

CRAY J90 Series Illustrated Parts Catalog

HMM-116-C

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Introduction

The CRAY J90 series of computer systems may be serviced by properly trained Cray Research, Inc. service personnel, customer service personnel, or third-party maintainers. The purpose of this illustrated parts catalog is to assist service personnel in identifying the part numbers of parts they need to replace.

This catalog describes the major components, or field-replaceable units, of the CRAY J90 series systems. The *Field Replacement Procedures*, Cray Research publication number HMM-079-A, describes these components and their removal and replacement procedures. If you have access to the Cray Research server *hydra*, you may access the CRAY J90 Series Spares Support Plan, which lists the hardware maintenance tools and miscellaneous supplies and their part numbers. The pathname is `/home/hydra/spe/els/j90/spares` and the filename is `j90spares`.

The parts ordering system at Cray Research ensures shipment of the most up-to-date parts. When you order parts using the part numbers in this catalog, you can be assured that you will receive the latest versions of the parts even if the part numbers have changed.

Record of Revision

May 1995

Original printing.

Revision A: September 1995

The CRAY J932 system mainframe parts were added. Part numbers were updated for the CRAY J916 system mainframe cabinet, the peripheral cabinet, and system support sections

Revision B: December 1995

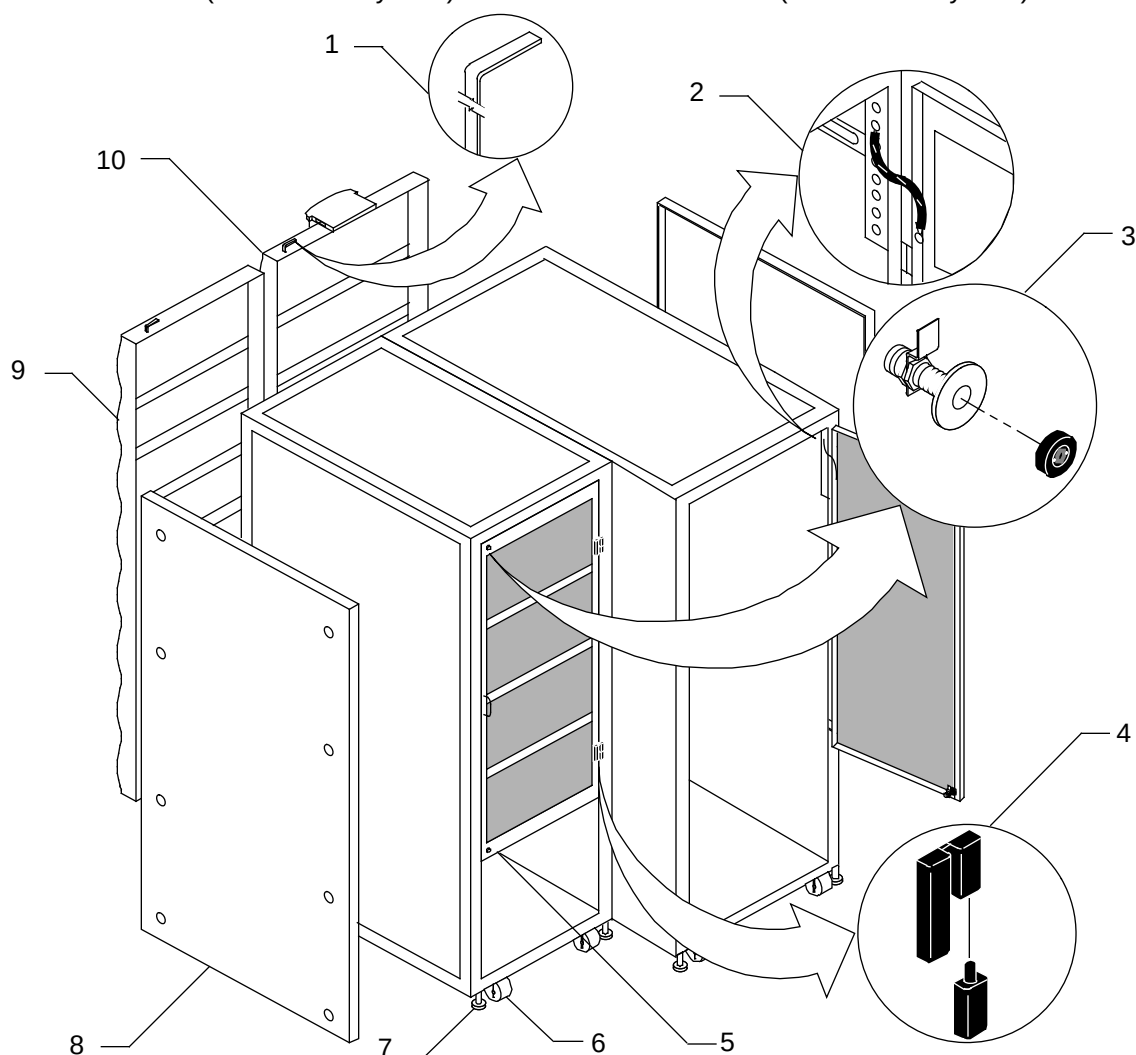
Updated the front-end power chassis 10-A fuse part number, Y1 cable part numbers, SI-3 PC board (DC6S) part number, VME power supply part number, and added a 10-A fuse to the VME chassis bulkhead. For the CRAY J916 system mainframe cabinet, this revision corrects the CPU module assembly part number and adds the non-HIPPI part number. For the VME boards, this revision adds another SPARC based CPU part number.

