

**ILLUSTRATED
PARTS
BREAKDOWN**

**applicationDEC
STORAGE EXPANDER**

ILLUSTRATED PARTS BREAKDOWN (IPB)

The IPB is used to identify a part and its location in a hardware product. The document references specific item numbers in the associated parts list.

HOW TO USE THE IPB

1. Locate the figure containing the item of interest.
2. Locate the number (callout) of the item of interest.
3. Locate that item number in the associated parts list.

FORMAT

Each IPB is generally organized based on its first figure. All other assemblies and subassemblies are referenced from this figure. Each figure contains numeric callouts of all major parts (items).

PARTS LIST

Each parts list contains the following:

Figure and Item No. – Lists the figure number and its referenced numeric callout

Description – Presents the name and a brief description of the item. A single asterisk (*) preceding the description denotes item is a

subassembly to its referenced figure. A double asterisk (**) preceding the description indicates that this item is subordinate to the preceding single asterisk item.

DEC Part No. – Lists the Digital/Vendor part number. The letter in the column heading indicates the current revision level of the Engineering Drawing for the referenced figure.

ECO Cut-In – Lists the top assembly drawing number and revision level at first printing. All additional revisions to an item are listed in this column.

Used On Code – Lists letters referring to the product variation assigned in Figure 1. When this column is blank, the item is used in all variations.

Ref Fig No. – Lists a cross reference between figures within the IPB.

PART NUMBER/PART DESCRIPTION INDEX SECTION

Lists items by part number numerically, and description alphabetically. Items are also referenced to a location within the IPB by figure and item number.

ECO/REVISION HISTORY

**OTHER IPB
MANUALS
REFERENCED**

FIGURE NO.	ASSEMBLY	INITIAL LEVEL	CURRENT LEVEL	PRINTING DATE	OTHER IPB MANUALS REFERENCED
1	PS2XR-A9	00000-00000		16-OCT-92	N/A
2	70-28274	00000-00000			

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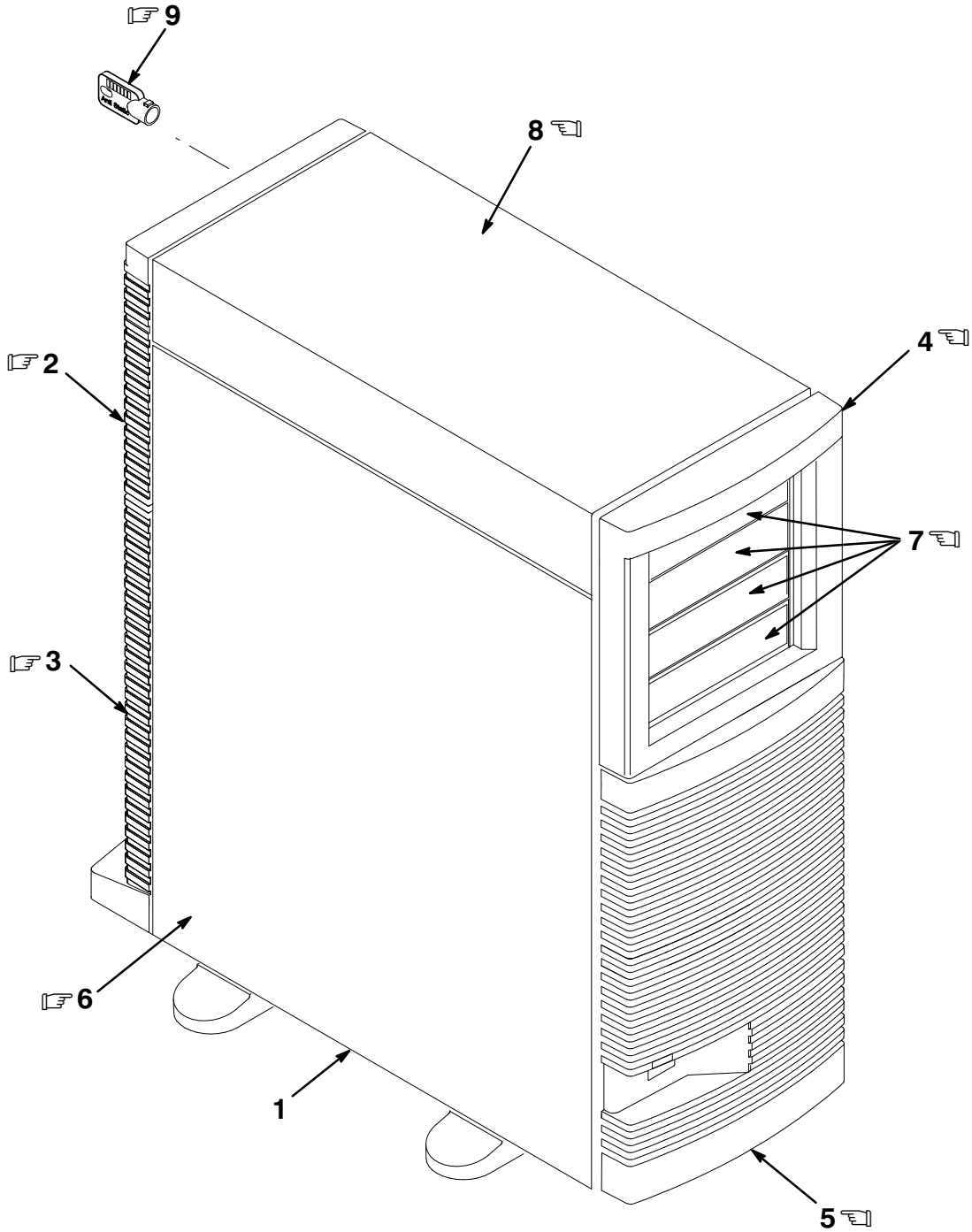
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  INDICATES FRU LEVEL PARTS

