

# IBM / Technical Newsletter

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## MVS/ESA JCL Reference

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MVS/System Product - JES3, Program No. 5685-002

This Technical Newsletter contains information for use with *MVS/ESA JCL Reference*.

This Technical Newsletter **does not contain** replacement pages for the base publication. Use the information in this Technical Newsletter as supplementary information to that contained in the base publication. The information in this Technical Newsletter remains in effect until incorporated into a subsequent version of the base publication.

*Note:* The information in this Technical Newsletter applies to APAR OY08131 for MVS/System Product Version 3 Release 1.0 and later releases. Use the information in this Technical Newsletter *only if* you install the PTF related to this APAR.

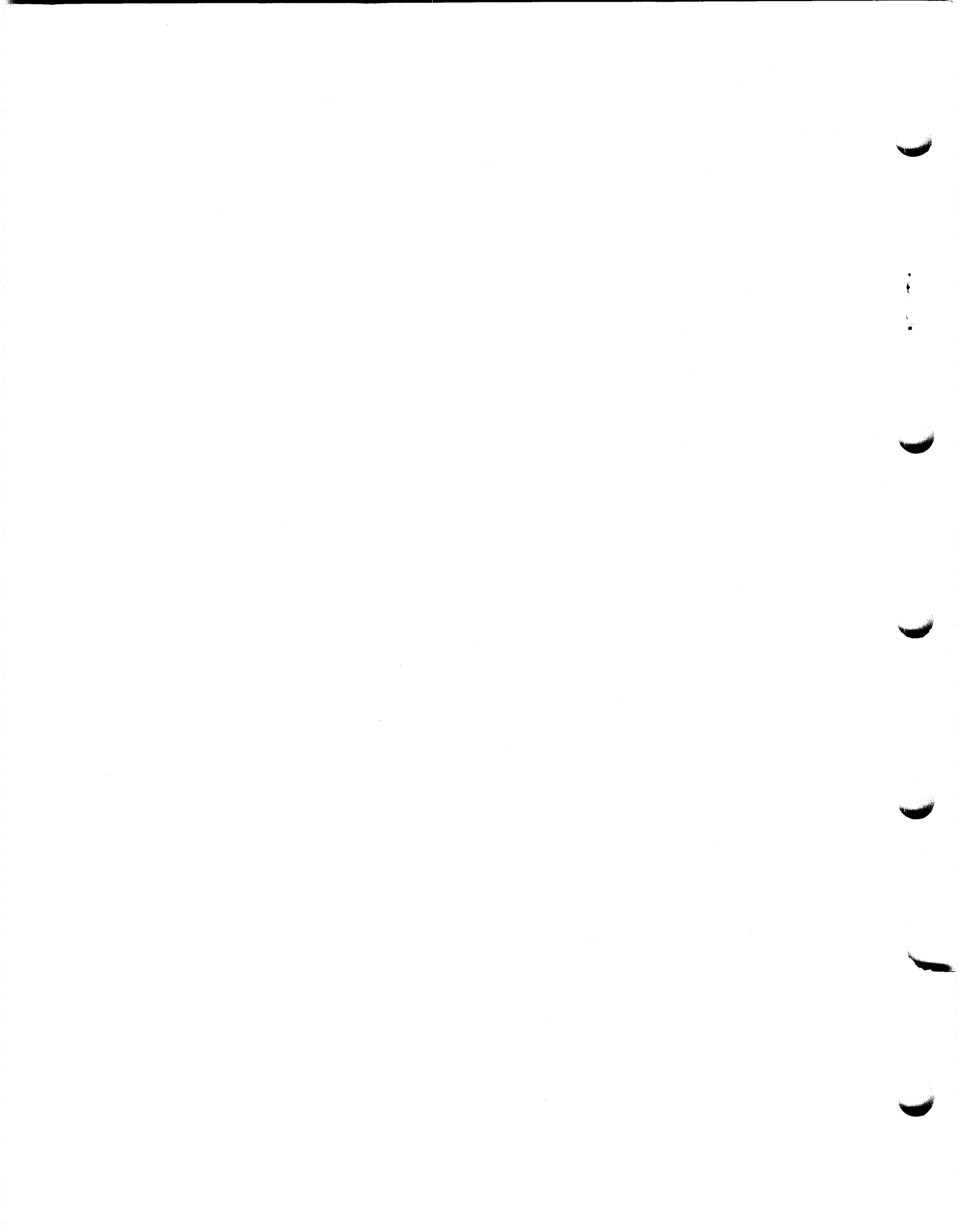
### Summary of Amendments

This Technical Newsletter provides information in support of APAR OY08131.

