S/390

Parts Catalog

Multiprise® 3000 Enterprise Server

S/390

Parts Catalog

IBM

> ┌── **Note!** ──┐
>
> Before using this information and the product it supports, read the information under Appendix B, "Notices" on page 39.
>
> └──┘

Second Edition (June, 2000)

This edition applies to the S/390 Multiprise 3000 Enterprise Server.

Contents

Preface

Using This Guide

This Parts Catalog contains listings and illustrations of replaceable assemblies and detailed parts.

Who Should Use This Guide

IBM has prepared this manual for the use of IBM customer service representatives in the installation, maintenance, and repair of the specific machines indicated. IBM makes no representations that it is suitable for any other purpose.

Use the following procedure to determine the part numbers of the FRUs within a CPC or expansion box.

1

Ensure you are logged on the support element in service mode.
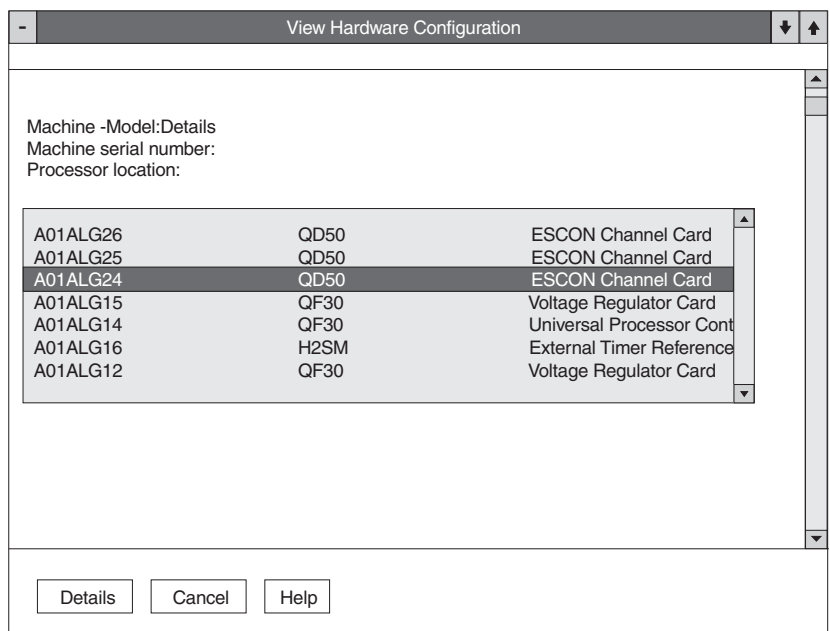
On the Support Element Workplace window:

1. Open **Task List** from **Views**.
2. Open **CPC Configuration Tasks** from the **Task List Work** area.
3. Open **Groups** from **Views**.
4. Drag the **CPC** icon (using the right-hand mouse button) and drop it on **View Hardware Configuration** under **CPC Configuration Tasks**.

2

On the View Hardware Configuration window:

1. Select the part location from the menu.

2. Select **Details**.

-	View Hardware Configuration	⬇ ⬆

Machine -Model:Details
Machine serial number:
Processor location:

A01ALG26	QD50	ESCON Channel Card
A01ALG25	QD50	ESCON Channel Card
A01ALG24	QD50	ESCON Channel Card
A01ALG15	QF30	Voltage Regulator Card
A01ALG14	QF30	Universal Processor Cont
A01ALG16	H2SM	External Timer Reference
A01ALG12	QF30	Voltage Regulator Card

Details	Cancel	Help

3

The Part Details windows shows information about the selected part.

When complete, select **OK**.

End of procedure.

Part Details	
Part identifier:	QD50
Location:	A01ALG24
Part number:	14F7322
Serial number:	3374913
Engineering change number:	C100148

OK   Help

Catalog Section

Assembly 1: Frame Assembly
Rear and side view

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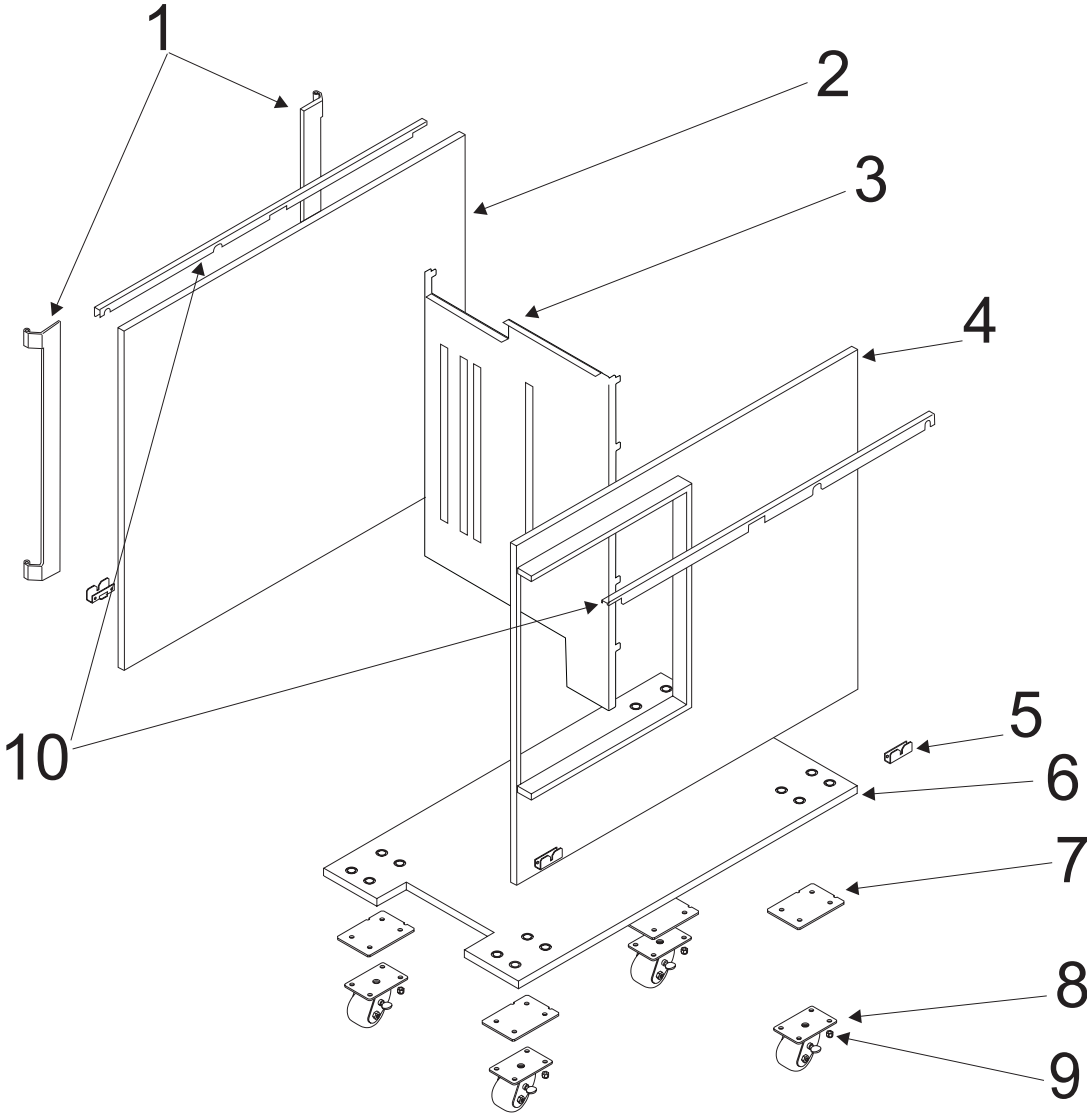
Asm–Index	Part Number	Units	Description
1–1	21L3833	2	Hinge
			Use 21F9002, (18) screws
–2	21L3366	1	Plate, Right Side
			Use 54G2882, (7) screws
–3	31L7094	1	Plate, Stiffener
			Use 21F9002, (12) screws
–4	31L7636	1	Plate, Left Side
			Use 54G2882, (7) screws
–5	21L3832	4	Bracket, Cover, Lower Mounting
			Use 21F9002, (8) screws
–6	05N6849	1	Base, Enclosure
–7	31L7644	4	Plate, Caster
–8	46G3536	4	Caster, Swivel
–9	1622419	16	Nut, M6 Elastic Stop
–10	21L3831	2	Bracket, Cover, Upper Mounting
			Use 21F9002, (12) screws