 INDICATES OPTIONAL PARTS

PARTS LIST 



STEXP-01-IL

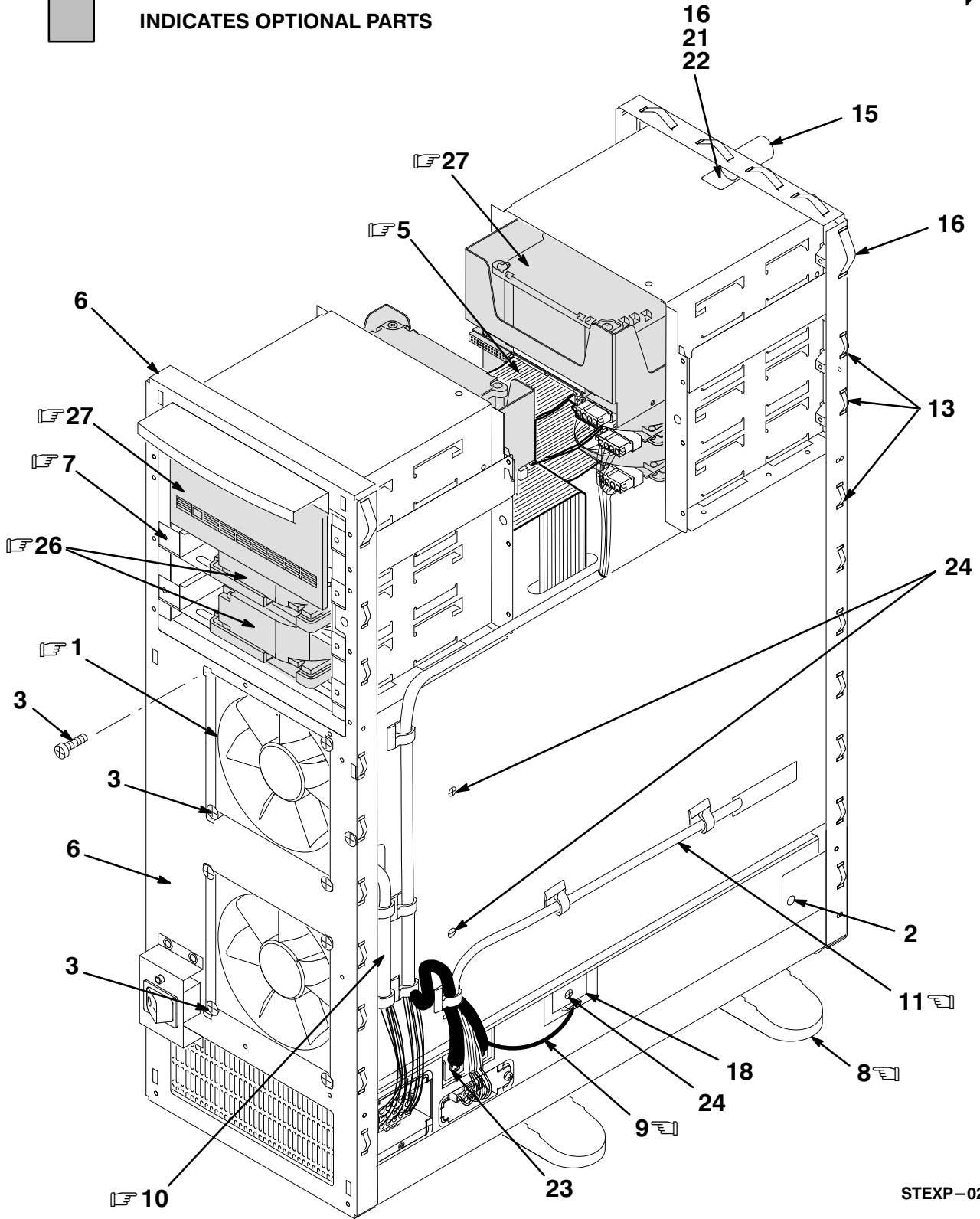
Figure 1. Storage Expander

FIG. & ITEM NO.	DESCRIPTION	DEC PART NO. ^A	ECO CUT-IN PS2XR-A9 00000	USED ON CODE	REF FIG NO.
1-	<p>STORAGE EXPANDER</p> <p>1 *UNIT ASSEMBLY, EXPANDER</p> <p>2 *Panel, Rear Upper</p> <p>3 *Panel, Rear Lower</p> <p>4 *Panel, Front Upper</p> <p>5 *Panel Assembly, Front Lower</p> <p>6 *Panel Assembly, Side</p> <p>7 *Insert, Opening</p> <p>8 *Cover Assembly, Upper</p> <p>9 *Key, Plastic</p> <p>LABELS (Not Shown)</p> <p>*Label, "Location"</p> <p>*Label, "Driver Identification Level"</p>	<p>PS2XR-A9</p> <p>70-28274-01</p> <p>74-42776-01</p> <p>74-43102-01</p> <p>74-42785-01</p> <p>70-28259-01</p> <p>70-26616-01</p> <p>74-41305-01</p> <p>70-28258-01</p> <p>12-17119-01</p> <p>36-36762-01</p> <p>36-36762-02</p>			<p>2</p>