- The SUBCHARS parameter is added to the XMIT JCL statement. Use SUBCHARS to transmit /\*EOF and /\*DEL internal reader control statements to another node as part of the XMIT JCL stream.

Note: To help you retrieve the information in this Technical Newsletter, we suggest that you place this description of the XMIT JCL statement in the book following the existing description of the XMIT JCL statement.

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## XMIT JCL Statement

**Note:**

The following description of the SUBCHARS parameter on the XMIT JCL statement applies to APAR OY08131.

**Support for the XMIT JCL Statement:**

- The XMIT JCL statement is supported only on JES3 systems.
- For JES2, the XMIT JCL statement is not supported. Use the JES2 /\*XMIT statement to transmit records.

**Purpose:** Use the XMIT JCL statement to transmit records from an MVS JES3 node to a JES3 node, a JES2 node, a VSE/POWER node, or a VM/RSCS node.

The sending system does not process or check the records for validity except when the JCL is processed by an internal reader (such as with TSO submit processing). In this case, the system recognizes /\*EOF and /\*DEL as internal reader control statements and errors can occur on the sending system if /\*EOF or /\*DEL are included in the XMIT JCL stream.

To transmit /\*EOF and /\*DEL statements as part of the XMIT JCL stream, replace /\* with two substitute characters and identify the substitute characters on the SUBCHARS parameter. Prior to transmission, the sending system converts the two substitute characters to /\*. The receiving (execution) system can then process the /\*EOF and /\*DEL statements as internal reader control statements.

Do not nest XMIT JCL statements. That is, do not include an XMIT JCL statement between an XMIT JCL statement and its delimiter.

The system builds network job header and trailer records from information on the JOB statement and any /\*NETACCT statements, if included, preceding the XMIT JCL statement. Then the system transmits all the records between the XMIT JCL statement and a delimiter statement.

The records can consist of a job input stream, an in-stream DD \* or DD DATA data set, or any job definition statements recognized by the destination node. If the records are a job input stream, and the destination node can process the JCL, the transmitted input stream is executed at the destination node.

The records end when the system finds one of the following delimiters:

- /\* in the input stream, if a DLM parameter is not coded on this XMIT JCL statement. (Refer to Chapter 12. Delimiter Statement for an explanation of /\*.)

From TSO only, TSO inserts /\* at the end-of-file if the default delimiter is not supplied.

- The two-character delimiter specified by a DLM parameter on this XMIT JCL statement.

**Syntax:**

```
//[name] XMIT parameter[,parameter]... [comments]
```

The XMIT JCL statement consists of the characters // in columns 1 and 2 and four fields: name, operation (XMIT), parameter, and comments.

**Name Field**

A name is optional on the XMIT JCL statement. If used, code it as follows:

- Each name must be unique within the job.
- The name must begin in column 3.
- The name is 1 through 8 alphanumeric or national (\$, #, @) characters.
- The first character must be alphabetic or national (\$, #, @).
- The name must be followed by at least one blank.

**Operation Field**

The operation field consists of the characters XMIT and must be preceded and followed by at least one blank. It can begin in any column.

**Parameter Field**

The XMIT JCL statement contains only keyword parameters. A DEST parameter is required; the DLM and SUBCHARS parameters are optional. If your JCL is to be processed by an internal reader and /\*EOF or /\*DEL is part of the XMIT JCL stream, you must code the SUBCHARS parameter.

You can code the keyword parameters in any order in the parameter field.

