



# **Program Directory for IBM Page Printer Formatting Aid/370**

Release 01, Modification Level 00

Program Number 5688-190

FMID HPGP100

for Use with  
MVS  
OS/390

CBPDO Level SMC0039  
Service Level 0039

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GI10-0220-01

**Note!**

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---

## 1.0 Introduction

This program directory is intended for the system programmer responsible for program installation and maintenance. It contains information concerning the material and procedures associated with the installation of IBM Page Printer Formatting Aid/370. This publication refers to IBM Page Printer Formatting Aid/370 as PPFA/370. You should read all of this program directory before installing the program and then keep it for future reference.

The program directory contains the following sections:

- 2.0, "Program Materials" on page 3 identifies the basic and optional program materials and documentation for PPFA/370.
- 3.0, "Program Support" on page 7 describes the IBM support available for PPFA/370.
- 4.0, "Program and Service Level Information" on page 9 lists the APARs (program level) and PTFs (service level) incorporated into PPFA/370.
- 5.0, "Installation Requirements and Considerations" on page 11 identifies the resources and considerations for installing and using PPFA/370.
- 6.0, "Installation Instructions" on page 17 provides detailed installation instructions for PPFA/370. It also describes the procedures for activating the functions of PPFA/370, or refers to appropriate publications.

Before installing PPFA/370, read 3.2, "Preventive Service Planning" on page 7. This section tells you how to find any updates to the information and procedures in this program directory.

Do not use this program directory if you are installing PPFA/370 with a SystemPac or ServerPac. When using these offerings, use the jobs and documentation supplied with the offering. This documentation may point you to specific sections of the program directory as required.

If you are installing PPFA/370 using the MVS Custom-Built Product Delivery Offering (CBPDO, 5751-CS3), a softcopy program directory is provided on the CBPDO tape which is identical to the printed copy shipped with your order. Your CBPDO contains a softcopy preventive service planning (PSP) upgrade for this product. All service and HOLDDATA for PPFA/370 are included on the CBPDO tape.

---

### 1.1 PPFA/370 Description

PPFA/370 is part of IBM's Advanced Function Presentation software and supports the requirements for defining page definitions and form definitions.

PPFA/370 is executed as a batch program, with the job control language (JCL) to execute PPFA/370. The commands defining form definitions and page definitions are submitted as a simple job. The form definition and page definition objects defined by the commands are written to a defined library and the job is terminated.

Print Services Facility (PSF), an IBM licensed program, is required to use stored form definitions and page definitions in print jobs that can merge stored objects with user data files. See 5.2.2.2, “Functional Requisites” on page 13 for the versions of PSF that can be used. PSF creates a data stream acceptable to IBM page printers.

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## **1.2 PPFA/370 FMID**

PPFA/370 consists of the following FMID:

HPGP100



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## 2.0 Program Materials

An IBM program is identified by a program number and a feature number. The program number for PPFA/370 is 5688-190.

Basic Machine-Readable Materials are materials that are supplied under the base license and feature code, and are required for the use of the product. Optional Machine-Readable Materials are orderable under separate feature codes, and are not required for the product to function.

The program announcement material describes the features supported by PPFA/370. Ask your IBM representative for this information if you have not already received a copy.

---

### 2.1 Basic Machine-Readable Material

The distribution medium for this program is 9-track magnetic tape (written at 6250 BPI), or 3480 cartridge. The tape or cartridge contains all the programs and data needed for installation. It is installed using SMP/E, and is in SMP/E RELFILE format. See 6.0, "Installation Instructions" on page 17 for more information about how to install the program.

Figure 1 describes the tape or cartridge.

**Notes:**

1. The data set attributes in these tables should be used in the JCL of jobs accessing the tape, but since the data sets on the tape are in IEBCOPY unloaded format, their actual attributes may be different.
2. If you are installing PPFA/370 using the MVS Custom-Built Product Delivery Offering (CBPDO) (5751-CS3), some of the information in these figures may not be valid. Consult the CBPDO documentation for actual values.

<i>Figure 1. Basic Material: Program Tape</i>				
Medium	Feature Number	Physical Volume	External Label Identification	VOLSER
6250 Tape	5861	1	PPFA370 MVS BASE	PGP100
3480 Cart	5862	1	PPFA370 MVS BASE	PGP100

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### 2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for PPFA/370.