  INDICATES FRU LEVEL PARTS

 INDICATES OPTIONAL PARTS

PARTS LIST 



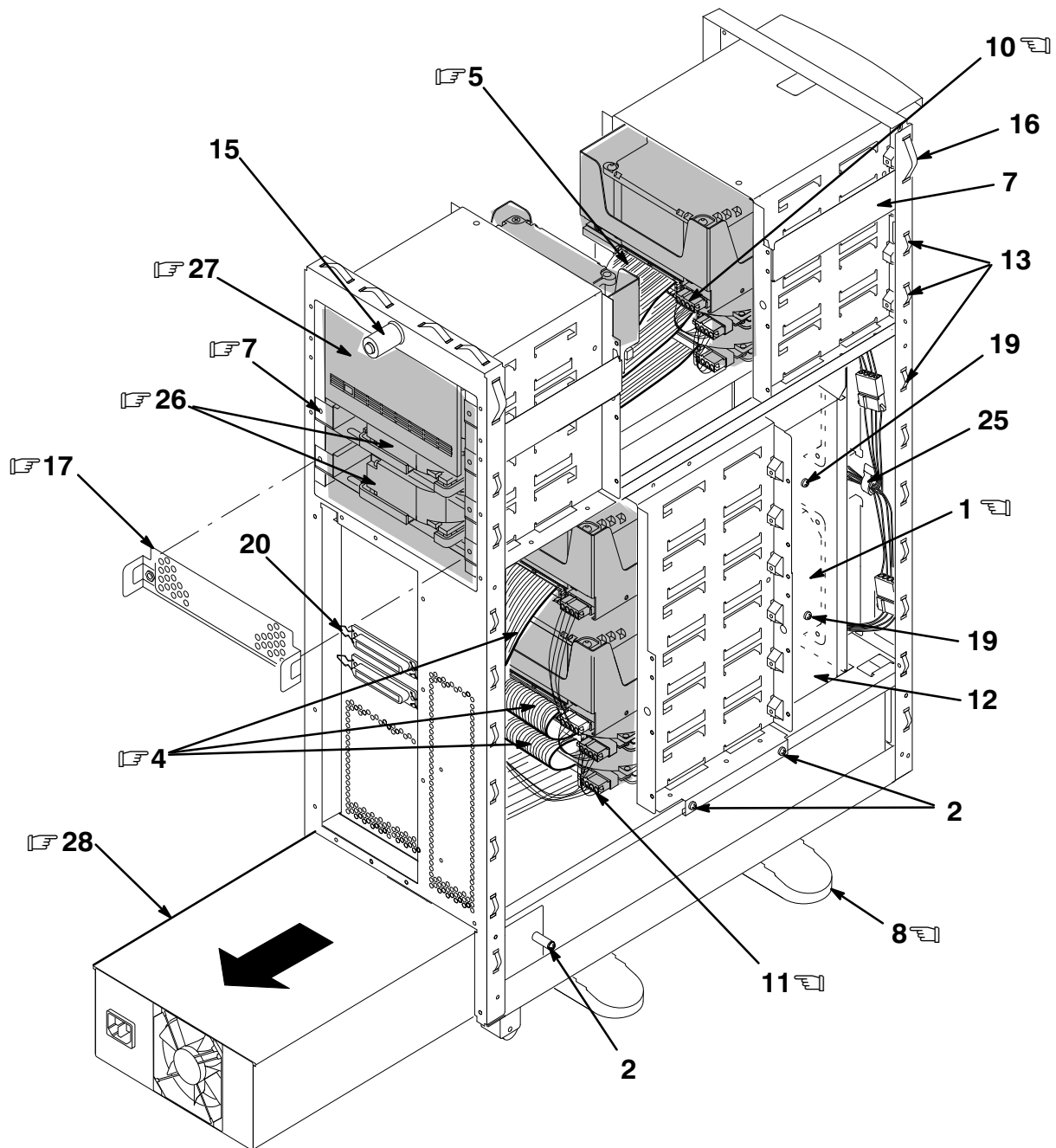
STEXP-02-IL

Figure 2. Unit Assembly, System (Sheet 1 of 2)

  INDICATES FRU LEVEL PARTS

 INDICATES OPTIONAL PARTS

PARTS LIST 



STEXP-02A-IL

Figure 2. Unit Assembly, Expander (Sheet 2 of 2)

FIG.& ITEM NO.	DESCRIPTION	DEC PART NO.	A ECO CUT-IN 70-28274 00000	USED ON CODE	REF FIG NO.
2-	UNIT ASSEMBLY, EXPANDER	70-28274-01			1
☞1	*Fan Assembly	12-23609-11			
2	*Screw, Captive Phi Pan Hd No. 8-32 x 31/64	12-34832-01			
3	*Screw, Mach Truss Hd No. 6-32 x 1 27/32	12-35005-01			
☞4	*Cable Assembly, SCSI (Lower)	17-03307-01			
☞5	*Cable Assembly, SCSI (Upper)	17-03308-01			
6	*Chassis Assembly	70-28268-01			
☞7	*Bracket Assembly, Drive	70-28285-01			
☞8	*Stand Assembly	70-28286-01			
☞9	*Cable Assembly, DC Switch	70-28294-01			
☞10	*Cable Assembly, Power (Upper)	70-28302-01			
