

5280



ZY20-8526-0

IBM 5280 Distributed Data System

**I/PAR Functional Unit and
Cause Code Guide**

Serial No. _____
Install Date _____

First Edition (March 1981)

This manual replaces, and makes obsolete, ZY31-0612-0, ZY31-0613-0, ZY31-0615-0, ZY31-0616-0, and ZY31-0617-0. Changes are periodically made to the information herein; these changes will be reported in new editions of this publication.

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INSTRUCTIONS FOR USING THIS GUIDE

For troubles on which a repair action has been taken:

- Record the three-digit major and the two-digit minor codes in the unit field of the I/PAR document.
- Select the cause code that best identifies the action, failure mode, and MAP/diagnostic package effectiveness.
- Record the cause code in the CAU ACT field of the I/PAR document.

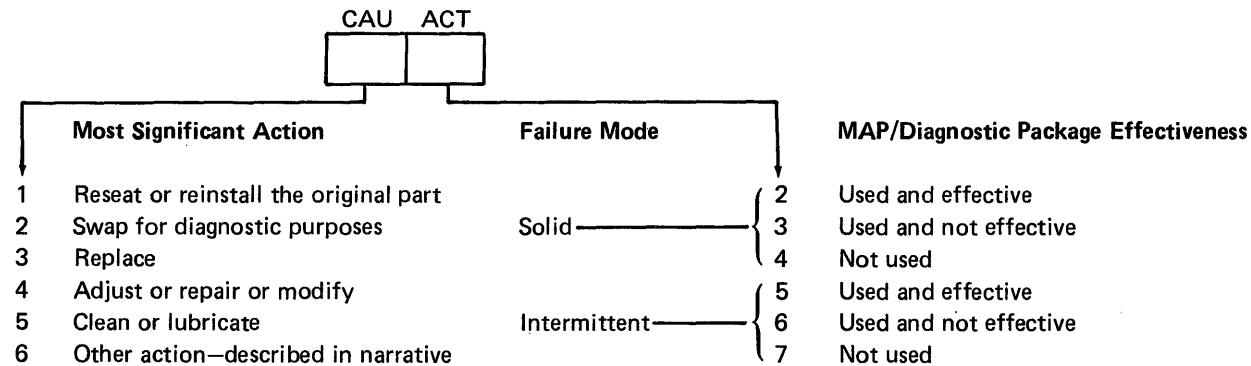
For all *No Trouble Found* calls:

- Refer to major code 960.

CAUSE CODES

(Do not use with major code 960.)

Choose one digit from each column:



Note: Consider the MAPs and diagnostics effective if they identify the failing part or direct you to the appropriate repair action or procedure.

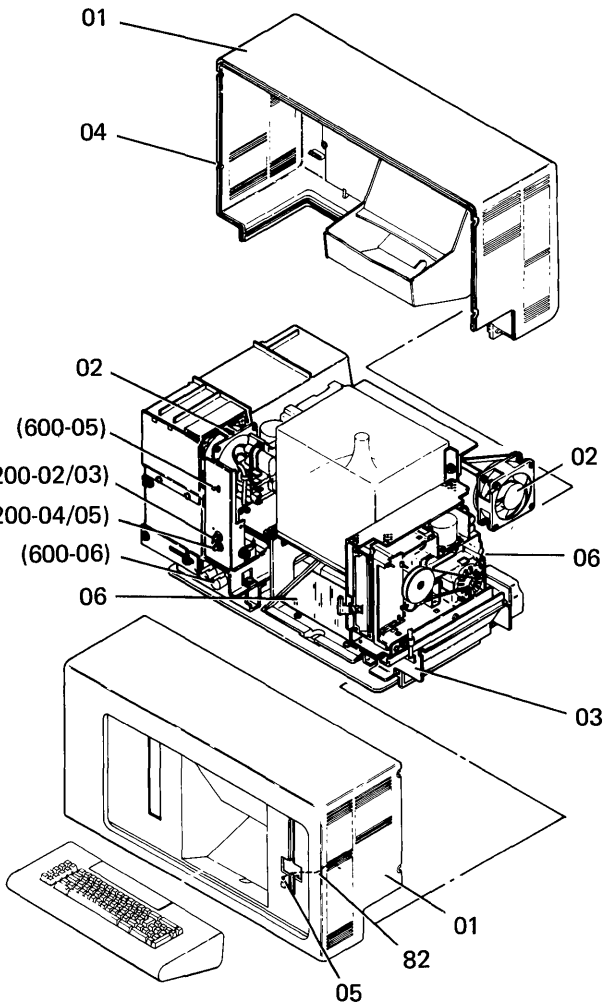
Contents

000 Base 1
 040 Keyboard. 2
 200 Display 3
 300 Logic 4
 302 Storage Cards 5
 312 Diskette Attachment 5
 313 Communications Attachment 5
 315 Printer Attachment 6
 317 Data Station Attachment 6
 340 ROS Patch Cards. 7
 600 Power 8
 612 Power Feature 9
 823 Diskette Drive (31SD) 10
 825 Diskette Drive (51TD) 10
 870 Customer Responsibility. 11
 960 No Trouble Found. 11
 990 Feature/RPQs. 12