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## 2.3 Program Publications

The following sections identify the basic and optional publications for PPFA/370.

### 2.3.1 Basic Program Publications

Figure 2 identifies the basic unlicensed program publications for PPFA/370. One copy of each of these publications is included when you order the basic materials for PPFA/370. For additional copies, contact your IBM representative.

<i>Figure 2. Basic Material: Unlicensed Publications</i>	
<b>Publication Title</b>	<b>Form Number</b>
Page Printer Formatting Aid/370 Licensed Program Specifications	G544-3696
Page Printer Formatting Aid/370 User's Guide	S544-5284
Page Printer Formatting Aid/370 Command Quick Reference Summary	G544-3701

Figure 3 identifies the basic licensed program publications for PPFA/370. The first copy is available at no charge to licensees of the basic material by ordering the 7xxx Feature Number. Order additional copies using the 8xxx Feature Number. A fee is charged for additional copies.

<i>Figure 3. Basic Material: Licensed Publications</i>		
<b>Publication Title</b>	<b>Form Number</b>	<b>Feature Number</b>
Page Printer Formatting Aid/370 Diagnosis Guide and Reference	LH40-0207	7140/8050

### 2.3.2 Optional Program Publications

No optional publications are provided for PPFA/370.

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## 2.4 Program Source Materials

No program source materials or viewable program listings are provided for PPFA/370.

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## 2.5 Publications Useful During Installation

The publications listed in Figure 4 may be useful during the installation of PPFA/370. To order copies, contact your IBM representative.

<i>Figure 4. Publications Useful During Installation</i>	
<b>Publication Title</b>	<b>Form Number</b>
<i>OS/390 SMP/E Commands</i>	SC28-1805
<i>OS/390 SMP/E Reference</i>	SC28-1806
<i>OS/390 SMP/E User's Guide</i>	SC28-1740
<i>OS/390 SMP/E Messages and Codes</i>	SC28-1738
<i>SMP/E Reference</i>	SC28-1107
<i>SMP/E User's Guide</i>	SC28-1302
<i>SMP/E Messages and Codes</i>	SC28-1108
<i>OS/390 MVS JCL Reference</i>	GC28-1757
<i>MVS/ESA V5 JCL Reference</i>	GC28-1479
<i>Advanced Function Presentation: Printer Information</i>	G544-3290



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## 3.0 Program Support

This section describes the IBM support available for PPFA/370.

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### 3.1 Program Services

Contact your IBM representative for specific information about available program services.

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### 3.2 Preventive Service Planning

Before installing PPFA/370, you should review the current Preventive Service Planning (PSP) information. If you obtained PPFA/370 as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO tape.

If you obtained PPFA/370 on a product tape, or if the CBPDO is more than two weeks old when you install it, you should contact the IBM Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

PSP Buckets are identified by UPGRADEs, which specify product levels, and SUBSETs, which specify the FMIDs for a product level. The UPGRADE and SUBSET values for PPFA/370 are:

<i>Figure 5. PSP Upgrade and Subset ID</i>		
UPGRADE	SUBSET	Description
PPFA370	HPGP100/0039	100

---

### 3.3 Statement of Support Procedures

Report any difficulties you have using this program to your IBM Support Center. If an APAR is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 6 identifies the component IDs (COMPID) for PPFA/370.

<i>Figure 6. Component IDs</i>			
FMID	COMPID	Component Name	RETAIN Release
HPGP100	568819001	PPFA370 MVS BASE	100



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## 4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of PPFA/370. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated. Information about the cumulative service tape is also provided.

This program is at Service Level 0039.

---

### 4.1 Program Level Information

The following APAR fixes against previous releases of PPFA/370 have been incorporated into this release. They are listed by FMID.