Revision C: June 1996

Updated part numbers for item 6, casters for the CRAY J916 system and the CRAY J932 system. Updated the part number for item 13, central control unit, for the CRAY J916 system.

Panels and Hinges

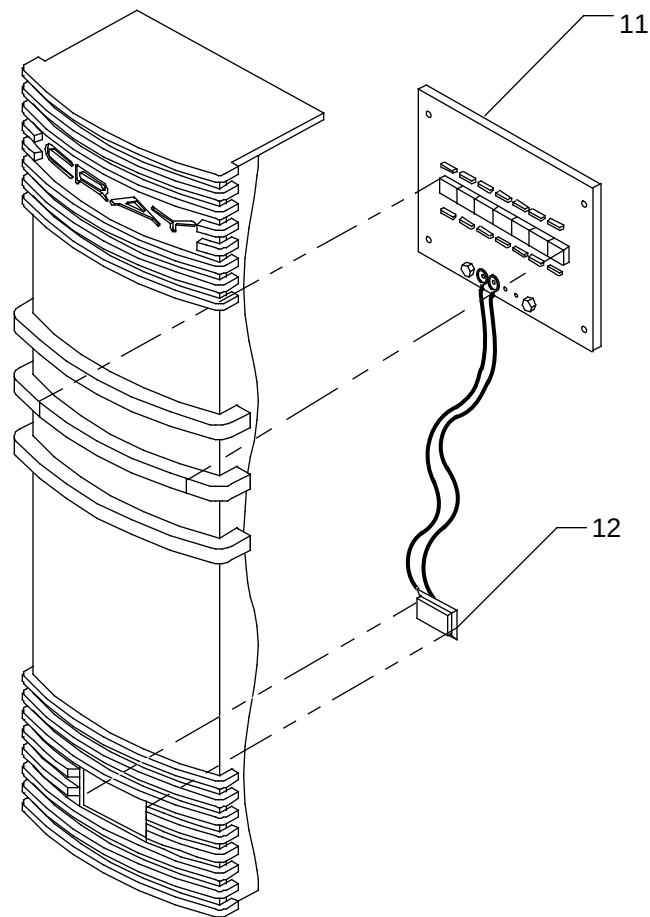
Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
1	90347200	Bar Latch	7	90377600	Leveler
2	90395100	Cable Assembly Ground	8	90371000	Side Panel (CRAY J916 System)
3	90365700	Latch		90438800	Side Panel (CRAY J932 System)
4	90346901	Offset Lift-off Hinge (right side)	9	90385400	Front Panel, I/O Cabinet (CRAY J916 System)
5	90364700	Rear Trim Panel Assembly		90348100	Front Panel, I/O Cabinet (CRAY J932 System)
6	90399600	Caster (CRAY J916 System and I/O Cabinet)	10	90385400	Front Panel, Processor Cabinet (CRAY J916 System)
	90377500	Caster (CRAY J932 System)		90416800	Front Panel, Processor Cabinet (CRAY J932 System)