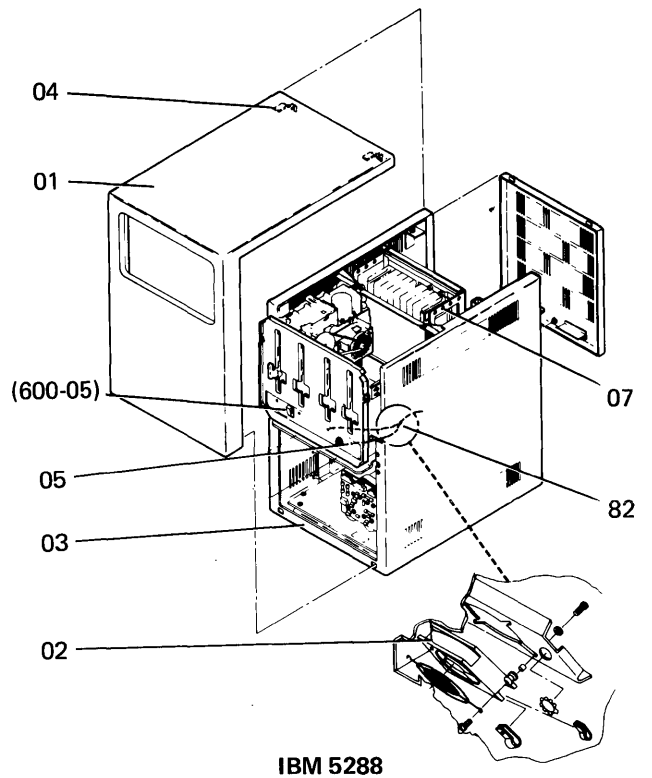
Note: Numbers shown in parenthesis on an illustration are numbers that are referenced from other major codes.

000 Base

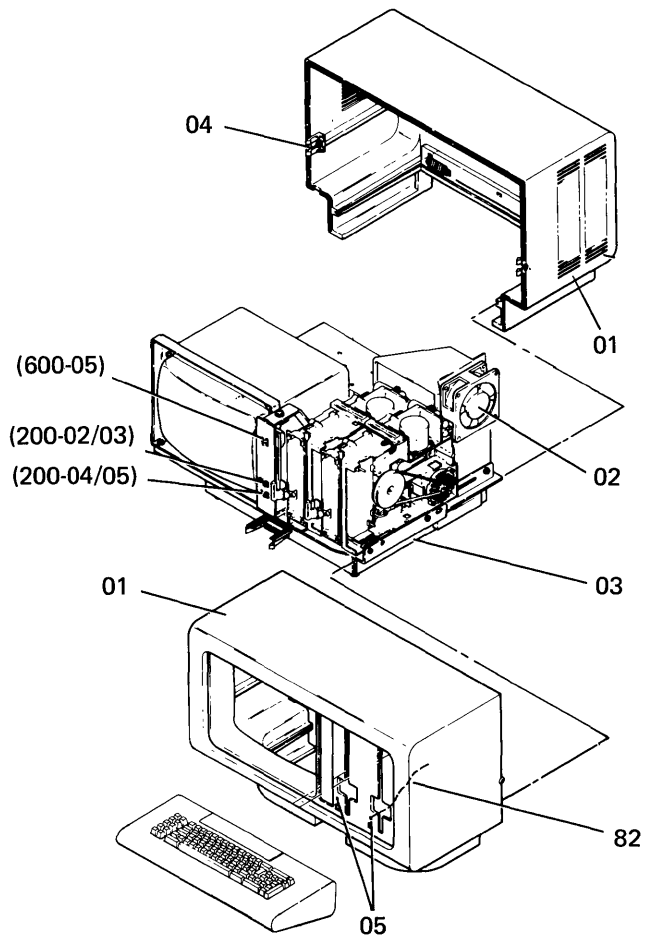
- 01 Covers
- 02 Fan
- 03 Frame
- 04 Latches/hinges
- 05 LEDs
- 06 Mirror (IBM 5282/5286 only)
- 07 Gate hardware (IBM 5288 only)
- 82 Cables/connectors (LED)
- 00 Other (Explain in the comments section.)