Assembly 2: Frame Assembly
Rear and side view
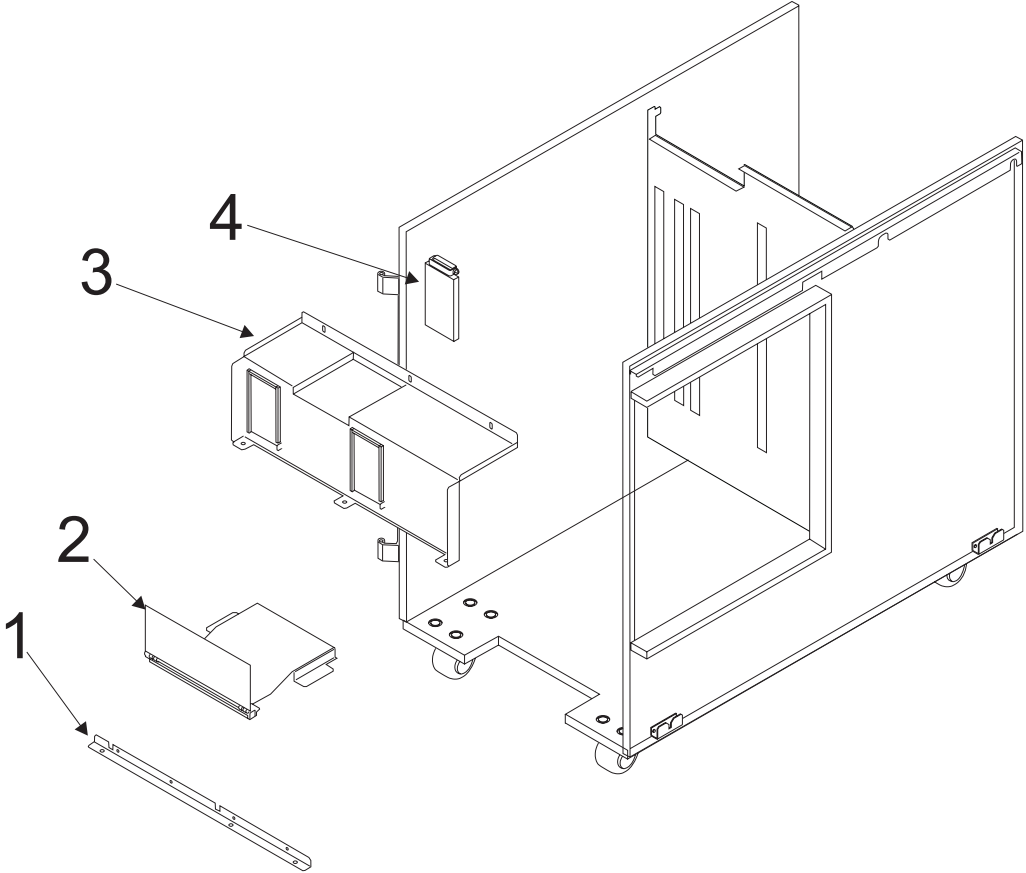
Asm–Index	Part Number	Units	Description
2–1	21L3345	1	Bracket, Panel Mounting
			Use 21F9002, (4) screws
–2	31L7420	2	Lower Service Door Assembly
			Use 1624775, (8) screws
–3	31L7694	1	Bracket, Exhaust Plenum
			Use 21F9002, (2) screws
			Use 1624775, (6) screws
–4	31L7098	2	Exhaust Flap Assembly
			Use 21F9002, (4) screws

Assembly 3: Frame Assembly

Rear and side view
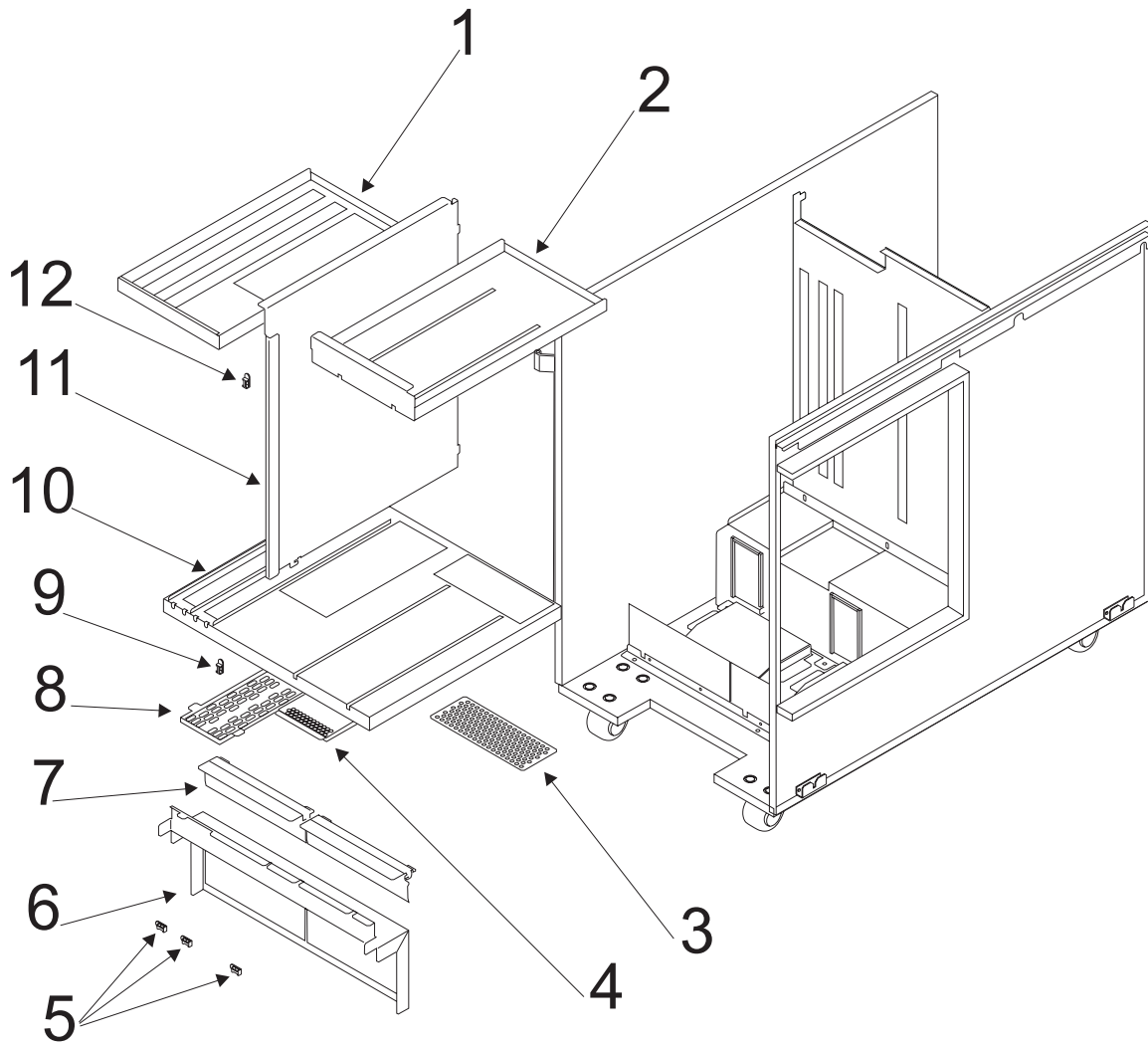
Asm–Index	Part Number	Units	Description
3–1	21L3352	1	Bracket, Upper Book Guide
			Use 1624775, (6) screws
–2	31L7633	1	Bracket, Upper PCI Guide
			Use 1624775, (6) screws
–3	31L7453	1	Plate, PCI Perforated
			Use 21F9002, (2) screws
–4	21L3791	1	Plate, PMI Perforated
			Use 21F9002, (4) screws
–5	84X5038	3	Tie Base
			Use 1624764, (3) screws
–6	31L7635	1	Bracket, Blower Mounting
			Use 21F9002, (10) screws
–7	31L7430	2	Upper Service Door Assembly
			Use 21F9002, (4) screws
–8	21L3792	1	Plate, OCA Perforated
			Use 21F9002, (4) screws
–9	84X5038	1	Tie Base
			Use 1624764, (1) screw
–10	31L7634	1	Bracket, Lower Guide
			Use 1624775, (8) screws
			Use 21F9002, (5) screws
–11	31L7695	1	Bracket, Rail Divider
			Use 21F9002, (2) screws
–12	84X5038	1	Tie Base
			Use 1624764, (1) screw