- FMID HPGP100

AL85134	AN66697	AQ03576
AN02399	AN69527	AQ05893
AN03422	AN70511	AQ08004
AN06848	AN70854	AQ08878
AN07869	AN71525	AQ10506
AN54401	AN77186	AQ11292
AN55431	AN79369	AQ13768
AN56043	AN83229	AQ14269
AN62333	AN86851	AQ14887
AN64544	AQ03377	

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### 4.2 Service Level Information

PTFs containing APAR fixes against this release of PPFA/370 have been incorporated into this product tape. For a list of included PTFs, examine the ++VER statement in the product's SMPMCS.

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### 4.3 Cumulative Service Tape

A cumulative service tape, containing PTFs not incorporated into this release, might be included with this program. Installation instructions for cumulative service tapes can be found in the SMP/E publications.

If you received this product as part of a CBPDO or a ProductPac, PTFs not incorporated into this release are provided on the tape, and a separate cumulative service tape will not be provided.





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## 5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating PPFA/370. The following terminology is used:

- *Driving system*: the system used to install the program.
- *Target system*: the system on which the program is installed.

In many cases, the same system can be used as both a driving system and a target system. However, you may want to set up a clone of your system to use as a target system by making a separate IPL-able copy of the running system. The clone should include copies of all system libraries that SMP/E updates, copies of the SMP/E CSI data sets that describe the system libraries, and your PARMLIB and PROCLIB.

Some cases where two systems should be used include the following:

- When installing a new level of a product that is already installed, the new product will delete the old one. By installing onto a separate target system, you can test the new product while still keeping the old one in production.
- When installing a product that shares libraries or load modules with other products, the installation can disrupt the other products. Installing onto a test system or clone will allow you to assess these impacts without disrupting your production system.

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### 5.1 Driving System Requirements

This section describes the environment of the driving system required to install PPFA/370.

#### 5.1.1 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

#### 5.1.2 Programming Requirements

<i>Figure 7 (Page 1 of 2). Driving System Software Requirements</i>	
<b>Program Number</b>	<b>Product Name and Minimum VRM/Service Level</b>
Any <b>one</b> of the following:	
5668-949	System Modification Program/Extended (SMP/E) Release 1.8.1 with PTF UR51070
5645-001	OS/390 SMP/E Version 1 Release 02 or higher with PTF UR51071
5645-001	OS/390 SMP/E Version 1 Release 03 or higher with PTF UR51067
5647-A01	OS/390 SMP/E Version 2 Release 04 or higher with PTF UR51067

Figure 7 (Page 2 of 2). Driving System Software Requirements

Program Number	Product Name and Minimum VRM/Service Level
5647-A01	OS/390 SMP/E Version 2 Release 05 or higher with PTF UR51068
5647-A01	OS/390 SMP/E Version 2 Release 06 or higher with PTF UR51068
5647-A01	OS/390 SMP/E Version 2 Release 07 or higher

## 5.2 Target System Requirements

This section describes the environment of the target system required to install and use PPFA/370.

PPFA/370 installs in the MVS (Z038) SREL.

### 5.2.1 Machine Requirements

The target system can run in any hardware environment that supports the required software.

PPFA/370 output can be used with IBM Advanced Function Printers which use the Intelligent Printer Data Stream (IPDS). Refer to *Advanced Function Presentation: Printer Information*, G544-3290, for a list of Advanced Function Printers.

### 5.2.2 Programming Requirements

#### 5.2.2.1 Mandatory Requisites

A mandatory requisite is defined as a product that is required without exception; this product either **will not install** or **will not function** unless this requisite is met. This includes products that are specified as REQs or PREs.

Figure 8. Mandatory Requisites

Program Number	Product Name and Minimum VRM/Service Level
Any <b>one</b> of the following:	
5655-068	MVS/ESA SP JES2 Version 5 Release 2.2 or higher
5655-069	MVS/ESA SP JES3 Version 5 Release 2.2 or higher
5645-001	OS/390 Version 1 Release 1 or higher with supported levels of JES2 or JES3
5647-A01	OS/390 Version 2 Release 4 or higher with supported levels of JES2 or JES3

### 5.2.2.2 Functional Requisites

A functional requisite is defined as a product that is **not** required for the successful installation of this product or for the basic function of the product, but **is** needed at run time for a specific function of this product to work. This includes products that are specified as IF REQs.