IBM 5282/5286



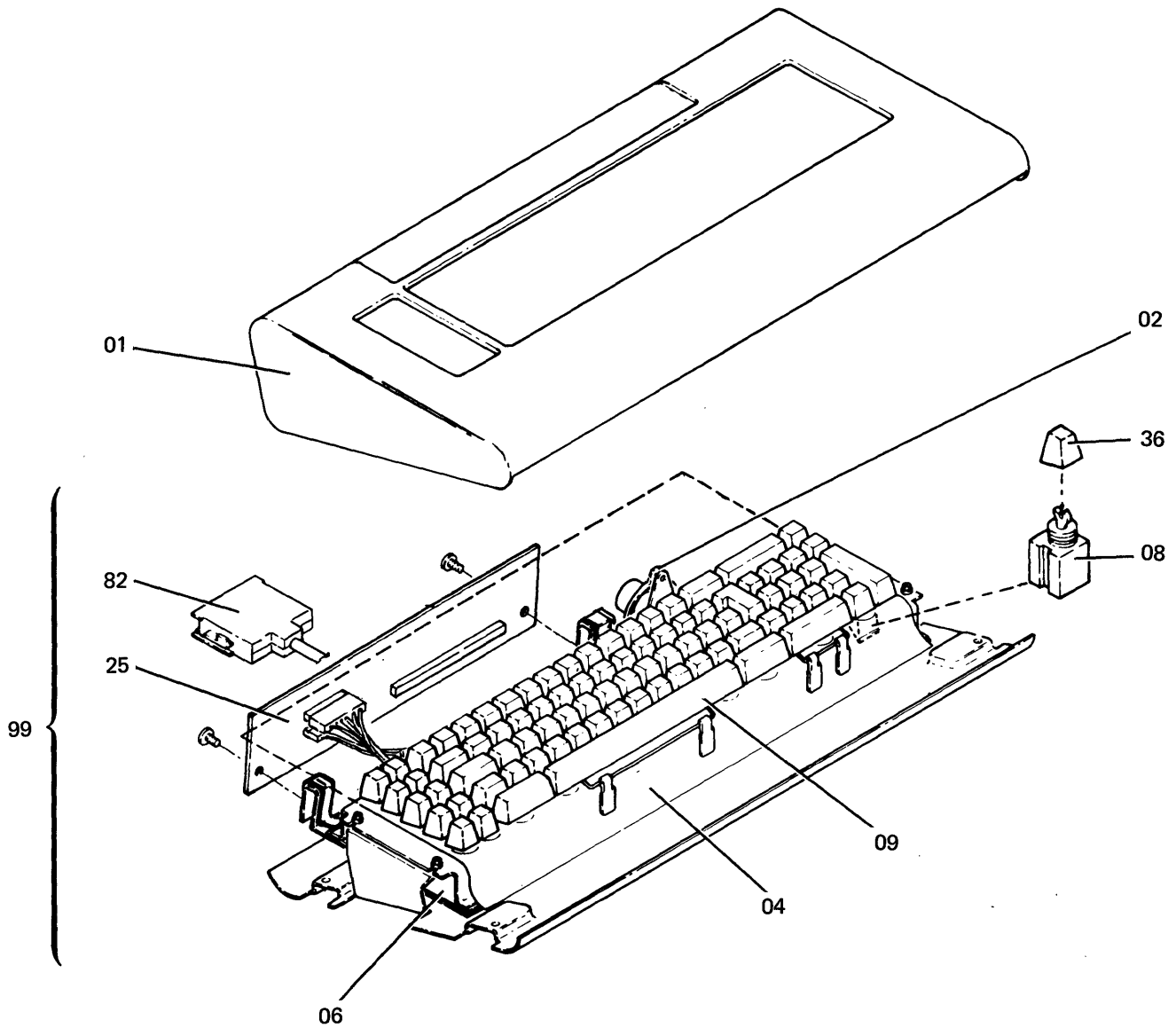
IBM 5288



IBM 5281/5285

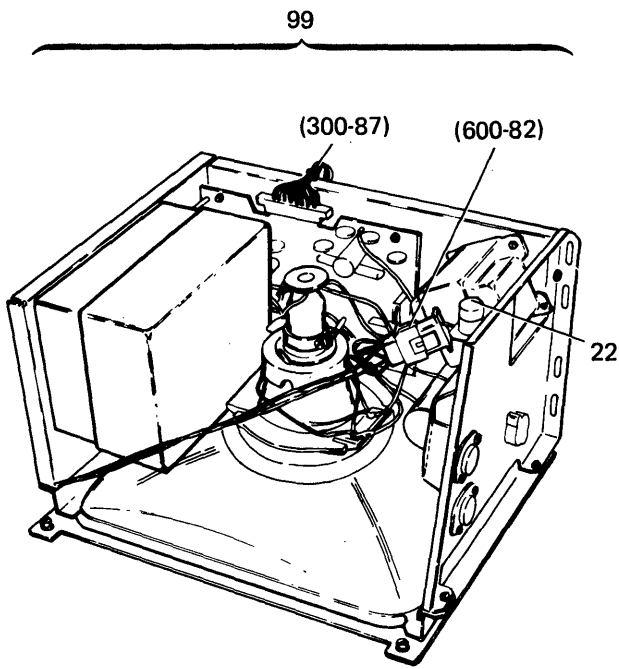
040 Keyboard

- 01 Cover
- 02 Speaker
- 04 Dust cover
- 06 Pad printed circuit board
- 08 Key module
- 09 Spacebar
- 25 Keyboard logic card
- 36 Keytop
- 82 Cables/connectors
- 99 Unit replacement
- 00 Other (Explain in comments section.)

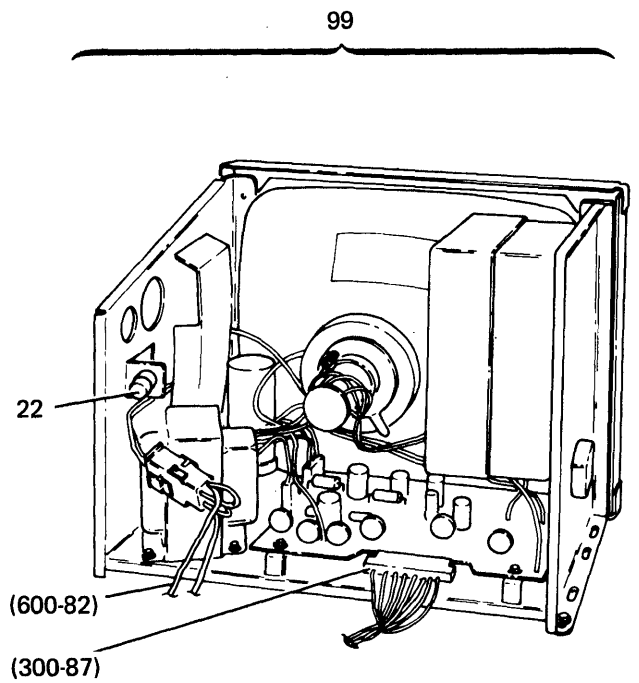


200 Display

- 02 Brightness control knob
 - 03 Brightness potentiometer
 - 04 Contrast control knob
 - 05 Contrast potentiometer
 - 22 Display fuse
 - 99 Unit replacement
 - 00 Other (Explain in the comments section.)
- } See 000 Base
for location