☞11	*Cable Assembly, Power (Lower)	70-28303-01			
12	*Cover, Air-flow	74-44050-01			
13	*Plate, Ground	74-41454-01			
14	*Wheel, Stroke	74-42135-01			
15	*Slider, Stroke	74-42137-01			
16	*Ground Cover, Upper	74-42241-01			
☞17	*Shielding, Driver	74-43107-01			
18	*Cover, DC Switch	74-43989-01			
19	*Screw, Sems Phi Pan Hd No. 6-32 x 3/8	90-00049-24			
20	*Screw, Phi Pan Hd No. 4-40 x 5/16	90-06010-01			
21	*Washer, Flat	90-06653-00			
22	*Nut, Kep No. 6-32	90-08185-00			
23	*Screw, Sems Phi Pan Hd No. 8-32 x 5/16	90-10174-01			
24	*Screw, Sems Phi Pan Hd No. 6-32 x 1/4	90-10174-00			
25	*Clip, Wire	90-40191-01			
☞26	*Drive Assembly, RZ2X	RZ2X-XX			
☞27	*Drive Assembly, RZ5X	RZ5X-XX			
28	*Screw, Captive Phi Pan Hd No. 6-32 x 29/32	90-11204-01			
☞29	*Power Supply (350 W)	H7882-AA			
	ITEMS (Not Shown)				
	*Terminator, Lead	12-33816-01			
	*Stopper, Fan Screw	74-41674-01			
	*Bumper, Fan	74-44157-01			
					Ω