Assembly 4: Frame Assembly

Rear and side view
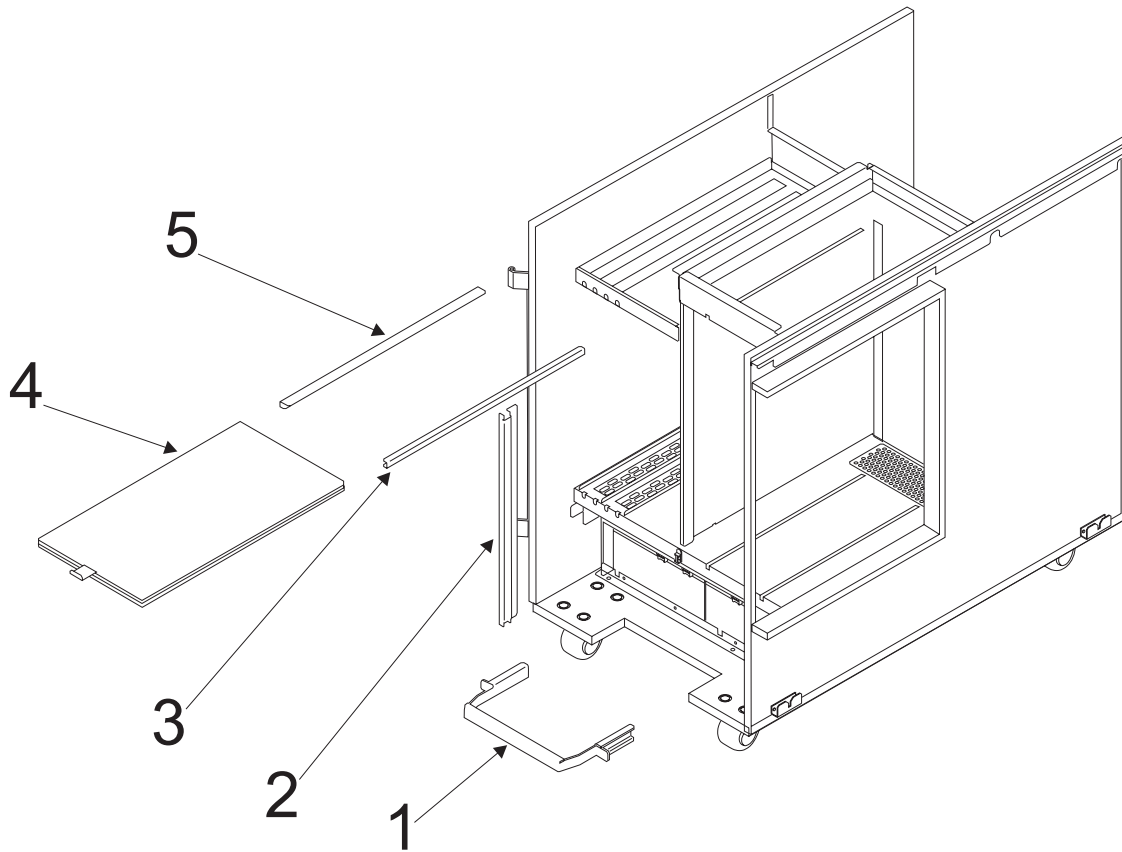
Asm–Index	Part Number	Units	Description
4–1	21L3837	1	Bracket, Cable Retainer
			Use 1624775, (2) screws
–2	21L3354	1	Bracket, Pitch Filler
			Use 1624775, (2) screws
–3	21L3789	1	Bracket, Right Filter
			Use 21F9002, (2) screws
–4	21L3787	1	Air Filter
–5	21L3788	1	Bracket, Left Filter
			Use 21F9002, (2) screws

Assembly 5: Frame Assembly
Front and side view

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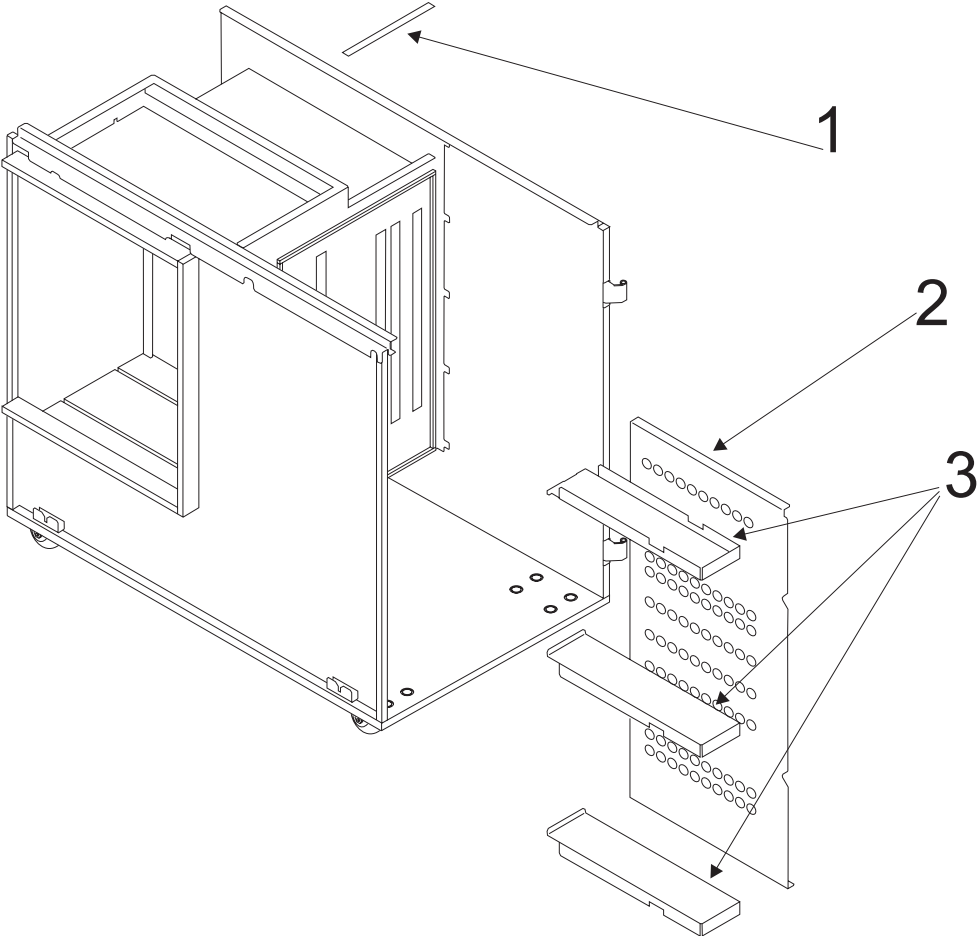
Asm–Index	Part Number	Units	Description
5–1	21L3804	1	Foam, Cable Tray
–2	31L7034	1	Plate, Battery Wall
			Use 1624775, (7) screws
–3	21L3510	3	Bracket, IBF
			Use 1624775, (12) screws