IBM 5282/5286

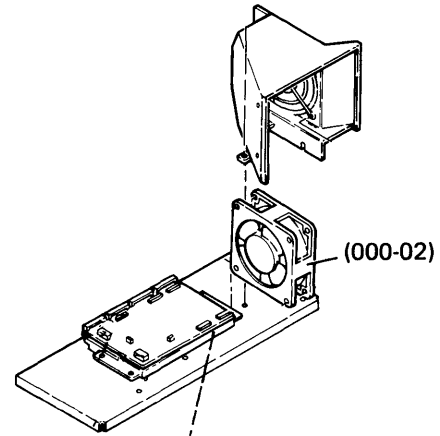


IBM 5281/5285

300 System Logic

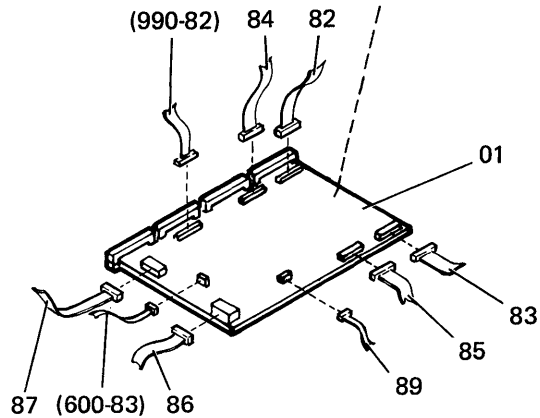
IBM 5285/5286

- 01 A logic board
- 02 A-C1 diskette/main MPU
- 03 A-A1 keyboard/display MPU
- 04 A-B1 MSR/elapsed-time counter
- 05 A-D3 VFO
- 06 A-E5 Feature main MPU
- 82 Cables/connectors diskette (A-C1)
- 83 Cables/connectors keyboard (A-A1)
- 84 Cables/connectors MSR/ETC (A-B1)
- 00 Other (Explain in the comments section.)



IBM 5288

- 01 A logic board
- 02 A-A1 diskette/main MPU
- 03 A-C1 keyboard/display MPU
- 04 A-D1 MSR/elapsed-time counter
- 05 A-B3 VFO
- 06 A-K1 Feature main MPU
- 81 Cables/connectors (J4, JC)
- 82 Cables/connectors diskette (A-A1)
- 83 Cables/connectors keyboard (A-C1)
- 84 Cables/connectors MSR/ETC (A-D1)
- 00 Other (Explain in the comments section.)

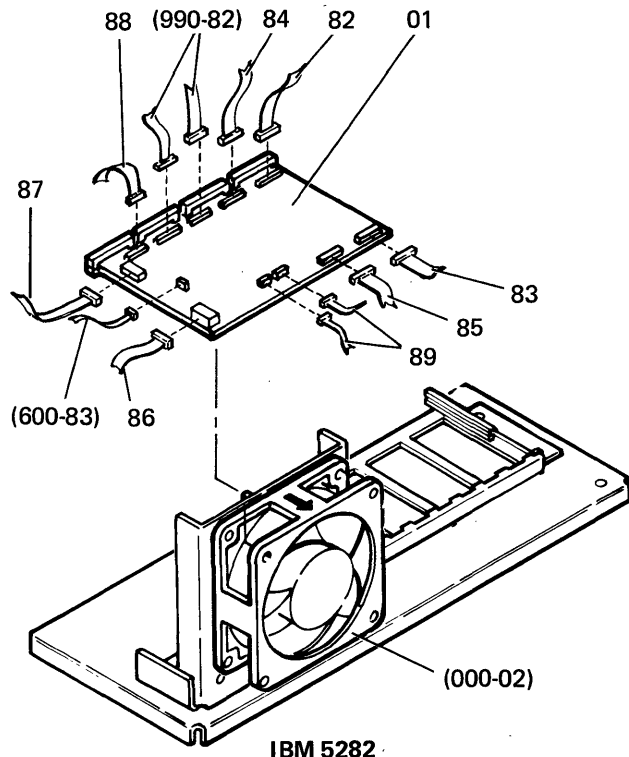


IBM 5281

IBM 5281/5282

(See the following illustrations)

- 01 Driver/receiver card
- 82 Diskette drive A cable (output)
- 83 Diskette drive A cable (input)
- 84 Diskette drive B cable (output)
- 85 Diskette drive B cable (input)
- 86 Keyboard/display cable (input)
- 87 Keyboard/display cable (output)
- 88 Keyboard output cable
- 89 MSR cable (input)
- 00 Other (Explain in the comments section.)



IBM 5282

**302 System Storage Cards
(IBM 5285/5286/5288)**

- 02 16K (Blue)
- 03 32K (Orange)
- 04 64K (Red)
- 00 Other (Explain in the comments section.)

312 Diskette Attachment

IBM 5285/5286

- 01 A-D1 driver/receiver
- 82 Cables/connectors (A-D1)
- 00 Other (Explain in the comments section.)

IBM 5288

- 01 A-B1 driver/receiver
- 02 A-E5 diskette MPU
- 03 A-F7 VFO
- 04 A-G7 driver/receiver
- 81 Cables/connectors (A-B1)
- 82 Cables/connectors (A-E5)
- 84 Cables/connectors (A-G7)
- 00 Other (Explain in the comments section.)

313 Communications Attachment

IBM 5285

BSC	SDLC/SNA	
01	02	A-D7 38LS
03	04	A-D7 EIA/CCITT
05	06	A-D7 DDSA
07	08	A-E5 Communications MPU (w/o 3270)
09	09	Jumpers/switches
10	11	A-E5 Communications MPU (with 3270)
82	82	Cables/connectors (A-E5)
83	83	Cables/connectors (external)
00	00	Other (Explain in the comments section.)

IBM 5288

BSC	SDLC/SNA	
01	02	A-J7 38LS
03	04	A-J7 EIA/CCITT
05	06	A-J7 DDSA
07	08	A-K5 Communications MPU (w/o 3270)
09	09	Jumpers/switches
10	11	A-K5 Communications MPU (with 3270)
82	82	Cables/connectors (A-K5)
83	83	Cables/connectors (external)
00	00	Other (Explain in the comments section.)