TROUBLESHOOTING SECTION 

Troubleshooting – SCSI Expansion Box

Problem Symptom	Probable Cause	Action Required
<ul style="list-style-type: none"> ● No response when main system box turned on. ● Power–On LED not lit. 	No AC power applied to expansion box.	Apply AC power.
	LED malfunction.	Replace LED.
	Defective power cabling.	Replace defective power cabling.
	Defective Power Supply.	Replace Power Supply.
<ul style="list-style-type: none"> ● No power to the SCSI drive(s). 	No AC power applied.	Apply AC power.
	Drive power connector not seated correctly.	Re–seat drive power connector.
	Defective power cabling.	Replace defective power cabling.
	Defective Power Supply.	Replace Power Supply.
<ul style="list-style-type: none"> ● SCSI drive(s) data is intermittent. 	Internal SCSI cable is not connected securely.	Re–seat SCSI cable connector.
	SCSI cable not terminated properly.	Check SCSI termination. See Page 4, Item 6.
	Cooling airflow is restricted to bay.	Provide for proper cooling airflow.
	External Interconnecting SCSI cable problem.	Check and re–seat external SCSI cable.
	Defective SCSI drive.	Replace SCSI drive.
<ul style="list-style-type: none"> ● Power supply not working. 	Thermal overload.	Remove AC power and allow to cool for several minutes.
	Defective Power Supply.	Replace Power Supply.
<ul style="list-style-type: none"> ● Cooling fan(s) not operating. 	No AC power applied.	Apply AC power.
	Defective fan(s)	Replace fan(s).
	Defective power cabling.	Replace defective power cabling.
	Defective Power Supply.	Replace Power Supply.

PART NUMBER/DESCRIPTION INDEX 

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PART NO.	DESCRIPTION	FIG NO.	ITEM NO.
12-17119-01	Key, Plastic	1	9
12-23609-11	Fan Assembly	2	1
12-33816-01	Terminator, Lead	2	Not Shown
12-34832-01	Screw, Captive Phi Pan Hd No. 8-32 x 31/64	2	2
12-35005-01	Screw, Mach Truss Hd No. 6-32 x 1 27/32	2	3
17-03307-01	Cable Assembly, SCSI (Lower)	2	4
17-03308-01	Cable Assembly, SCSI (Upper)	2	5
36-36762-01	Label, Location	1	Not Shown
36-36762-02	Label, Driver Identification Level	1	Not Shown
70-26616-01	Panel Assembly, Side	1	6
70-28258-01	Cover Assembly, Upper	1	8
70-28259-01	Panel Assembly, Front Lower	1	5
70-28268-01	Chassis Assembly	2	6
70-28274-01	UNIT ASSEMBLY, EXPANDER	2	N/A
70-28274-01	Unit Assembly, Expander	1	1
70-28285-01	Bracket Assembly, Drive	2	7
70-28286-01	Stand Assembly	2	8
70-28294-01	Cable Assembly, DC Switch	2	9
70-28302-01	Cable Assembly, Power (Upper)	2	10
70-28303-01	Cable Assembly, Power (Lower)	2	11
74-41305-01	Insert, Opening	1	7
74-41454-01	Plate, Ground	2	13
74-41674-01	Stopper, Fan Screw	2	Not Shown
74-42135-01	Wheel, Stroke	2	14
74-42137-01	Slider, Stroke	2	15
74-42241-01	Ground Cover, Upper	2	16
74-42776-01	Panel, Rear Upper	1	2
74-42785-01	Panel, Front Upper	1	4
74-43102-01	Panel, Rear Lower	1	3
74-43107-01	Shielding, Driver	2	17
74-43989-01	Cover, DC Switch	2	18
74-44050-01	Cover, Air-flow	2	12
74-44157-01	Bumper, Fan	2	Not Shown
90-00049-24	Screw, Sems Phi Pan Hd No. 6-32 x 3/8	2	19
90-06010-01	Screw, Phi Pan Hd No. 4-40 x 5/16	2	20
90-06653-00	Washer, Flat	2	21
90-08185-00	Nut, Kep No. 6-32	2	22
90-10174-00	Screw, Sems Phi Pan Hd No. 6-32 x 1/4	2	24
90-10174-01	Screw, Sems Phi Pan Hd No. 8-32 x 5/16	2	23
90-11204-01	Screw, Captive Phi Pan Hd No. 6-32 x 29/32	2	28
90-40191-01	Clip, Wire	2	25
H7882-AA	Power Supply (350 W)	2	29
PS2XR-A9	STORAGE EXPANDER	1	N/A
RZ2X-XX	Drive Assembly, RZ2X	2	26
RZ5X-XX	Drive Assembly, RZ5X	2	27