| **Assembly 6: Frame Assembly**
| Rear and side view
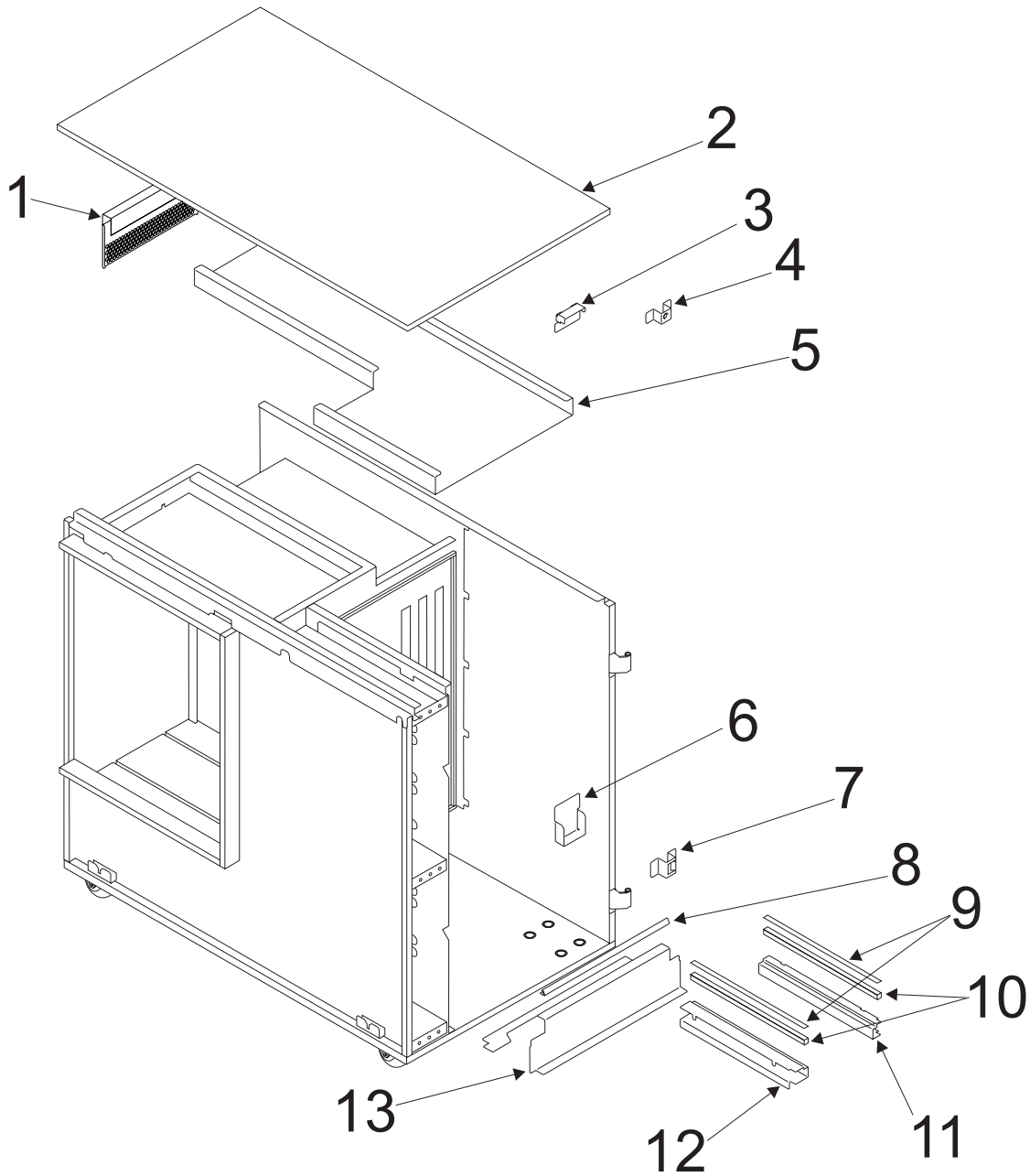
Asm– Index	Part Number	Units	Description
6–1	21L3853	1	Plate, Inlet Perforated
			Use 1624775, (2) screws
–2	31L7024	1	Plate, Enclosure Top
			Use 21F9002, (23) screws
–3	45L3588	1	Upper Guide Bracket
			Use 21F9002, (3) screws
–4	45L3592	1	Bracket Upper Pin Locator
			Use 1624742, (2) screws
–5	21L3802	1	Cable Tray
			Use 21F9002, (11) screws
–6	45L3589	1	Lower Guide Bracket
			Use 21F9002, (3) screws
–7	45L3593	1	Lower Pin Locator
			Use 1624742, (2) screws
–8	21L3374	1	Gasket, EMC
–9	31L7417	2	Film, Plenum
–10	31L7416	2	Foam, Plenum
–11	31L7415	1	Bracket, Right Cage Support
			Use 21F9002, (2) screws
–12	31L7414	1	Bracket, Left Cage Support
			Use 21F9002, (2) screws
–13	21L3372	1	Plate, Air deflector
			Use 21F9002, (6) screws

Assembly 7: Frame Assembly with Doors
Front and side view
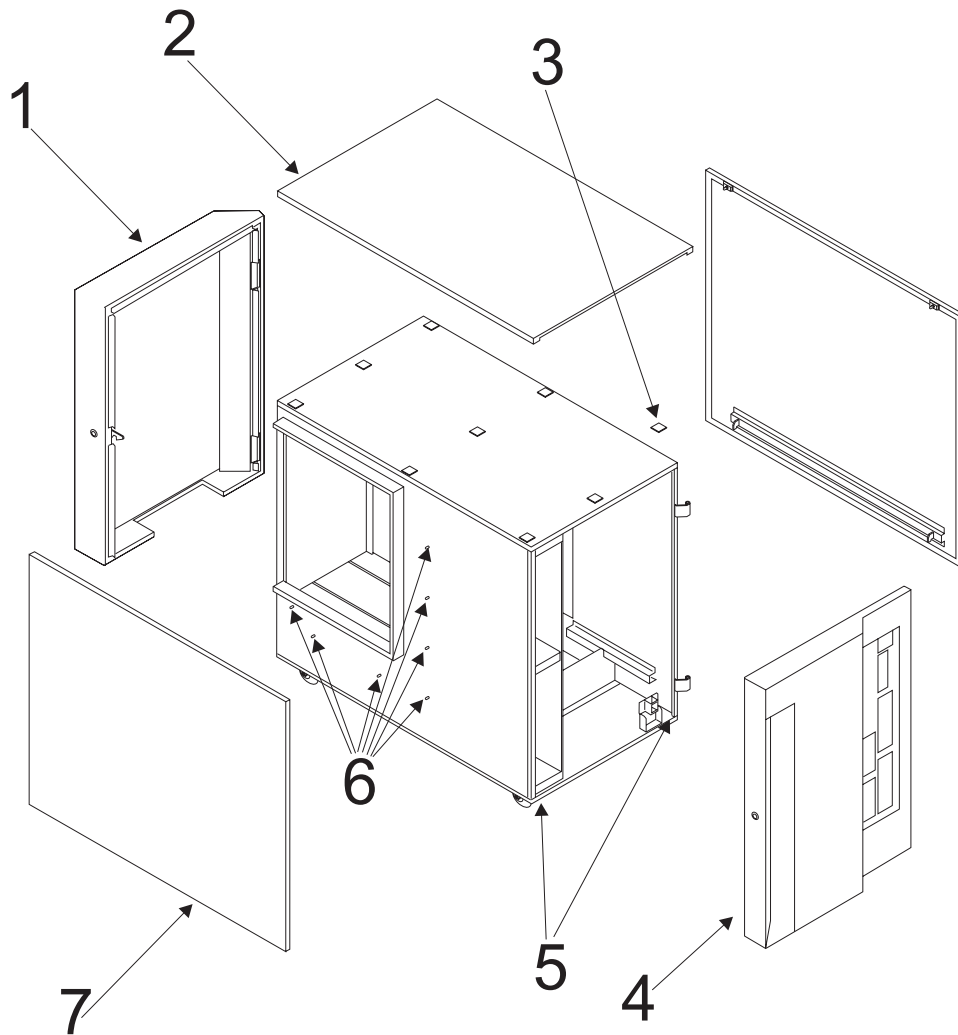
Asm–Index	Part Number	Units	Description
7–1	21L3840	1	Rear Door
–2	21L3828	1	Cover, Top
			Use 21F9002, (4) screws
–3	21L3830	9	Pad
–4	45L3587	1	Front Door
–5	19F0740	1	Gasket
			Cut two (2) pieces 831.7 mm long
–6	31L7648	8	Cap
–7	12K0277	2	Cover, Side