KEYWORD PARAMETERS	VALUES	PURPOSE
DEST = nodename[.vmuserid]  See page XMIT-5	nodename: 1 - 8 alphanumeric or \$, #, @ characters vmuserid: 1 - 8 alphanumeric or \$, #, @ characters	Identifies the destination for all following records until a delimiter stops transmission of the records.
DLM = delimiter  See page XMIT-6	delimiter: 2 alphanumeric, \$, #, @, or special characters	Specifies a delimiter to stop the transmission of records.
SUBCHARS = substitute  See page XMIT-8	substitute: 2 alphanumeric, \$, #, @, or special characters	Specifies a substitute for internal reader control statements.

## Comments Field

The comments field follows the parameter field after at least one intervening blank.

## Location in the JCL

Place the XMIT JCL statement after a JOB statement and any `/*NETACCT` statements. (Other JES3 JCL statements between the JOB and XMIT JCL statements are not supported and can cause unpredictable results.) The JOB statement must be valid for the submitting location.

Do not place any other MVS JCL statements between the JOB statement and the XMIT JCL statement. If any of these statements intervene, the system terminates the job.

## Error on XMIT JCL Statement

If the system finds an error on the XMIT JCL statement before a specified DLM parameter, all jobs in the batch are flushed.

If the system finds an error on the XMIT JCL statement after a specified DLM parameter, the network job is flushed and local processing starts at the statement following the specified delimiter.

## Examples of the XMIT JCL Statement

---

```
//JOBA JOB 25FA64,'KEN KAHN'  
//X1 XMIT DEST=KGNMVS45  
.  
.  
(records to be transmitted)  
.  
/*  
//JOB B JOB ...  
.
```

In this example, the records between the XMIT JCL statement and the delimiter statement (`/*` in columns 1 and 2) are transmitted to the node named KGNMVS45.

---

---

```
//JOBBC JOB PW19,'DEPT 53'
//X2 XMIT DEST=POKVMDD3.MVSGST34,DLM=AA
.
.
/*
(records to be transmitted)
/*EOF
/*DEL
.
.
AA
//JOBBC JOB ...
.
```

In this example, processing is **not** through an internal reader on the sending system. The records between the XMIT JCL statement and the delimiter statement, which must contain AA in columns 1 and 2 as specified in the DLM parameter, are transmitted to the system, MVSGST34, running on the VM system at the node named POKVMDD3.

---

```
//JOBEC JOB NS37,'NYC BX'
//X3 XMIT DEST=SANFRAN,DLM=AA,SUBCHARS=' /+'
.
.
(records to be transmitted)
.
.
/+EOF
.
.
/+DEL
AA
//JOBFC JOB ...
.
```

In this example, the JCL is processed through an internal reader on the sending system. The records between the XMIT JCL statement and the delimiter statement, which must contain AA in columns 1 and 2 as specified in the DLM parameter, are transmitted to the node named SANFRAN.

To transmit the /\*EOF and /\*DEL internal reader control statements, /\* is replaced by /+ in columns 1 and 2 on both statements in the XMIT JCL stream and SUBCHARS=' /+' is coded on the XMIT statement. The sending system does not recognize /+ EOF and /+ DEL as internal reader statements. Then prior to transmission, the sending system converts /+ to /\* and sends /\*EOF and /\*DEL to the receiving node, which can then process the internal reader control statements.

---

---

## DEST Parameter

**Parameter Type:** Keyword, required

**Purpose:** Use the DEST parameter to specify a destination for the following input stream records. The DEST parameter can send the records to a node or, for a node that is a VM system, to a guest system running on the virtual machine.

**Syntax:**

```
DEST=nodename
```

```
DEST=nodename.vuserid
```

## Subparameter Definition

**nodename**

Identifies the destination node. The nodename identifies a JES2 system, a JES3 system, a VSE/POWER node, or a VM system. The nodename is 1 through 8 alphanumeric or national (\$, #, @) characters specified during JES initialization. If the requested node is the same as the submitting node, the records following the XMIT JCL statement are processed by the local system.

**vmuserid**

Identifies a destination guest system running in a virtual machine. The vmuserid is 1 through 8 alphanumeric or national (\$, #, @) characters.

## Examples of the DEST Parameter

---

```
//TRANS XMIT DEST=LAXSYS
```

This example sends the following records to a node named LAXSYS.

---

```
//SEND XMIT DEST=VMSYS3.GUEST7
```

This example sends the following records to a guest system, named GUEST7, running in the VM system at the node named VMSYS3.