Pod

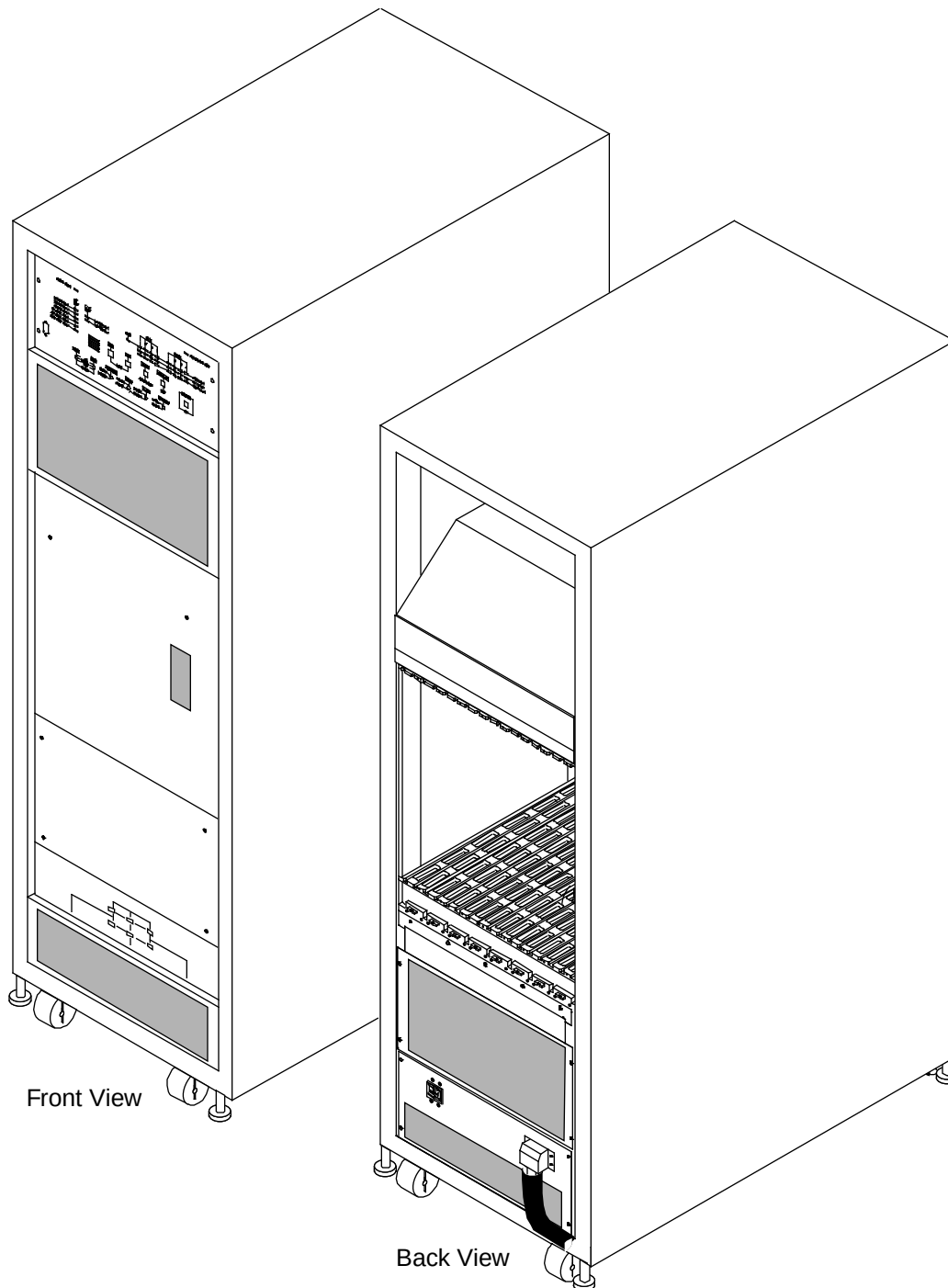
Ref.