Assembly 8: Covers and Frame

Assembly view, front and side
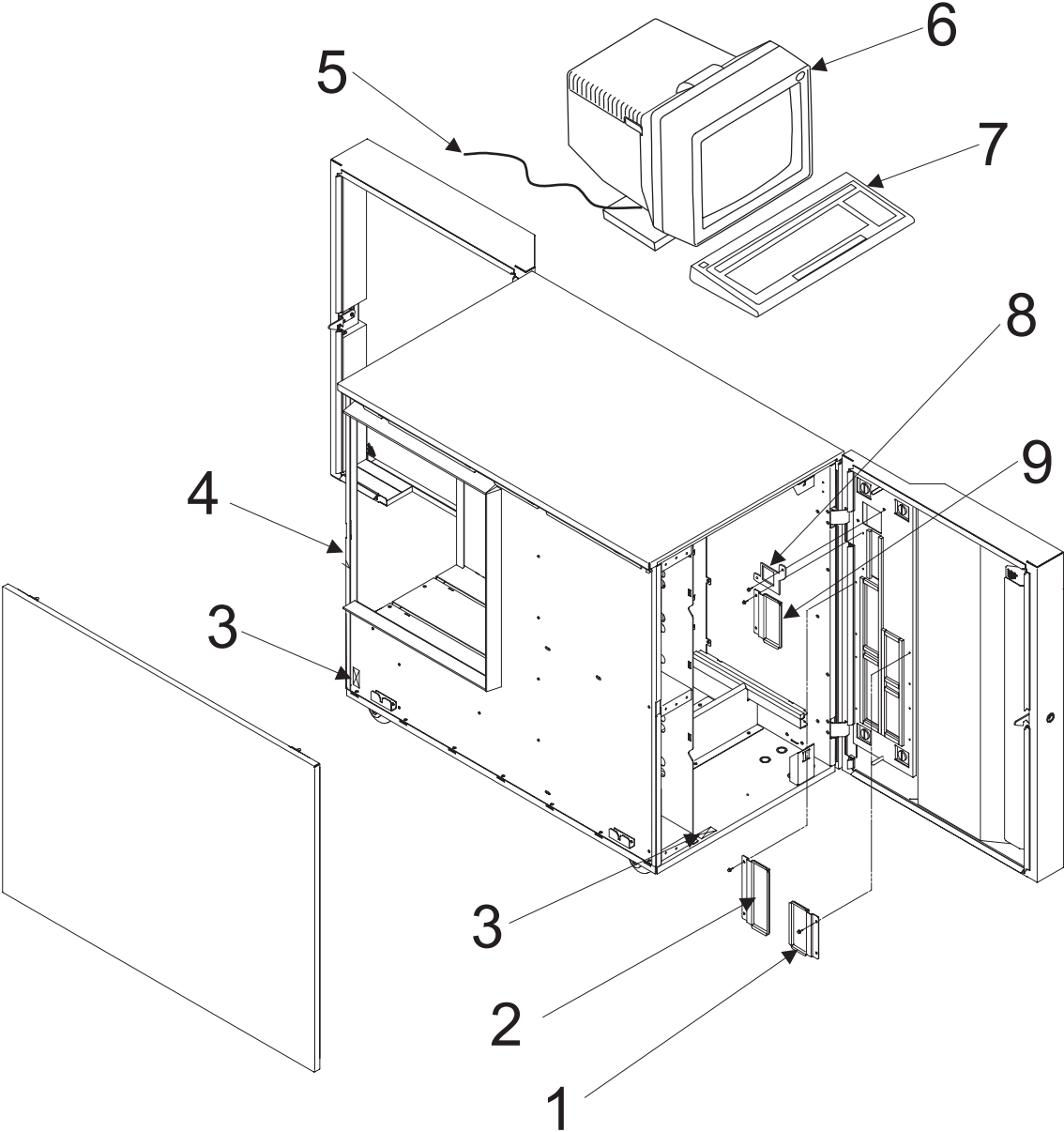
Asm–Index	Part Number	Units	Description
8–1	45L3598	AR	DAT Decorative Cover Plate
			Use 1624764, (2) screws
–2	45L3599	AR	CDROM Decorative Cover Plate
			Use 1624764, (2) screws
–3	42G4996	AR	Label Blank
–4	31L7972	1	Frame Assembly, Base (Processor)
–4	31L7974	1	Frame Assembly, DASD Expansion
–4	31L7976	1	Frame Assembly, I/O Expansion
–5	31L7062	1	Line Cord, Monitor, US/Canada
–5	13F9979	1	Line Cord, Monitor, France, Germany Spain, Portugal, Brazil, Norway, Sweden, Finland, Netherlands, Belgium, Denmark
–5	14F0069	1	Line Cord, Monitor, Italy
–5	38F3968	1	Line Cord, Monitor, French Canada, UK
–5	6952301	1	Line Cord, Monitor, French Canada, UK
–5	14F0051	1	Line Cord, Monitor, Switzerland
–6	60H9963	1	Monitor, 19 inch (17.9 inch viewable)
–6	60H9965	1	Monitor, 19 inch (17.9 inch viewable)
–6	60H9967	1	Monitor, 21 inch (19.8 inch viewable)
–6	60H9969	1	Monitor, 21 inch (19.8 inch viewable)
–7	07H0665	1	Keyboard Assembly, US
–7	07H0680	1	Keyboard Assembly, French
–7	07H0681	1	Keyboard Assembly, German
–7	07H0669	1	Keyboard Assembly, Spanish (Not Spain)
–7	07H0696	1	Keyboard Assembly, Spanish
–7	07H0687	1	Keyboard Assembly, Italian
–7	42H1295	1	Keyboard Assembly, Canadian French
–7	07H0690	1	Keyboard Assembly, Portuguese
–7	07H0671	1	Keyboard Assembly, Brazilian Portuguese
–7	07H0701	1	Keyboard Assembly, UK English
–7	07H0688	1	Keyboard Assembly, Norwegian
–7	07H0697	1	Keyboard Assembly, Swedish/Finnish
–7	07H0679	1	Keyboard Assembly, Dutch
–7	07H0675	1	Keyboard Assembly, Belgian French
–7	07H0678	1	Keyboard Assembly, Danish
–7	07H0698	1	Keyboard Assembly, Swiss French, German
–8	31L7690	1	Bezel Assembly
			Use 1621190, (2) screws
–9	45L3600	1	Floppy Disk Decorative Cover Plate
			Use 1624764, (2) screws

Assembly 9: Cage Assembly

Cage Assembly, front and side
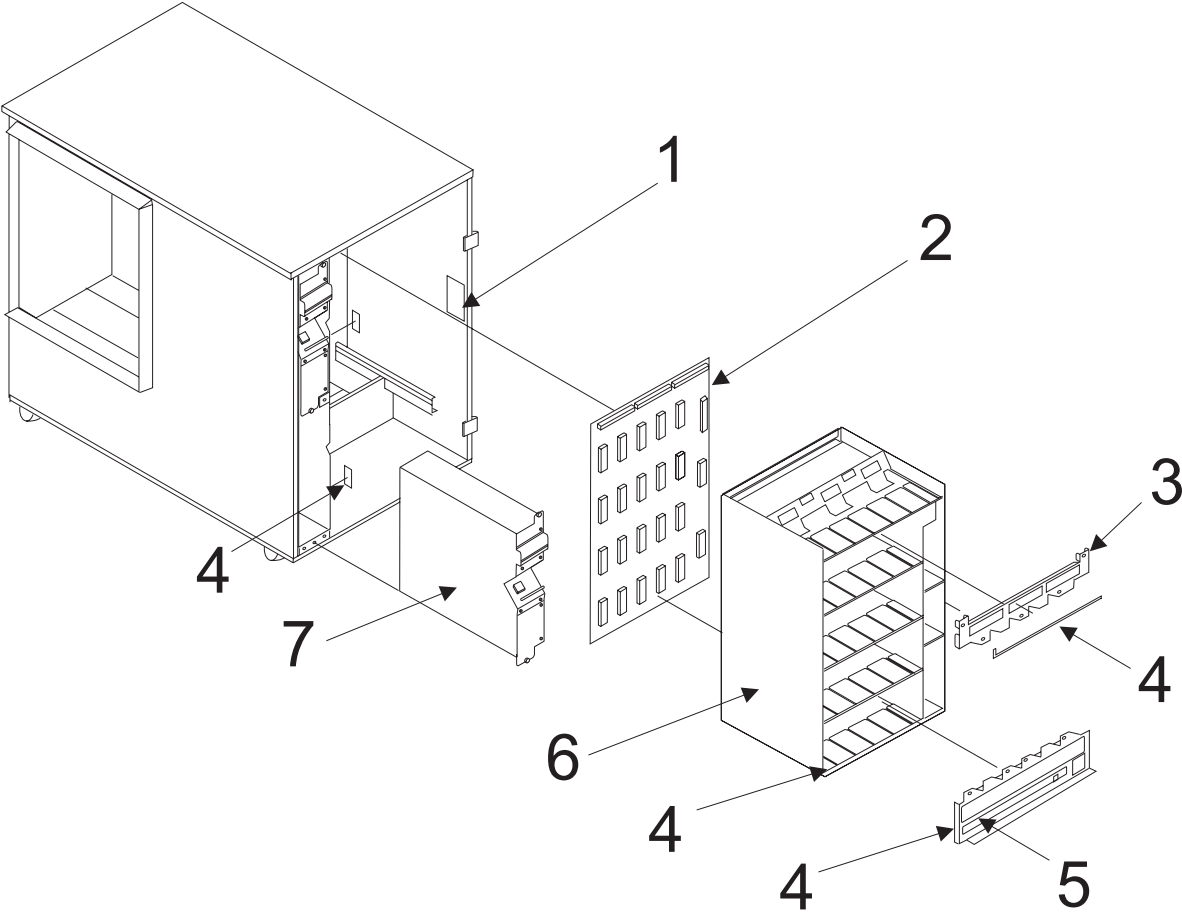
Asm– Index	Part Number	Units	Description
9–1	31L7632	1	Hazardous Energy Label
–2	60H1108	1	Midplane Board Assembly
			Use 4236316, (4) screws
			Use 1622347, (4) lock washers
–3	31L7638	1	Plate
			Use 1624764, (5) screws
–4	31L7463	AR	Label Set, Ref
–5	21L3369	1	Plate
			Use 1624764, (7) screws
–6	31L7640	1	Cage Assembly
			Use 5462882, (12) screws
–7	44H2792	2	Battery