<i>Figure 9. Functional Requisites</i>		
Program Number	Product Name and Minimum VRM/Service Level	Function
5655-B17	PSF for OS/390 Version 3 Release 2 or higher	Print output using the Record Formatting option
Any <b>one</b> of the following:		
5695-040	PSF/MVS Version 2 Release 2 or higher	Print Form definitions and Page definitions
5655-B17	PSF for OS/390 Version 3 Release 1 or higher	Print Form definitions and Page definitions

### 5.2.2.3 Toleration/Coexistence Requisites

A toleration/coexistence requisite is defined as a product which must be present on a sharing system. These systems can be other systems in a multisystem environment (not necessarily sysplex), a shared DASD environment (such as test and production), or systems that reuse the same DASD at different time intervals.

PPFA/370 has no toleration/coexistence requisites.

### 5.2.2.4 Incompatibility (Negative) Requisites

A negative requisite identifies products which must *not* be installed on the same system as this product.

PPFA/370 has no negative requisites.

## 5.2.3 DASD Storage Requirements

PPFA/370 libraries can reside on IBM MVS supported DASD.

Figure 10 lists the total space required for each type of library.

<i>Figure 10. Total DASD Space Required by PPFA/370</i>	
Library Type	Total Space Required
Target	15 tracks of 3390 DASD
Distribution	26 tracks of 3390 DASD

**Notes:**

1. IBM recommends use of system determined block sizes for efficient DASD utilization for all non-RECFM U data sets. For RECFM U data sets, IBM recommends a block size of 32760, which is the most efficient from a performance and DASD utilization perspective.
2. Abbreviations used for the data set type are:

- U** Unique data set, allocated by this product and used only by this product. In order to determine the correct storage needed for this data set, this table provides all required information; no other tables (or program directories) need to be referenced for the data set size.
- S** Shared data set, allocated by this product and used by this product and others. In order to determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other program directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.
- E** Existing shared data set, used by this product and others. This data set is NOT allocated by this product. In order to determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other program directories). This existing data set must have enough free space to accommodate the storage size given in this table.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old one and reclaim the space used by the old release and any service that had been installed. You can determine whether or not these libraries have enough space by deleting the old release with a dummy function, compressing the libraries, and comparing the space requirements with the free space in the libraries.

For more information on the names and sizes of the required data sets, please refer to 6.1.6, "Allocate SMP/E Target and Distribution Libraries and Paths" on page 20.

3. All target and distribution libraries listed have the following attributes:
  - The default name of the data set may be changed
  - The default block size of the data set may be changed
  - The data set may be merged with another data set that has equivalent characteristics
  - The data set may be either a PDS or a PDSE
4. All target libraries listed have the following attributes:
  - The data set may be SMS managed
  - It is not required for the data set to be SMS managed
  - The data set may be in the LPA
  - It is not required for the data set to be in the LPA
  - The data set may be in the LNKST
  - It is not required for the data set to be APF authorized
  - It is not required for the data set to reside on the IPL volume
  - The values in the "Member Type" column are not necessarily the actual SMP/E element types identified in the SMPMCS.

The following figures describe the target and distribution libraries required to install PPFA/370. The storage requirements of PPFA/370 must be added to the storage required by other programs having data in the same library or path.

**Note:** The data in these tables should be used when determining which libraries can be merged into common data sets. In addition, since some ALIAS names may not be unique, ensure that no naming conflicts will be introduced before merging libraries.

<i>Figure 11. Storage Requirements for PPFA/370 Target Libraries</i>								
<b>Library DDNAME</b>	<b>Member Type</b>	<b>Target Volume</b>	<b>T Y P E</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>No. of 3390 Trks</b>	<b>No. of DIR Blks</b>
LINKLIB	LMOD	TVOL1	E	PDS	U	0	13	2
SAMPLIB	Sample	TVOL2	E	PDS	FB	80	2	2

Figure 12. Storage Requirements for PPFA/370 Distribution Libraries						
Library DDNAME	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR Blks
AAKQMOD0	U	PDS	U	0	24	25
ASAMPLIB	E	PDS	FB	80	2	2

The following figures list data sets that are not used by SMP/E, but are required for PPFA/370 to execute.