No.	Part Number	Description
11	90391100	PCB Assembly, LED
12	90441500	System Off Switch Assembly (CRAY J916 System)
	90386401	System Off Switch Assembly (CRAY J932 System)



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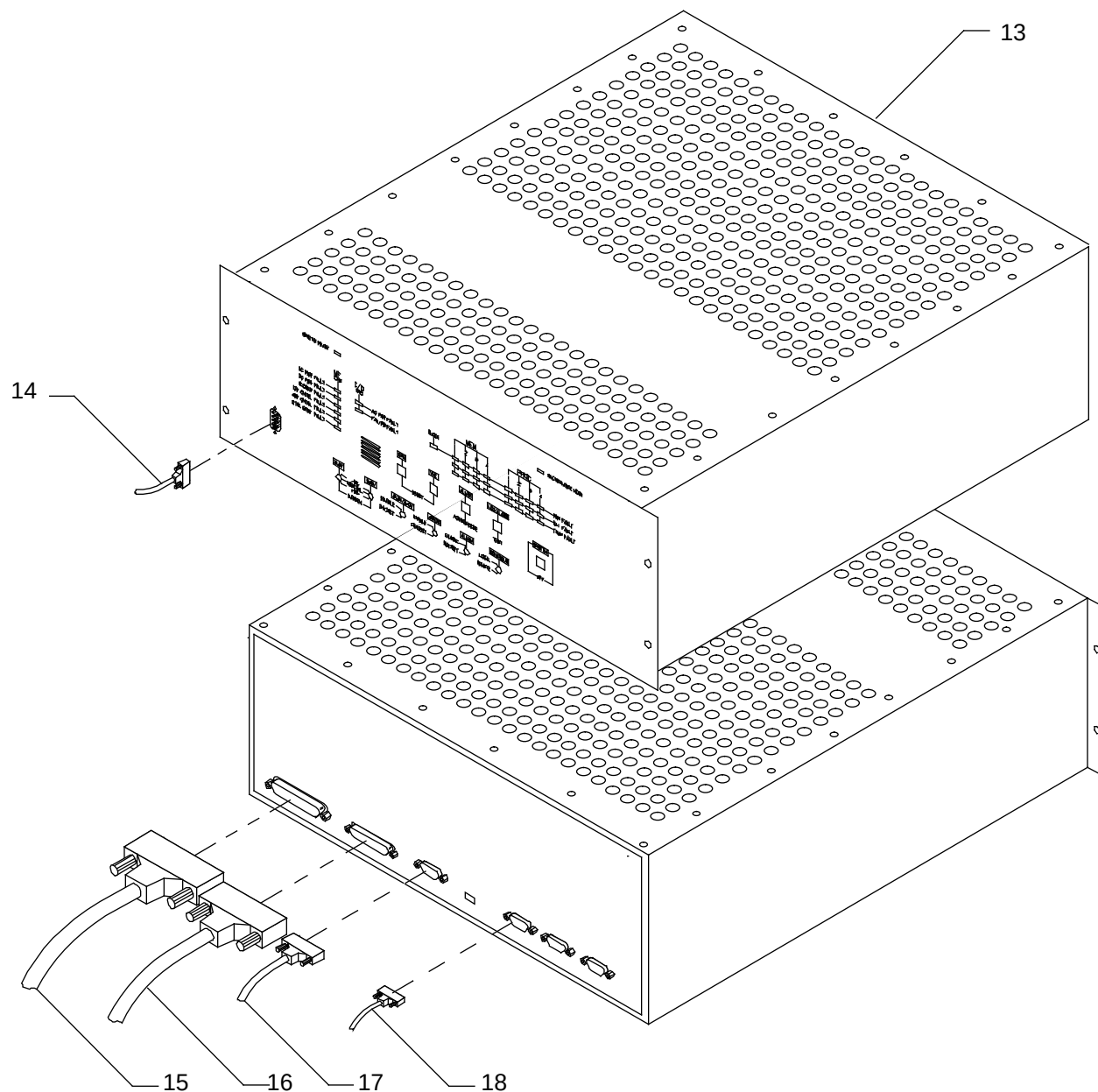
CRAY J916 Mainframe Cabinet



NOTE: When you order parts using part numbers in this catalog, you can be assured that you will receive the latest versions of the parts even if the part numbers have changed.