Assembly 10: I/O Assembly

Assembly view, front and side
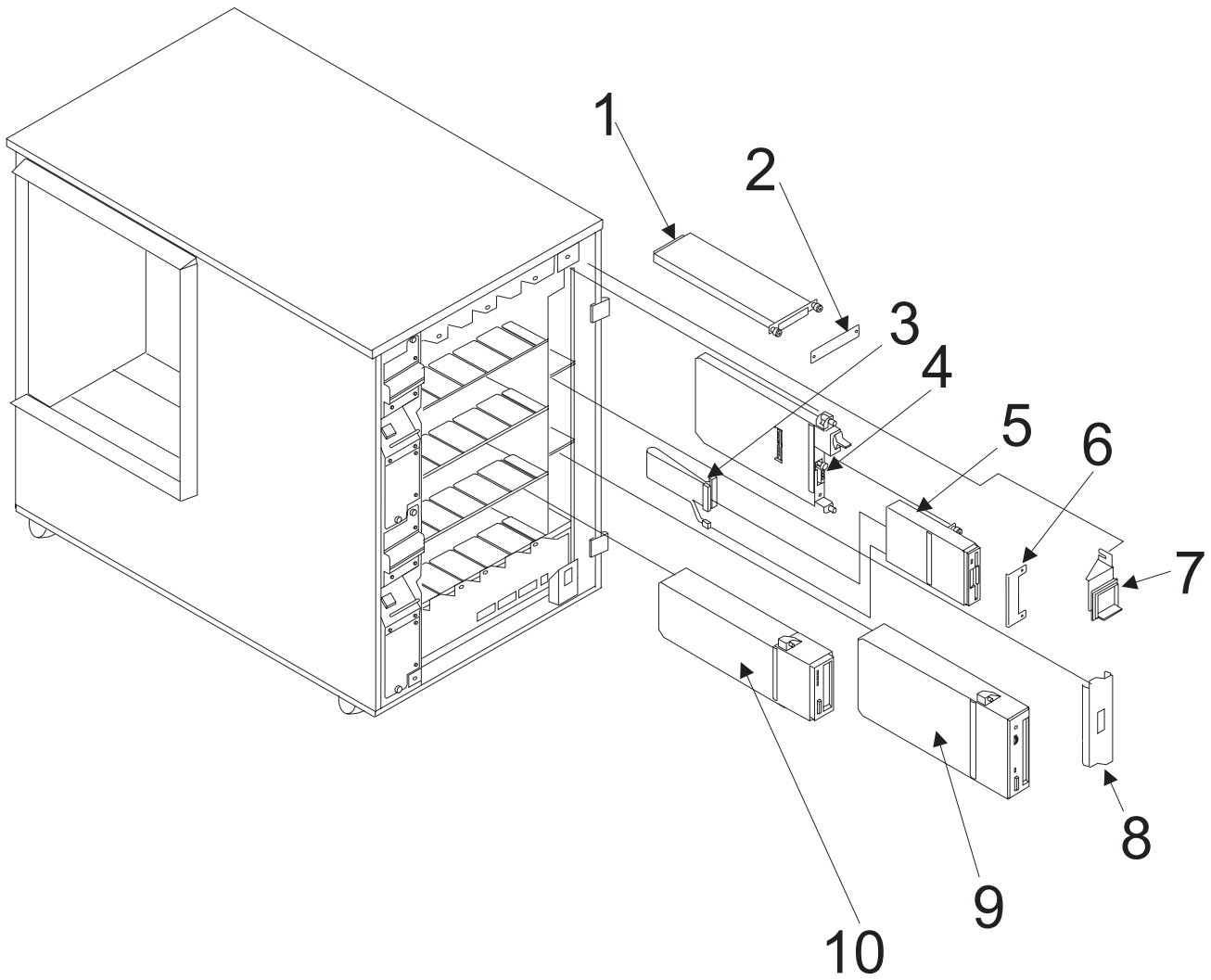
Asm– Index	Part Number	Units	Description
10–1	05N5370	1	SSA Extender Card
–2	47H0216	1	Extender Dummy Cover
			Use 1624764, (2) screws
–3	21L3816	1	Cable
–4	12K0294	1	EPO Card
–5	31L7643	1	Floppy Drive Assembly
–6	31L8002	1	Floppy Drive Dummy Cover
			Use 1624764, (2) screws
–7	31L7625	1	Switch Bezel Assembly
			Use 1624764, (2) screws
–8	21L3515	1	CDROM Dummy Cover
			Use 1624764, (2) screws
–9	11P0586	1	CDROM Assembly
–10	05N6839	1	DAT Assembly

