and you are notified with the following prompt:

   Mount next reel on same tape unit. Enter RUN to continue.

   Mount another tape reel on the same drive and enter the RUN command. On a multireel dump, the Dump completed message is not displayed until after the final reel.

7. Label the tape with the date and time of the halt, the CPU type, and the tape speed. Record the tape dump in the system logbook and give the tape to your Customer Support representative.

During the tape dump, the software first verifies that there is a 6250-bpi tape drive on the system and then writes the contents of memory to tape. If, however, the software determines that your tape drive cannot support 6250-bpi dumping, the software displays this message:

   Tape drive does not support remote density selection.

The software then defaults to performing a 1600-bpi full dump to the specified drive.

**Example of a 6250-bpi Tape Dump on MTO:** The following example shows the procedure for performing a full tape dump at 6250 bpi. The example assumes that the system halted and that you mounted a write-enabled tape on MTO:

DPM400: CPU halted at 000006/006163: 003776
09 Jan 89 09:02:02 Monday

CP> SYSCLR
DPM006: Central Processor system initialization completed.
09 Jan 89 09:02:12 Monday

CP> RUN 773

Enter P for a partial dump, Enter F for a full dump: F
Beginning full dump.
Dump completed.
DPM400: CPU halted at 000014/013070: 003776
09 Jan 89 09:03:12 Monday

CP>
Using Another Tape Drive: To perform a 6250-bpi tape dump to a tape unit other than unit 0, use the following sequence of VCP commands and responses:

```
SYSCLR
ACCESS 7
773
/
SS unit
RUN
```

The ACCESS command, which can be abbreviated as A, is terminated by the / (slash) subcommand of ACCESS. (Note that you do not have to press the RETURN key after pressing the CD key.) unit is the number of the tape drive. After you issue the RUN command, you are prompted for a full or partial dump as described above.

**Example of a 6250-bpi Tape Dump on MT1:** The following example shows the procedure for performing a partial tape dump at 6250 bpi on tape drive 1 (MT1).

```
DPM400: CPU halted at 000006/006163: 003776
10 Jan 89 11:12:55 Tuesday
CP> SYSCLR
DPM006: Central Processor system initialization completed.
10 Jan 89 11:13:17 Tuesday
CP> ACCESS 7
000000/000007: 001000 773
000000/000010: 000000 /
CP> SS 1
CP> RUN

Enter P for a partial dump, Enter F for a full dump: P
Beginning partial dump.
Dump completed.
DPM400: CPU halted at 000014/013070: 003776
10 Jan 89 11:14:24 Tuesday
CP>
```