Central Control Unit

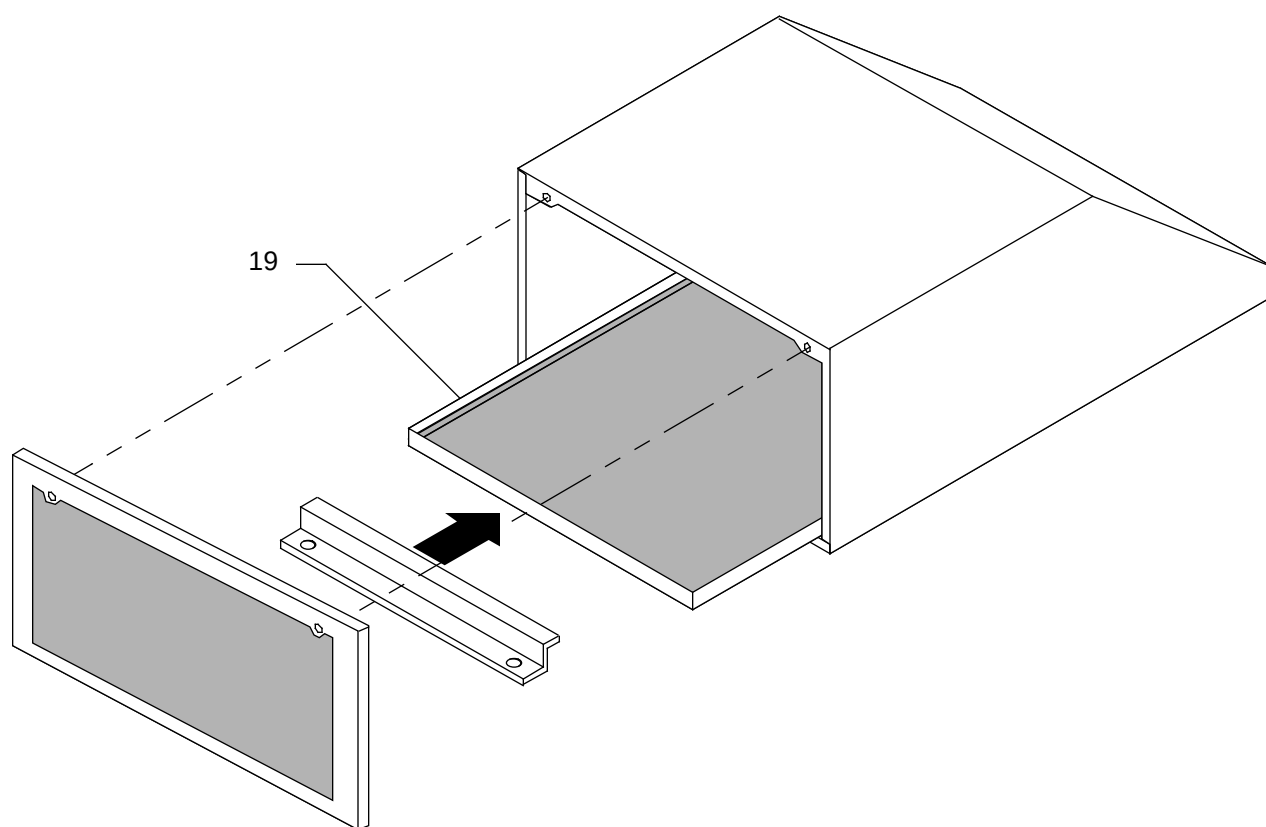
Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
13	90376501	Central Control Unit	17	90350300	CCU to AC Power Entry Sense Cable
14	90386400	CCU to Pod Cable	18	90350600	Alarm Cable
15	90350000	CCU to Card Cage Backplane Sense Cable			
16	90350200	CCU to Front-end Power Sense Cable			



Input Air Filter

Ref.