315 Printer Attachment

IBM 5285

- 01 A-D5 printer MPU (Twinaxial)
- 02 A-D5 printer MPU (Start-stop)
- 82 Cables/connectors (A-D5)
- 00 Other (Explain in the comments section.)

IBM 5288

- 01 A-B5 printer MPU (Twinaxial)
- 02 A-B5 printer MPU (Start-stop)
- 82 Cables/connectors
- 00 Other (Explain in the comments section.)

317 Data Station Attachment

IBM 5285/5286

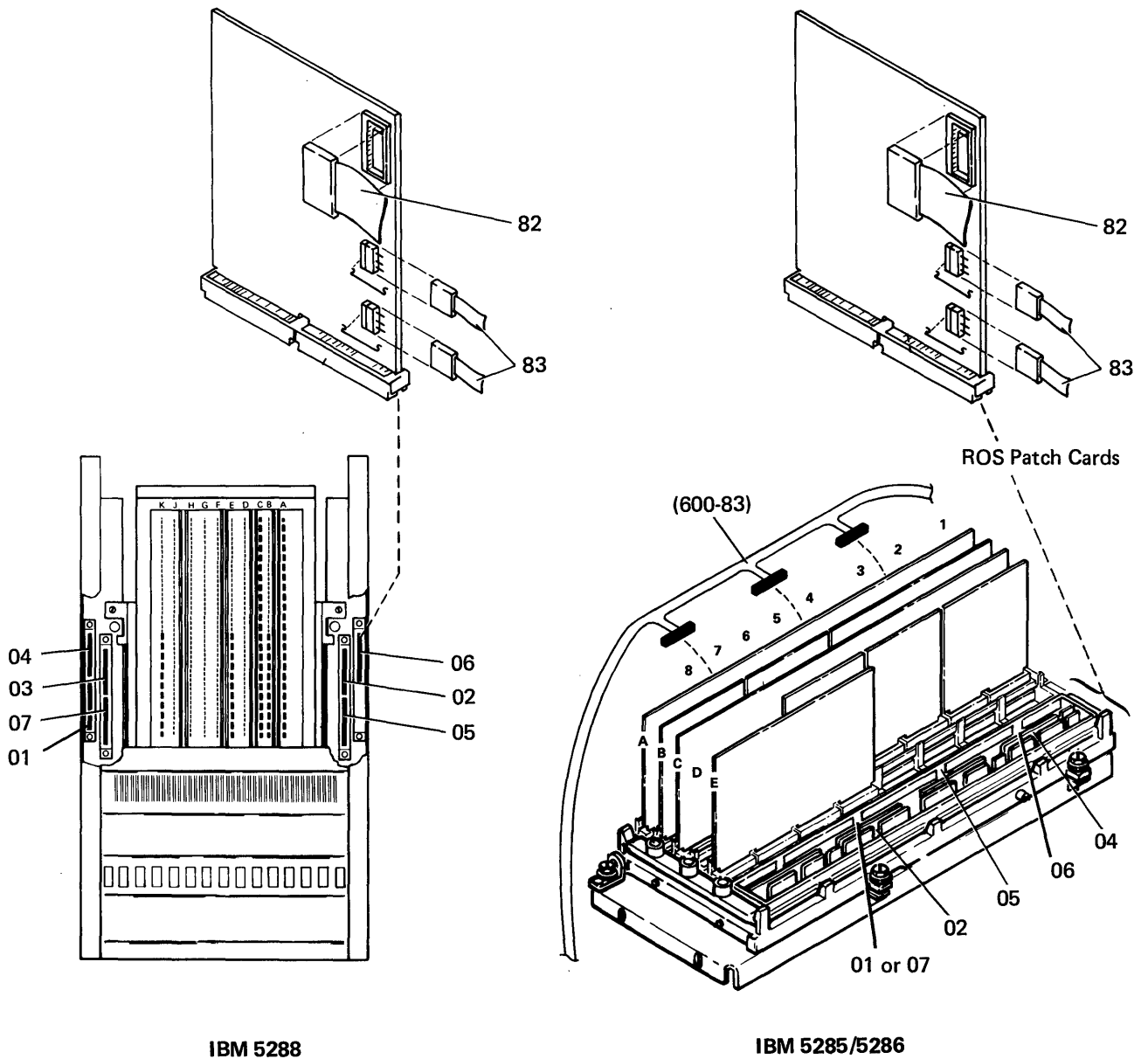
- 01 A-B7 keyboard/display storage
- 02 A-E1 data station adapter
- 82 Cables/connectors (A-E1)
- 00 Other (Explain in the comments section.)

IBM 5288

- 01 A-D5 keyboard/display storage
- 02 A-D7 keyboard/display storage
- 03 A-E1 data station adapter
- 04 A-F1 data station adapter
- 05 A-G1 data station adapter
- 83 Cables/connectors (A-E1)
- 84 Cables/connectors (A-F1)
- 85 Cables/connectors (A-G1)
- 00 Other (Explain in the comments section.)

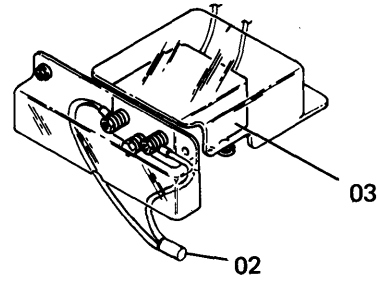
340 ROS Patch Cards

- 01 Communications (IBM 5285/5288)
- 02 Base Diskette
- 03 Feature diskette (IBM 5288)
- 04 Keyboard/display
- 05 Base main MPU
- 06 Printer (IBM 5285/5288)
- 07 Feature main MPU
- 82 Cables/connectors (signal)
- 83 Cables/connectors (power)
- 00 Other (Explain in the comments section.)