---

## DLM Parameter

**Parameter Type:** Keyword, optional

**Purpose:** Use the DLM parameter to specify a delimiter to stop transmission of input stream records. When the DLM parameter assigns a delimiter other than the standard delimiter (/ \* in columns 1 and 2), the records can include the standard delimiter.

If you use the DLM delimiter to define a delimiter, be sure to terminate the records with the specified DLM characters. Otherwise, all jobs between the XMIT JCL statement and the end-of-file are flushed.

From TSO only, TSO inserts / \* at the end-of-file if the default delimiter is not supplied.

**Syntax:**

DLM=delimiter
---------------

- If the specified delimiter contains any special characters, enclose the delimiter in apostrophes. In this case, a special character is any character that is neither alphanumeric nor national (\$, #, @).
- If the delimiter contains an ampersand or an apostrophe, code each ampersand or apostrophe as two consecutive ampersands or apostrophes and enclose the delimiter in apostrophes. Each pair of consecutive ampersands or apostrophes counts as one character.

### Subparameter Definition

**delimiter**

Specifies two characters that indicate the end of this data set in the input stream.

### Default

If you do not specify a DLM parameter, the default is the standard / \* delimiter statement.

### Invalid Delimiters

If the delimiter is not two characters, the system terminates the job and does not transmit any records.



## Examples of the DLM Parameter

---

```
//XX XMIT DEST=NYCNODE,DLM=AA
      .
      .
      (records to be transmitted)
      .
AA
```

The DLM parameter assigns the characters AA as the delimiter for the in-stream records to be transmitted.

---

```
//XY XMIT DEST=ATL,DLM='A+'
//XZ XMIT DEST=BOST,DLM='&&7'
//XW XMIT DEST=CHI,DLM='B'''
```

These examples specify delimiters of A + , &7, and B'.

---

## SUBCHARS Parameter

**Parameter Type:** Keyword, optional

**Purpose:** Use the SUBCHARS parameter to specify a substitute (consisting of two characters) for the first two characters of /\*EOF and /\*DEL internal reader control statements. The substitute characters on the internal reader control statements must be in columns 1 and 2.

You can use the SUBCHARS parameter for any XMIT JCL job. However, SUBCHARS is required if you want to transmit internal reader control statements (/\*EOF and /\*DEL) and the job is processed by an internal reader on the sending system. Note that the system recognizes /\*EOF and /\*DEL as internal reader control statements and errors can occur on the sending system if /\*EOF or /\*DEL are included in the XMIT JCL stream.

To transmit internal reader control statements, replace /\* on the /\*EOF and /\*DEL statements in the records to be transmitted with two substitute characters and identify the substitute characters on the SUBCHARS parameter. Prior to transmission, the system converts the substitute characters to /\* and sends /\*EOF and /\*DEL to the receiving node for processing.

**Reference:** The internal reader is described in *SPL: JES3 Initialization and Tuning* and *SPL: System Modifications*.

**Syntax:**

SUBCHARS=substitute
---------------------

- |  |
|--|
| <ul style="list-style-type: none"><li>• If the specified substitute contains any special characters, enclose the substitute in apostrophes. In this case, a special character is any character that is neither alphanumeric nor national (\$, #, @).</li><li>• If the substitute contains an ampersand or an apostrophe, code each ampersand or apostrophe as two consecutive ampersands or apostrophes and enclose the substitute in apostrophes. Each pair of consecutive ampersands or apostrophes counts as one character.</li></ul> |
|--|

### Subparameter Definition

**substitute**

Specifies two characters that indicate the substitute characters for the first two characters of internal reader control statements. The substitute characters apply only to internal reader statements.

### Default

There is no default for SUBCHARS.

### Invalid Substitute

If the substitute is not two characters, the system terminates the job and does not transmit any records.

## Examples of the SUBCHARS Parameter

---

```
//XX XMIT DEST=NYCNODE,SUBCHARS=MV
      .
      .
      (records to be transmitted)
MVEOF
      .
```

The SUBCHARS parameter identifies the characters MV as the substitute for the first two characters of the internal reader control statement to be transmitted. Prior to transmission, the system converts the MV substitute characters to /\* and sends /\*EOF to the receiving node for processing.