<i>Figure 13. Storage Requirements for PPFA/370 Non-SMP/E Data Sets</i>						
<b>Data Set Name</b>	<b>T Y P E</b>	<b>O R G</b>	<b>R E C F M</b>	<b>L R E C L</b>	<b>No. of 3390 Trks</b>	<b>No. of DIR Blks</b>
PAGELIB	U	PDS	VBM	8205	2	2
FORMDEF	U	PDS	VBM	8205	2	2

---

## 5.3 FMIDs Deleted

Installing PPFA/370 may result in the deletion of other FMIDs. To see what FMIDs will be deleted, examine the ++VER statement in the product's SMPMCS.

If you do not wish to delete these FMIDs at this time, you must install PPFA/370 into separate SMP/E target and distribution zones.

**Note:** These FMIDs will not automatically be deleted from the Global Zone. Consult the SMP/E manuals for instructions on how to do this.

---

## 5.4 Special Considerations

PPFA/370 has no special considerations for the target system.

---

## 6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of PPFA/370.

Please note the following:

- If you want to install PPFA/370 into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMPCSI and the SMP/E control data sets.
- Sample jobs have been provided to help perform some or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries required for SMP/E execution have been defined in the appropriate zones.
- The SMP/E dialogs may be used instead of the sample jobs to accomplish the SMP/E installation steps.

---

### 6.1 Installing PPFA/370

#### 6.1.1 SMP/E Considerations for Installing PPFA/370

This release of PPFA/370 is installed using the SMP/E RECEIVE, APPLY, and ACCEPT commands. The SMP/E dialogs may be used to accomplish the SMP/E installation steps.

#### 6.1.2 SMP/E Options Subentry Values

The recommended values for some SMP/E CSI subentries are shown in Figure 14. Use of values lower than these may result in failures in the installation process. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. Refer to the SMP/E manuals for instructions on updating the global zone.

*Figure 14. SMP/E Options Subentry Values*

SUB-ENTRY	Value	Comment
DSSPACE	(25,25,25)TRK	Recommended value for PPFA/370
PEMAX	SMP/E Default	IBM recommends using the SMP/E default for PEMAX.

#### 6.1.3 Unload the Sample JCL from the Product Tape

The following sample installation jobs are provided on the distribution tape to help you install PPFA/370:

Figure 15. Sample Installation Jobs

Job Name	Job Type	Description	RELFILE
AKQREC	RECEIVE	Sample RECEIVE job	IBM.HPGP100.F3
AKQALLOC	ALLOCATE	Sample job to allocate target and distribution libraries	IBM.HPGP100.F3
AKQDDDEF	DDDEF	Sample job to define SMP/E DDDEFs	IBM.HPGP100.F3
AKQAPPCK	APPLY CHECK	Sample APPLY CHECK job	IBM.HPGP100.F3
AKQAPP	APPLY	Sample APPLY job	IBM.HPGP100.F3
AKQACCCK	ACCEPT CHECK	Sample ACCEPT CHECK job	IBM.HPGP100.F3
AKQACC	ACCEPT	Sample ACCEPT job	IBM.HPGP100.F3

You may copy the jobs from the tape by submitting the job below. Add a job card and change the lowercase parameters to uppercase values to meet your site's requirements before submitting.

```
//STEP1 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//IN DD DSN=IBM.HPGP100.F3,UNIT=tunit,VOL=SER=PGP100,
// LABEL=(4,SL),DISP=(OLD,KEEP)
//OUT DD DSN=jcl-library-name,
// DISP=(NEW,CATLG,DELETE),
// VOL=SER=dasdvol,UNIT=SYSALLDA,
// DCB=*.STEP1.IN,SPACE=(TRK,(2,1,1))
//SYSUT3 DD UNIT=SYSALLDA,SPACE=(CYL,(1,1))
//SYSIN DD *
COPY INDD=IN,OUTDD=OUT
/*
```

where **tunit** is the unit value matching the product tape or cartridge, **jcl-library-name** is the name of the data set where the sample jobs will reside, and **dasdvol** is the volume serial of the DASD device where the data set will reside.

You can also access the sample installation jobs by performing an SMP/E RECEIVE for FMID HPGP100, and then copying the jobs from data set **hlq.HPGP100.F3** to a work data set for editing and submission.