Assembly 11: DASD
Assembly view, rear and side
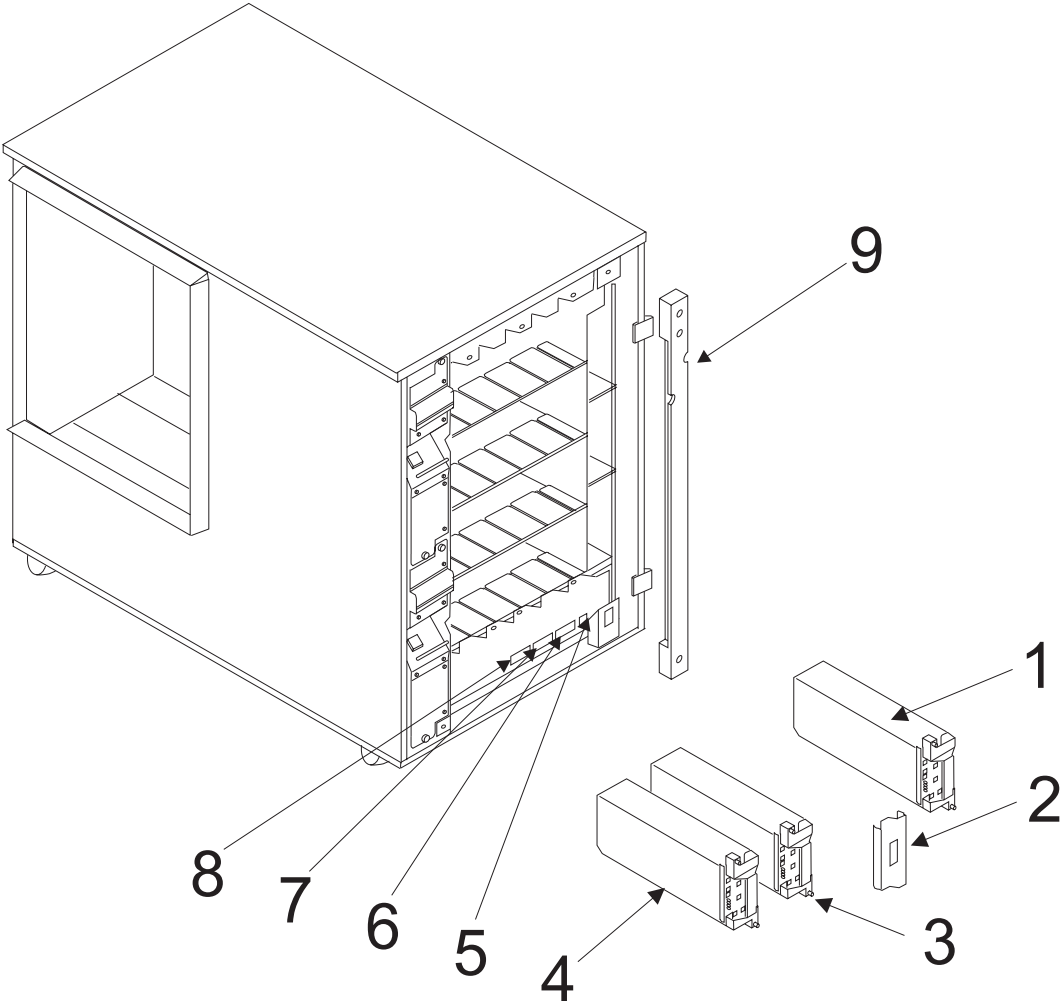
Asm– Index	Part Number	Units	Description
11–1	12K0473	AR	9.1GB SSA-SE HDD
–2	11J3570	AR	HDD Dummy Cover
			Use 1624764, (2) screws
–3	12K0474	AR	18.2GB SSA HDD
–4	21L3856	AR	HDD Jumper Assembly/Passthru
–5	12K0048	1	Label (Russia)
–6	31L7702	1	Label (Taiwan)
–7	12K0085	1	Label, Serial Number
–8	21L3843	1	Information Plate, US
–8	21L3844	1	Information Plate (sub for France)
–8	21L3845	1	Information Plate (sub for Ireland)
–8	12K0056	1	Information Plate (sub for Brazil)
–9	99J5101	AR	Alignment Fixture

Assembly 12: PCI Cage Assembly

Assembly view, rear and side

Asm– Index	Part Number	Units	Description
12–1	31L7632	2	Hazardous Energy Label The 02G7521 Laser Label is part of this Label
–2	31L7643	AR	Label Set, Ref
–3	05N6560	AR	PCI Filler Use 92F1294 (1-4) screws
–4	05N6561	AR	ISA Filler Use 92F1294 (1-4) screws
–5	REF	1	Parallel Channel Card Use 1621180 (2) screws
–6	REF	1	SBC Card Use 92F1294 (4) screws
–7	11J4570	2	Label
–8	05N6147	1	I/O Cage Assembly
–9	31L7999	1	I/O Cage Dummy Cover, used in DASD Expansion Frame only

Assembly 13: Power Assemblies

Assembly view, rear and side
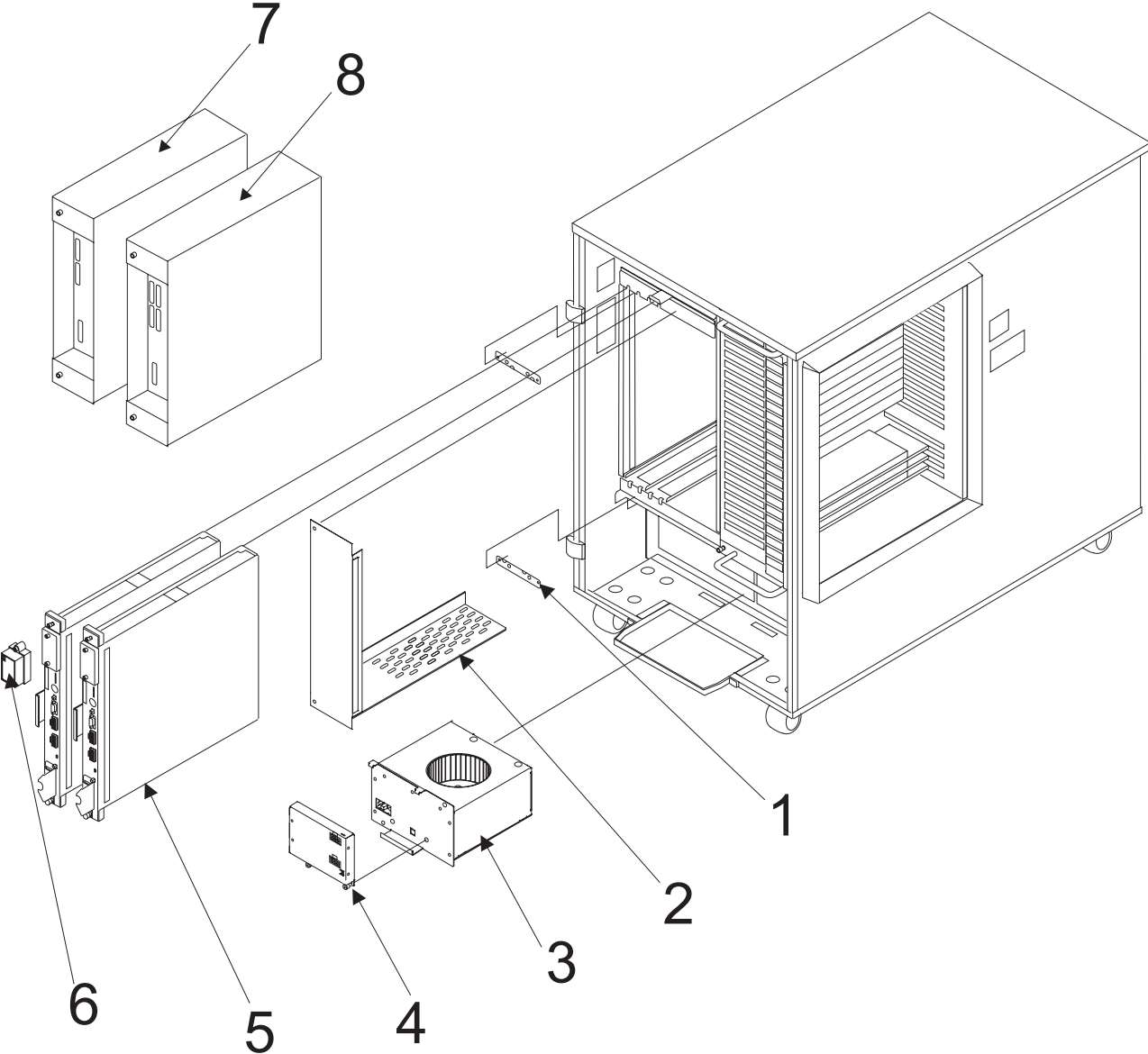
Asm– Index	Part Number	Units	Description
13–1	31L7962	2	Keying Plate Use 21F9002, (4) screws
–2	31L7637	1	PMI Airflow Bracket, used in DASD Expansion Frame only Use 1624764, (2) screws
–3	31L7030	2	MSA (Blower)
–4	31L7627	2	MDA (Motor Drive Assembly)
–5	12K0904	2	OCA (Offline Converter Assembly)
–6	11J4181	2	CBU(Crypto Battery Unit)
–7	REF	1	FIBB, used in I/O Expansion Frame only
–8	REF	1	PMI, used in Processor Frame only