---

```
//XY XMIT DEST=ATL,SUBCHARS='A+'
//XZ XMIT DEST=BOST,SUBCHARS='&&7'
//XW XMIT DEST=CHI,SUBCHARS='B'''
```

These examples specify substitutes of A +, &7, and B'.

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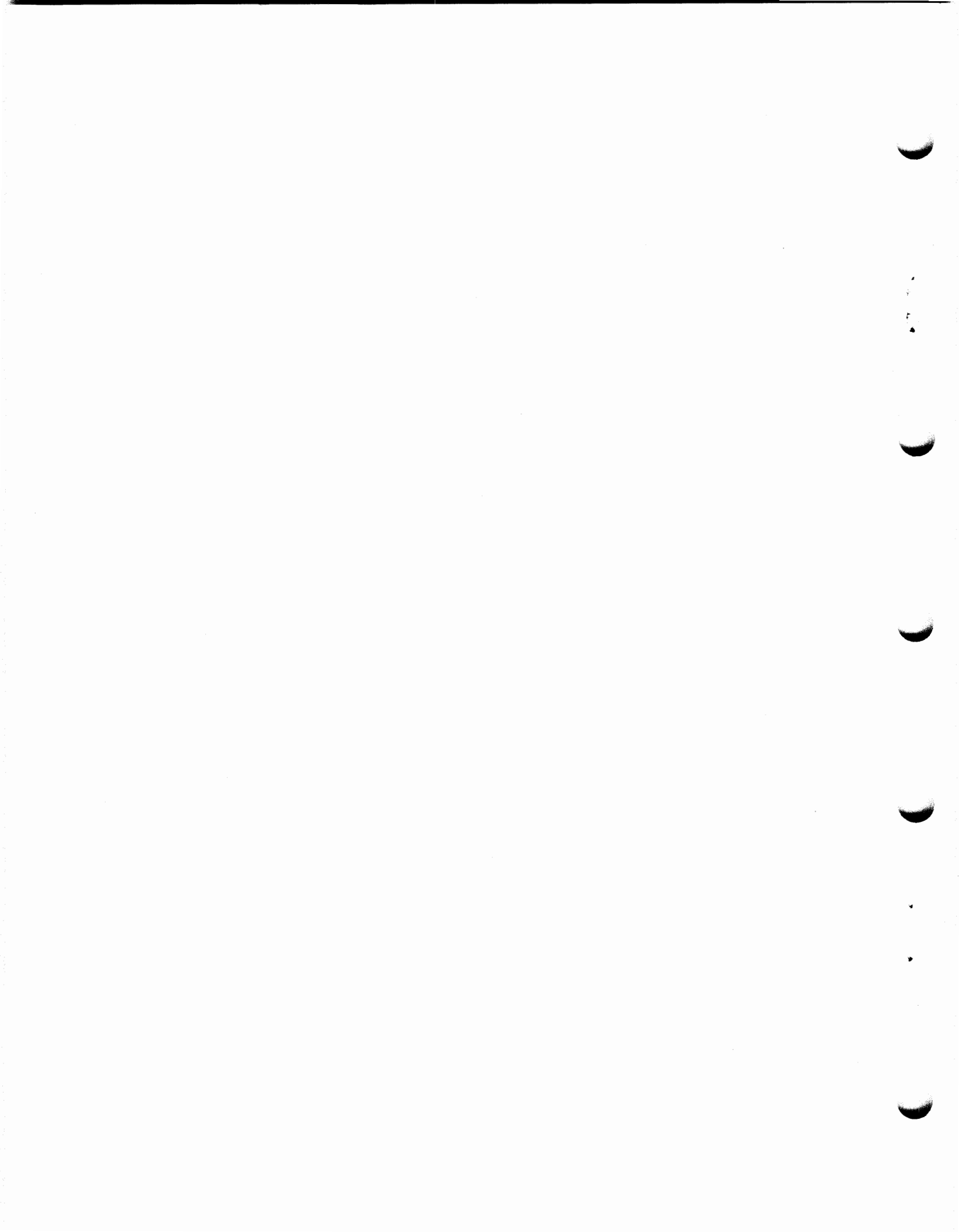
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