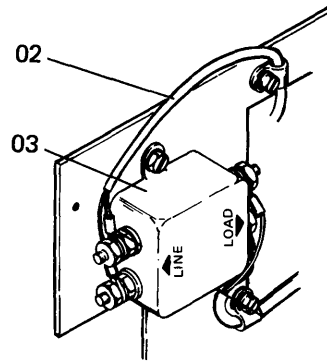


600 Power

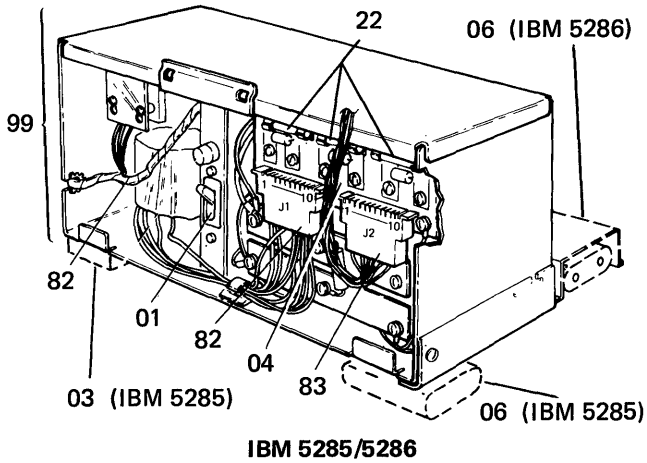
- 01 Circuit breaker (IBM 5285/5286/5288)
- 02 Power cord
- 03 Line filter
- 04 Base board assembly 1
- 05 Power switch (See 000 Base)
- 06 Resonant capacitor (IBM 5285/5286/5288)
- 07 Relay (IBM 5281/5282)
- 08 Base board assembly 2 (IBM 5288)
- 22 Fuse
- 82 Cables/connectors AC
- 83 Cables/connectors DC
- 00 Other (Explain in the comments section.)