## 6.1.4 Perform SMP/E RECEIVE

Edit and submit sample job AKQREC to perform the SMP/E RECEIVE for PPFA/370. Consult the instructions in the sample job for more information.

NOTE: If you obtained PPFA/370 as part of a CBPDO, you can use the RCVPDO job found in the CBPDO RIMLIB data set to RECEIVE the PPFA/370 FMIDs as well as any service, HOLDDATA, or preventive service planning (PSP) information included on the CBPDO tape. For more information, refer to the documentation included with the CBPDO.



### Expected Return Codes and Messages:

A return code of 0 should be received.

## 6.1.5 RECEIVE the Cumulative Service Tape (if provided)

A cumulative service tape may be shipped with the product package. If no cumulative service tape is shipped or if the product is received by CBPDO, skip this section.

Figure 16 contains a sample job to RECEIVE the PTFs and HOLDDATA from the cumulative service tape. Create JCL similar to this sample, modifying the job to specify the appropriate parameters for your installation.

If any of the PTFs on the tape have a system hold by the ++HOLD SYSTEM modification control statement with a reason ID equal to UCLIN, file 6 of the cumulative service tape will contain the UCLIN for that PTF. The instructions for the UCLIN are contained in the cover letter of the PTF.

### Expected Return Codes and Messages:

A return code of 0 should be received.

```
//AKQRCVC JOB 'account #','name',MSGLEVEL=(1,1)
//*****
//* RECEIVE CUMULATIVE SERVICE DATA. *
//* MAKE THE FOLLOWING MODIFICATIONS: *
//* 1) CHANGE #GLOBALCSI TO THE DATA SET NAME OF *
//* YOUR GLOBAL CSI DATA SET *
//* 2) CHANGE tape TO A VALID TAPE UNIT NAME *
//* 2) CHANGE ssssss TO A VALID SOURCEID NAME *
//*****
//RECEIVE EXEC PGM=GIMSMP,REGION=4096K
//SMPCSI DD DSN=#GLOBALCSI,
// DISP=SHR
//SMPHOLD DD UNIT=tape,LABEL=(4,NL),DISP=SHR,
// VOL=SER=CUMTAP,
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=7200)
//SMPPTFIN DD UNIT=tape,LABEL=(1,NL),DISP=SHR,
// VOL=SER=CUMTAP,
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=7200)
//SMP.SMPCNTL DD *
// SET BDY(GLOBAL).
// RECEIVE SYSMODS HOLDDATA SOURCEID(ssssss).
/*
```

Figure 16. RECEIVE Job for Cumulative Service Tape

## 6.1.6 Allocate SMP/E Target and Distribution Libraries and Paths

Edit and submit sample job AKQALLOM to allocate the SMP/E target and distribution libraries for PPFA/370. Consult the instructions in the sample job for more information.

### Expected Return Codes and Messages:

A return code of 0 should be received.

## 6.1.7 Create DDDEF Entries

Edit and submit sample job AKQDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for PPFA/370. Consult the instructions in the sample job for more information.

### Expected Return Codes and Messages:

A return code of 0 should be received.

## 6.1.8 Perform SMP/E APPLY CHECK

Edit and submit sample job AKQAPPCK to perform an SMP/E APPLY CHECK for PPFA/370. Consult the instructions in the sample job for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the following on the APPLY CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of **ERRORS** and not of **WARNINGS** (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

**Note:** The GROUPEXTEND operand indicates that SMP/E apply all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

### Expected Return Codes and Messages:

A return code of 4 should be received with message:

```
GIM61903W LMOD AKQPPFA was not deleted by SYSMOD HPGP100 because
          AKQPPFA is not in the TARGET Zone.
```

## 6.1.9 Perform SMP/E APPLY

Edit and submit sample job AKQAPP to perform an SMP/E APPLY for PPFA/370. Consult the instructions in the sample job for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the following on the APPLY: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of **ERRORS** and not of **WARNINGS** (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

**Note:** The GROUPEXTEND operand indicates that SMP/E apply all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

**Expected Return Codes and Messages:**

A return code of 4 should be received with message:

```
GIM61903W LMOD AKQPPFA was not deleted by SYSMOD HPGP100 because
          AKQPPFA is not in the TARGET Zone.
```