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DESCRIPTION	DEC PART NO.	FIG. NO.	ITEM NO.
Bracket Assembly, Drive	70-28285-01	2	7
Bumper, Fan	74-44157-01	2	Not Shown
Cable Assembly, DC Switch	70-28294-01	2	9
Cable Assembly, Power (Lower)	70-28303-01	2	11
Cable Assembly, Power (Upper)	70-28302-01	2	10
Cable Assembly, SCSI (Lower)	17-03307-01	2	4
Cable Assembly, SCSI (Upper)	17-03308-01	2	5
Chassis Assembly	70-28268-01	2	6
Clip, Wire	90-40191-01	2	25
Cover Assembly, Upper	70-28258-01	1	8
Cover, Air-flow	74-44050-01	2	12
Cover, DC Switch	74-43989-01	2	18
Drive Assembly, RZ2X	RZ2X-XX	2	26
Drive Assembly, RZ5X	RZ5X-XX	2	27
Fan Assembly	12-23609-11	2	1
Ground Cover, Upper	74-42241-01	2	16
Insert, Opening	74-41305-01	1	7
Key, Plastic	12-17119-01	1	9
Label, Driver Identification Level	36-36762-02	1	Not Shown
Label, Location	36-36762-01	1	Not Shown
Nut, Kep No. 6-32	90-08185-00	2	22
Panel Assembly, Front Lower	70-28259-01	1	5
Panel Assembly, Side	70-26616-01	1	6
Panel, Front Upper	74-42785-01	1	4
Panel, Rear Lower	74-43102-01	1	3
Panel, Rear Upper	74-42776-01	1	2
Plate, Ground	74-41454-01	2	13
Power Supply (350 W)	H7882-AA	2	29
Screw, Captive Phl Pan Hd No. 6-32 x 29/32	90-11204-01	2	28
Screw, Captive Phl Pan Hd No. 8-32 x 31/64	12-34832-01	2	2
Screw, Mach Truss Hd No. 6-32 x 1 27/32	12-35005-01	2	3
Screw, Phl Pan Hd No. 4-40 x 5/16	90-06010-01	2	20
Screw, Sems Phl Pan Hd No. 6-32 x 1/4	90-10174-00	2	24
Screw, Sems Phl Pan Hd No. 6-32 x 3/8	90-00049-24	2	19
Screw, Sems Phl Pan Hd No. 8-32 x 5/16	90-10174-01	2	23
Shielding, Driver	74-43107-01	2	17
Slider, Stroke	74-42137-01	2	15
Stand Assembly	70-28286-01	2	8
Stopper, Fan Screw	74-41674-01	2	Not Shown
STORAGE EXPANDER	PS2XR-A9	1	N/A
Terminator, Lead	12-33816-01	2	Not Shown
UNIT ASSEMBLY, EXPANDER	70-28274-01	2	N/A
Unit Assembly, Expander	70-28274-01	1	1
Washer, Flat	90-06653-00	2	21
Wheel, Stroke	74-42135-01	2	14