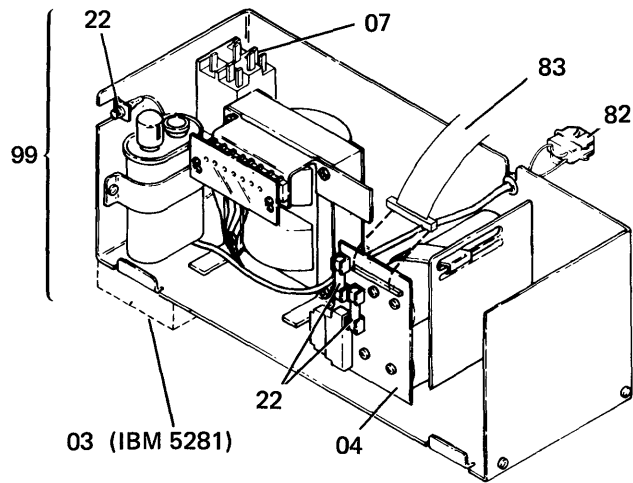
IBM 5281/5285



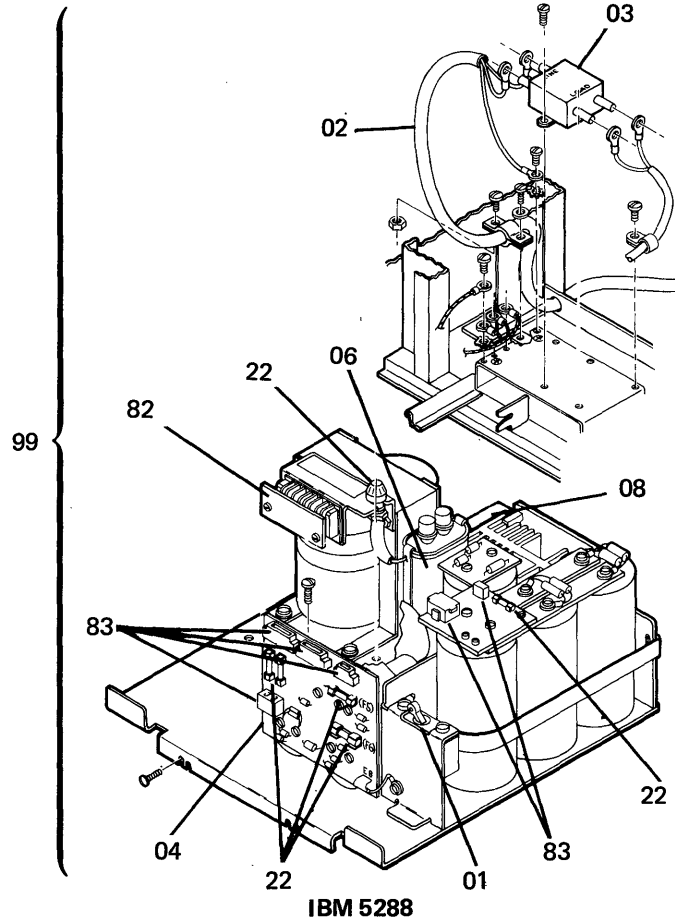
IBM 5282/5286



IBM 5285/5286



IBM 5281/5282



IBM 5288

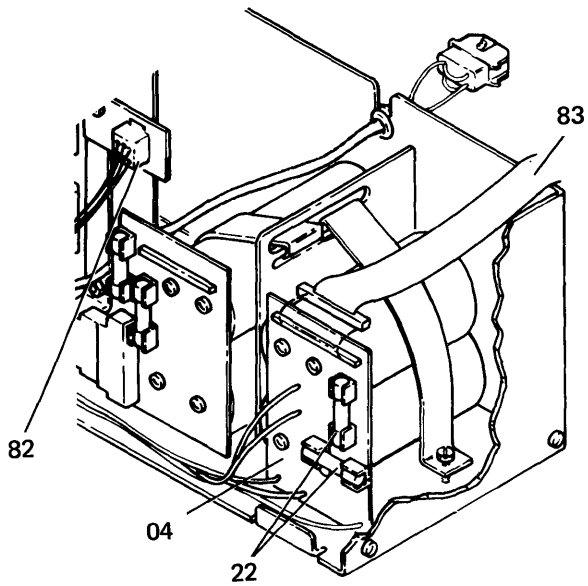
612 Power Feature

IBM 5281/5282

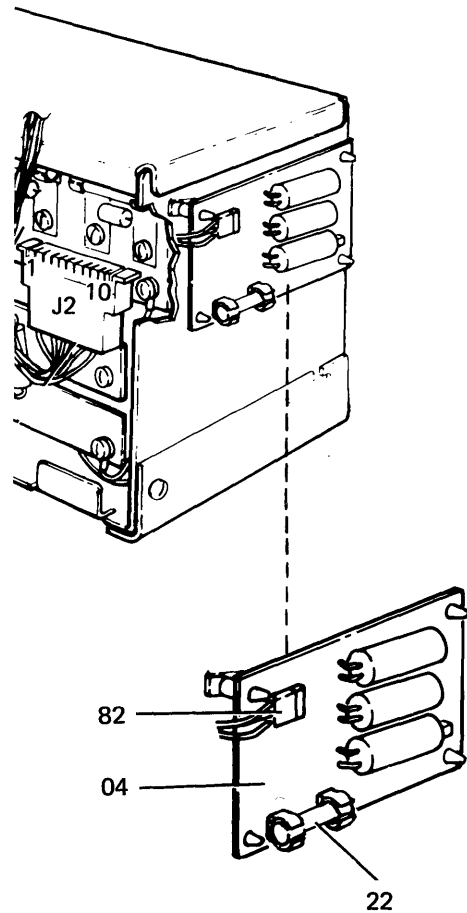
- 04 Feature board assembly
- 22 Fuse
- 82 Cables/connectors AC
- 83 Cables/connectors DC
- 00 Other (Explain in the comments section.)

IBM 5285

- 04 Communications feature board
- 22 Fuse
- 82 Cables/connectors
- 00 Other (Explain in the comments section.)



IBM 5281/5282



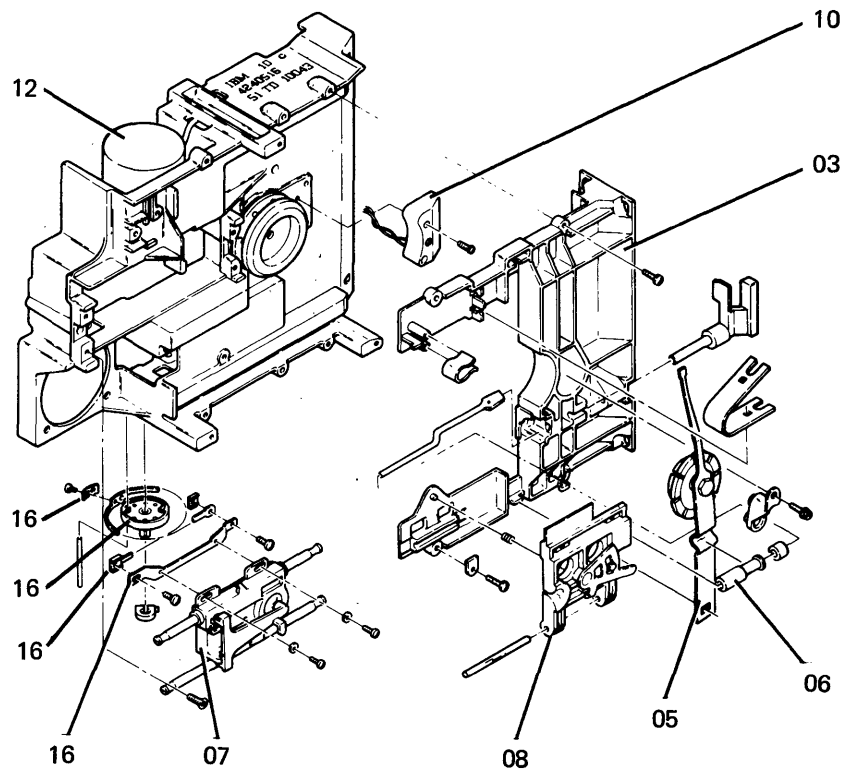
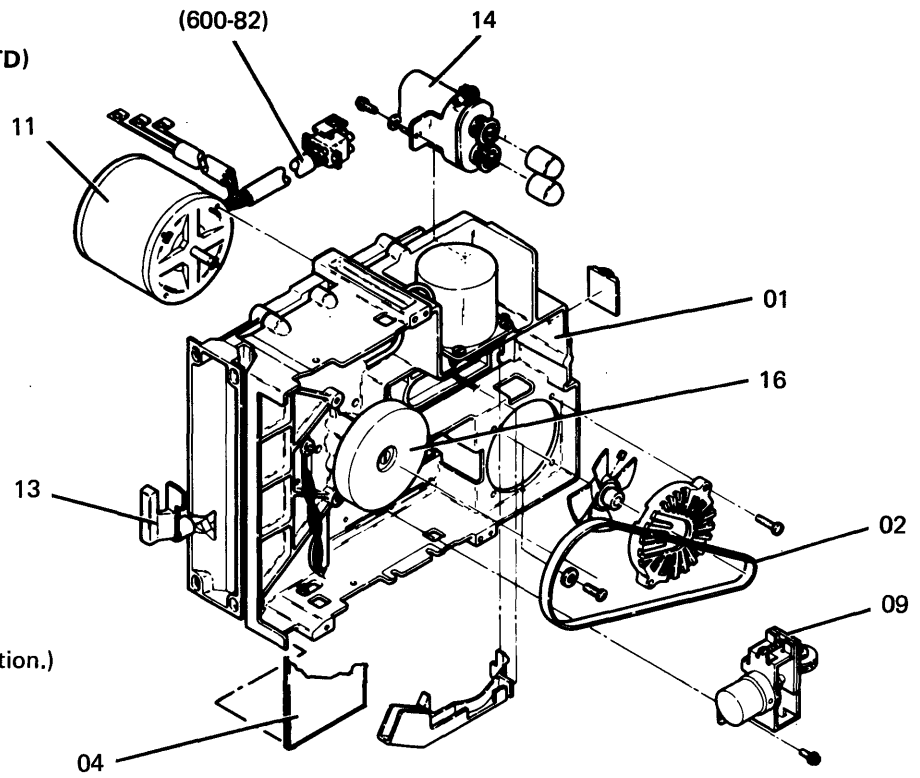
IBM 5285