Assembly 14: Cables

Asm–Index	Part Number	Units	Description
14–1	00G2380	AR	Ethernet Wrap Plug
–2	02K4243	AR	Speaker
–3	05N5290	AR	Cable Assembly, Ethernet Wakeup
–4	05N5291	AR	Cable Assembly, Token Ring Wakeup
–5	05N5371	AR	Cable Assembly, RS-422 Wrap
–6	08J5792	AR	Token Ring Wrap Plug
–7	11J5863	AR	Cable Assembly, STI .8 meter
–8	12K0278	AR	Cable Assembly, UPIC OCA1-P3 to AMD1-P2
–9	12K0279	AR	Cable Assembly, UPIC OCA2-P3 to AMD2-P2
–10	12K0280	AR	Cable Assembly, OCA to IBF
–11	12K0406	AR	Cable Assembly, Y Out Bus/Tag, Parallel Channel
–12	21L2716	AR	Cable Assembly, STI 3.3 meter
–13	31L7061	AR	Line Cord, US/Canada 110V, 6 ft.
–14	31L7062	AR	Line Cord, US/Canada 110V, 14 ft.
–15	31L7064	AR	Line Cord, US/Canada 220V, 6 ft.
–16	31L7065	AR	Line Cord, US/Canada 220V, 14 ft.
–17	31L7067	AR	Line Cord, US/Canada 110V, 6 ft., Twist-Lock
–18	31L7068	AR	Line Cord, US/Canada 110V, 14 ft., Twist-Lock
–19	31L7070	AR	Line Cord, US/Canada 220V, 6 ft., Twist-Lock
–20	31L7071	AR	Line Cord, US/Canada 220V, 14 ft., Twist-Lock
–21	31L7072	AR	Line Cord, China 220V, 14 ft.
–22	31L7073	AR	Line Cord, Europe 220V, 14 ft.
–23	31L7074	AR	Line Cord, Denmark 220V, 14 ft.
–24	31L7075	AR	Line Cord, Austrailia 220V, 14 ft.
–25	31L7076	AR	Line Cord, South Africa 220V, 14 ft.
–26	31L7077	AR	Line Cord, United Kingdom 220V, 14 ft.
–27	31L7078	AR	Line Cord, Japan 110V, 14 ft.
–28	31L7079	AR	Line Cord, Switzerland/US/Canada 110V, 14 ft.
–29	31L7080	AR	Line Cord, Italy 220V, 14 ft.
–30	31L7081	AR	Line Cord, Israel 220V, 14 ft.
–31	31L7662	AR	Cable Assembly, SBC/BIDI (Floppy)
–32	31L7663	AR	Cable Assembly, SBC/BIDI (SCSI)
–33	31L7671	AR	Cable Assembly, Parallel Channel Adapter
–34	31L7672	AR	Cable Assembly, SCSI Terminator
–35	31L7714	AR	Cable Assembly, SCSI Wrap Block
–36	31L7720	AR	Cable Assembly, USI
–37	31L7963	AR	Cable Assembly, OCA1-P4/OCA2-P4 to RS-422 (Processor Frame)
–38	31L7964	AR	Cable Assembly, OCA1-P4/OCA2-P4 to RS-422 (Expansion Frame)
–39	31L7985	AR	Cable Assembly, SSA .2 meter
–40	31L7986	AR	Cable Assembly, SSA 1.4 meter
–41	12K0874	AR	Cable Assembly, SSA 5 meter Was 31L7987
–42	5547283	AR	Diag Wrap Block
–43	6165899	AR	Token Ring Wrap Plug

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42G4996	8–3	19
42H1295	8–7	19
44H2792	9–7	21
45L3587	7–4	17
45L3588	6–3	15
45L3589	6–6	15
45L3592	6–4	15
45L3593	6–7	15
45L3598	8–1	19
45L3599	8–2	19
45L3600	8–9	19
46G3536	1–8	5
47H0216	10–2	23
5547283	14–42	31
60H1108	9–2	21
60H9963	8–6	19
60H9965	8–6	19
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Appendix A. Warranty

Statement of Limited Warranty

The warranties provided by IBM in this Statement of Limited Warranty apply only to Machines you originally purchase for your use, and not for resale, from IBM or an IBM authorized reseller. The term "Machine" means an IBM machine, its features, conversions, upgrades, elements, or accessories, or any combination of them. Machines are subject to these terms only if purchased in the United States or Puerto Rico, or Canada, and located in the country of purchase. If you have any questions, contact IBM or your reseller.

Machine: S/390 Multiprise 3000 Enterprise Server

Warranty Period*: One Year

*Elements and accessories are warranted for three months. Contact your place of purchase for warranty service information.

Production Status: Each Machine is manufactured from new parts, or new and serviceable used parts (which perform like new parts). In some cases, the Machine may not be new and may have been previously installed. Regardless of the Machine's production status, IBM's warranty terms apply.

The IBM Warranty: IBM warrants that each Machine 1) is free from defects in materials and workmanship and 2) conforms to IBM's Official Published Specifications. IBM calculates the expiration of the warranty period from the Machine's Date of Installation. The date on your receipt is the Date of Installation, unless IBM or your reseller informs you otherwise.

During the warranty period, IBM or your reseller will provide warranty service under the type of service designated for the Machine and will manage and install engineering changes that apply to the Machine. IBM or your reseller will specify the type of service.

For a feature, conversion, or upgrade, IBM or your reseller may require that the Machine on which it is installed be 1) the designated, serial-numbered Machine and 2) at an engineering-change level compatible with the feature, conversion, or upgrade. Some of these transactions (called "Net-Priced" transactions) may include additional parts and associated replacement parts that are provided on an exchange basis. All removed parts become the property of IBM and must be returned to IBM.

Replacement parts assume the remaining warranty of the parts they replace.

If a Machine does not function as warranted during the warranty period, IBM or your reseller will repair or replace it (with a Machine that is at least functionally equivalent) without charge. If IBM or your reseller is unable to do so, you may return it to your place of purchase and your money will be refunded.

If you transfer a Machine to another user, warranty service is available to that user for the remainder of the warranty period. You should give your proof of purchase and this Statement to that user.

Warranty Service: To obtain warranty service for the Machine, you should contact your reseller or call IBM. In the United States, call IBM at **1-800-IBM-SERV (426-7378)**. In Canada, call IBM at **1-800-465-6666**. You may be required to present proof of purchase.

Depending on the Machine, the service may be 1) a "Repair" service at your location (called "On-site") or at one of IBM's or a reseller's service locations (called "Carry-in") or 2) an "Exchange" service, either On-site or Carry-in.

When a type of service involves the exchange of a Machine or part, the item IBM or your reseller replaces becomes its property and the replacement becomes yours. The replacement may not be new, but will be in good working order and at least functionally equivalent to the item replaced.

It is your responsibility to:

1. obtain authorization from the owner (for example, your lessor) to have IBM or your reseller service a Machine that you do not own;
2. where applicable, before service is provided —
    a. follow the problem determination, problem analysis, and service request procedures that IBM or your reseller provide,
    b. secure all programs, data, and funds contained in a Machine,
    c. inform IBM or your reseller of changes in a Machine's location, and
    d. for a Machine with exchange service, remove all features, parts, options, alterations, and attachments not under warranty service. Also, the Machine must be free of any legal obligations or restrictions that prevent its exchange; and
3. be responsible for loss of, or damage to, a Machine in transit when you are responsible for the transportation charges.

Extent of Warranty: IBM does not warrant uninterrupted or error-free operation of a Machine.

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This warranty gives you specific legal rights and you may also have other rights which vary from jurisdiction to jurisdiction.

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Federal Communications Commission (FCC) Statement

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions contained in the installation manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors, by installation or use of this equipment other than as specified in the installation manual, or by any other unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Canadian Department of Communications Compliance Statement

This equipment does not exceed Class A limits per radio noise emissions for digital apparatus, set out in the Radio Interference Regulation of the Canadian Department of Communications. Operation in a residential area may cause unacceptable interference to radio and TV reception requiring the owner or operator to take whatever steps are necessary to correct the interference.

Avis de conformlté aux normes du ministère des Communications du Canada

Cet équipement ne dépasse pas les limites de Classe A d'émission de bruits radioélectriques pour les appareils numériques, telles que prescrites par le Règlement sur le brouillage radioélectrique établi par le ministère des Communications du Canada. L'exploitation faite en millieu résidentiel peut entrainer le brouillage des réceptions radio et télé, ce qui obligerait le propriétaire ou l'opérateur à prendre les dispositions nécessaires pour en éliminer les causes.

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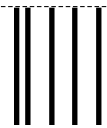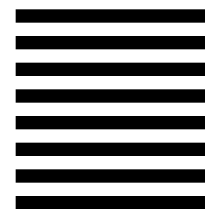
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