## 6.1.10 Perform SMP/E ACCEPT CHECK

Edit and submit sample job AKQACCCK to perform an SMP/E ACCEPT CHECK for PPFA/370. Consult the instructions in the sample job for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the following on the ACCEPT CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of **ERRORS** and not of **WARNINGS** (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

**Note:** The GROUPEXTEND operand indicates that SMP/E accept all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

**Expected Return Codes and Messages:**

A return code of 4 should be received with message:

```
GIM61903W LMOD AKQPPFA was not deleted by SYSMOD HPGP100 because
          AKQPPFA is not in the DLIB Zone.
```

## 6.1.11 Perform SMP/E ACCEPT

Edit and submit sample job AKQACC to perform an SMP/E ACCEPT for PPFA/370. Consult the instructions in the sample job for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the following on the ACCEPT: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of **ERRORS** and not of **WARNINGS** (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

Before using SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. This will cause entries produced from JCLIN to be saved in the distribution zone whenever a SYSMOD containing inline JCLIN is ACCEPTed. For more information on the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E manuals.

**Note:** The GROUPEXTEND operand indicates that SMP/E accept all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

## Expected Return Codes and Messages:

A return code of 4 should be received with message:

```
GIM61903W LMOD AKQPPFA was not deleted by SYSMOD HPGP100 because
          AKQPPFA is not in the DLIB Zone.
```

If PTFs containing replacement modules are being ACCEPTed, SMP/E ACCEPT processing will linkedit/bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder may issue messages documenting unresolved external references, resulting in a return code of 4 from the ACCEPT step. These messages can be ignored, because the distribution libraries are not executable and the unresolved external references will not affect the executable system libraries.

---

## 6.2 Activating PPFA/370

PPFA/370 is fully operational once the SMP/E installation is complete. No further customization is required to activate this function.

The publication *Page Printer Formatting Aid/370 User's Guide, S544-5284*, contains the step-by-step procedures to activate the functions of PPFA/370.

---

## 6.3 Installation Verification Procedure

Use the PPFA/370 Installation Verification Procedure (IVP) to ensure that PPFA/370 has been correctly installed. Two jobs have been placed in the data set SYS1.SAMPLIB that can be used for the IVP:

- AKQALLOC - Allocate page definition and form definition data sets
- AKQIV82E - IVP job that creates a page definition and form definition

### 6.3.1 Allocate Page Definition and Form Definition Data Sets

The AKQALLOC job can be used to allocate page definition and form definition data sets.

The AKQALLOC job resides in data set SYS1.SAMPLIB(AKQALLOC).

Edit and submit sample job AKQALLOC. Consult the instructions in the sample job for more information.

A return code of "0" is expected from this job.

### 6.3.2 IVP Job to Create Page Definition and Form Definition

The AKQIV82E job generates a page definition and a form definition designed for all PPFA supported printers. The job then stores the page definition and form definition into the *ppfa.pagelib* and *ppfa.formlib* data sets created from the AKQALLOC job.

The AKQIV82E job resides in the data set SYS1.SAMPLIB(AKQIV82E).

You will need to supply a valid jobcard to match your environment.

If a return code of "0" is received from this job, the IVP has completed successfully.

---

## 6.4 Post IVP Procedure

PPFA can be used in conjunction with PSF to show how the page definition and form definition created during the IVP is used to format your data. The following section describes the procedure for printing this sample. If you would like to print this sample, a currently supported release of PSF must be installed on your system, and the *ppfa.pagelib* and *ppfa.formlib* data sets generated with the AKQALLOC job must be made available to PSF.

The AKQIV82P job uses PSF in conjunction with the sample page definition and form definition generated with the AKQIV82E job to create sample output for any PPFA supported printer.

The AKQIV82P job resides in the data set SYS1.SAMPLIB(AKQIV82P).

You will need to supply a valid jobcard to match your environment.

A return code of "0" is expected from this job.

See Appendix A, "Printed Results of Verification Programs" on page 25 for an example of the printed output from this job.