823 Diskette Drive 1 (Single-sided 31SD)

Use the minor codes listed under 825

825 Diskette Drive 2D (Dual-sided 51TD)

- 01 Frame/mounting hardware
- 02 AC drive belt
- 03 Diskette guide
- 04 Diskette drive control card
- 05 Collet/flat spring assembly
- 06 Collet roll assembly
- 07 Head carriage assembly
- 08 Head load bail assembly
- 09 Head load solenoid assembly
- 10 LED/PTX assembly
- 11 AC drive motor
- 12 Stepper motor
- 13 Diskette locking lever
- 14 AC motor capacitor
- 16 Band/pulley/clamp
- 82 Cables/connectors
- 99 Unit replacement
- 00 Other (Explain in the comments section.)



870 CUSTOMER RESPONSIBILITY

Use only service codes 14, 16, 21, 25, 26 and 30 with major code 870.

- 01 Customer application program
- 02 Customer-owned cables/hardware
- 03 Diskette (media)
- 04 Environment
- 05 External non-IBM modem
- 06 External telephone company
- 07 Incorrect procedures/operator error
- 08 Power failure
- 00 Other (Explain in the comments section.)

Cause Codes for 870

- 91 Verification procedures were incorrect or misleading.
- 92 Verification procedures were not used.

960 NO TROUBLE FOUND

Use 960 to report calls when an error is reported but no repair action is taken.

- Use the customer four-digit error code in the *minor* and *cause* area of the I/PAR.

Example:

Major	Minor	Cause
960	10	20

(The customer-reported error code was 1020.)

- For power-on checkout problems, use 60 in the *minor* area, and report the number of ■ symbols remaining on screen in the *cause* area.

Example:

Major	Minor	Cause
960	60	02

(Two ■ symbols were on the screen at the time of the failure.)

- For other than power or no reported error codes, explain the symptom in the comments section.

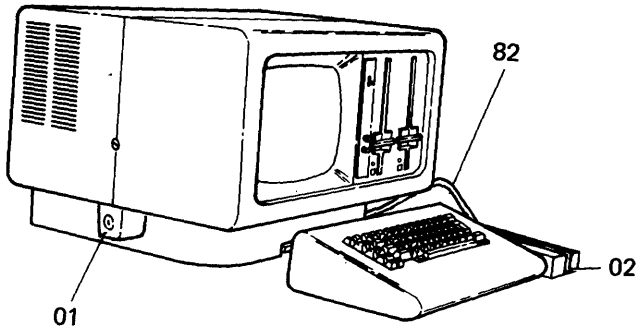
Example:

Major	Minor	Cause
960	00	00

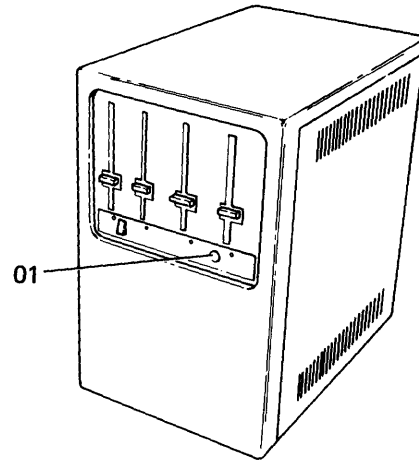
Note: For communications, enter CXXX error codes as 4XXX, and enter DXXX error codes as 5XXX.

990 Features/RPQs

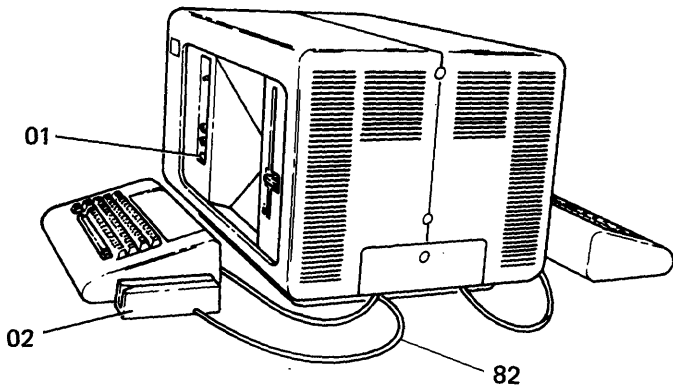
- 01 Keylock (IBM 5285/5286/5288)
- 02 Magnetic stripe reader (MSR)
- 82 Cables/connectors
- 00 Other (Explain in the comments section.)



IBM 5281/5285



IBM 5288



IBM 5282/5286



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