---

## Appendix A. Printed Results of Verification Programs

The printed output of the IVP is a series of three pages. The first page should look similar to the example in Figure 17; the second and third pages should look similar to the example in Figure 18 on page 26. The fonts and spacing in your output may be different than the examples in this program directory.

NAME Paul Anderson	NAME Diana Lowery	NAME Michael Johnson
EMPLOYEE 492027	EMPLOYEE 693267	EMPLOYEE 759303
DEPARTMENT 46390	DEPARTMENT 10677	DEPARTMENT 75969
SALARY 116000	SALARY 149000	SALARY 109940
SEX MALE	SEX FEMALE	SEX MALE
BIRTHDAY 08/05/1935	BIRTHDAY 03/24/1961	BIRTHDAY 05/11/1959
ADDRESS New York	ADDRESS Dallas	ADDRESS Denver
NAME Irene Harris	NAME Frank Simpson	NAME Jane Farlow
EMPLOYEE 224050	EMPLOYEE 928473	EMPLOYEE 378596
DEPARTMENT 54310	DEPARTMENT 93678	DEPARTMENT 04410
SALARY 182300	SALARY 140000	SALARY 110000
SEX FEMALE	SEX MALE	SEX FEMALE
BIRTHDAY 07/21/1962	BIRTHDAY 11/30/1913	BIRTHDAY 12/24/1945
ADDRESS Seattle	ADDRESS Chicago	ADDRESS Phoenix

Figure 17. IVP Example Output - First Page

NAME Paul Anderson	NAME Diana Lowery	NAME Michael Johnson
EMPLOYEE 492027	EMPLOYEE 693267	EMPLOYEE 759303
DEPARTMENT 46390	DEPARTMENT 10677	DEPARTMENT 75969
SALARY	SALARY	SALARY
SEX MALE	SEX FEMALE	SEX MALE
BIRTHDAY	BIRTHDAY	BIRTHDAY
ADDRESS New York	ADDRESS Dallas	ADDRESS Denver
NAME Irene Harris	NAME Frank Simpson	NAME Jane Farlow
EMPLOYEE 224050	EMPLOYEE 928473	EMPLOYEE 378596
DEPARTMENT 54310	DEPARTMENT 93678	DEPARTMENT 04410
SALARY	SALARY	SALARY
SEX FEMALE	SEX MALE	SEX FEMALE
BIRTHDAY	BIRTHDAY	BIRTHDAY
ADDRESS Seattle	ADDRESS Chicago	ADDRESS Phoenix

Figure 18. IVP Example Output - Second and Third Pages







# Reader's Comments

## Program Directory for IBM Page Printer Formatting Aid/370 Service Level 0039

You may use this form to comment about this document, its organization, or subject matter with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

For each of the topics below please indicate your satisfaction level by circling your choice from the rating scale. If a statement does not apply, please circle N.

### RATING SCALE

very  
satisfied    1    2    3    4    5    very  
dissatisfied    not  
applicable  
N

	Satisfaction					
Ease of product installation	1	2	3	4	5	N
Contents of program directory	1	2	3	4	5	N
Installation Verification Programs	1	2	3	4	5	N
Time to install the product	1	2	3	4	5	N
Readability and organization of program directory tasks	1	2	3	4	5	N
Necessity of all installation tasks	1	2	3	4	5	N
Accuracy of the definition of the installation tasks	1	2	3	4	5	N
Technical level of the installation tasks	1	2	3	4	5	N
Ease of getting the system into production after installation	1	2	3	4	5	N

How did you order this product?

- \_\_\_ CBPDO
- \_\_\_ CustomPac
- \_\_\_ ServerPac
- \_\_\_ Independent
- \_\_\_ Other

Is this the first time your organization has installed this product?

- \_\_\_ Yes
- \_\_\_ No

Were the people who did the installation experienced with the installation of MVS products?

- \_\_\_ Yes

\_\_\_ No

If yes, how many years? \_\_\_

If you have any comments to make about your ratings above, or any other aspect of the product installation, please list them below:

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Name and Job Title

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Organization

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Address

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Thank you for your participation.

Please send the completed form to (or give to your IBM representative who will forward it to the IBM Page Printer Formatting Aid/370 Development group):

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