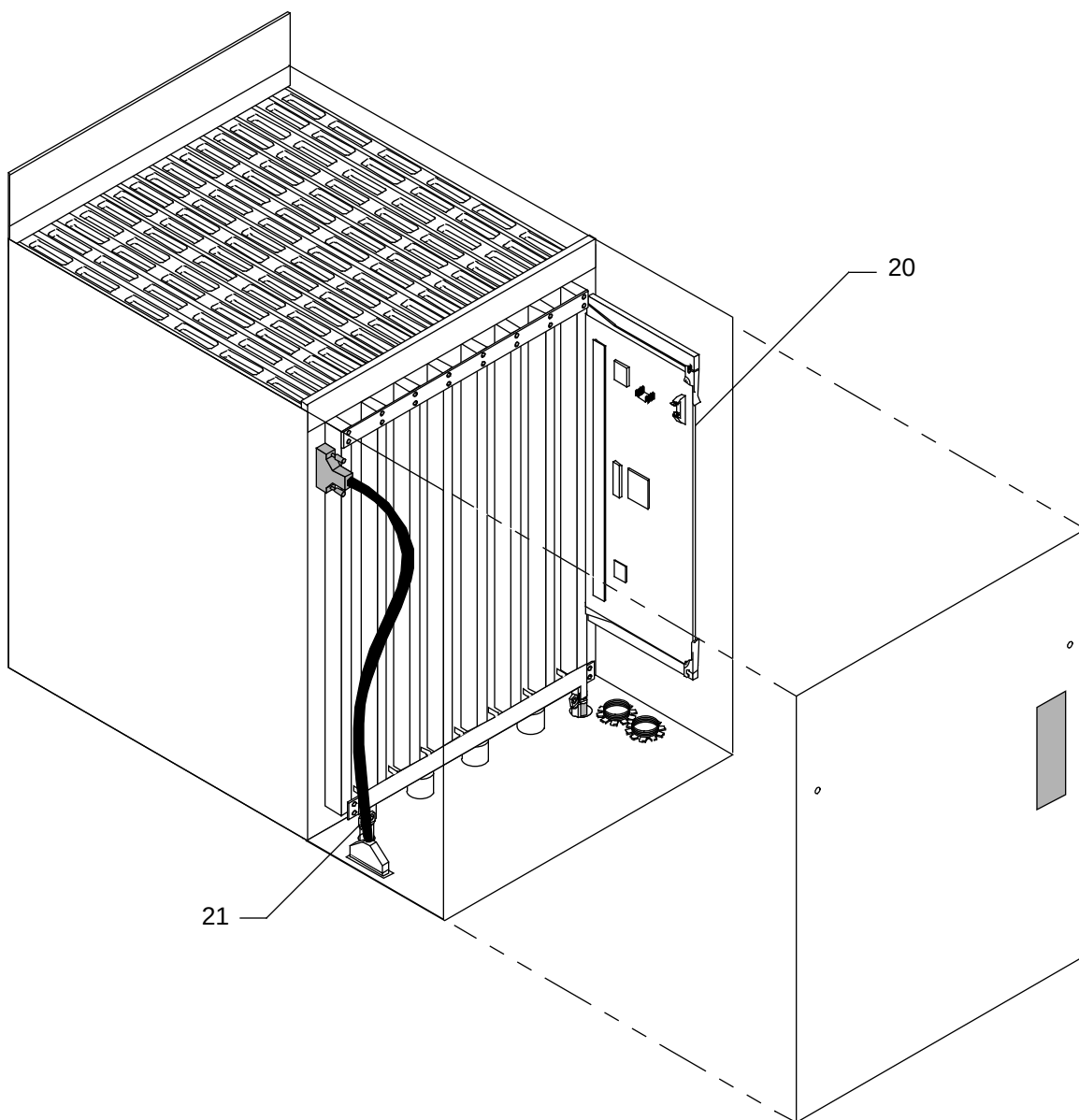
No.	Part Number	Description
19	90312400	Input Air Filter



CPU Card Cage

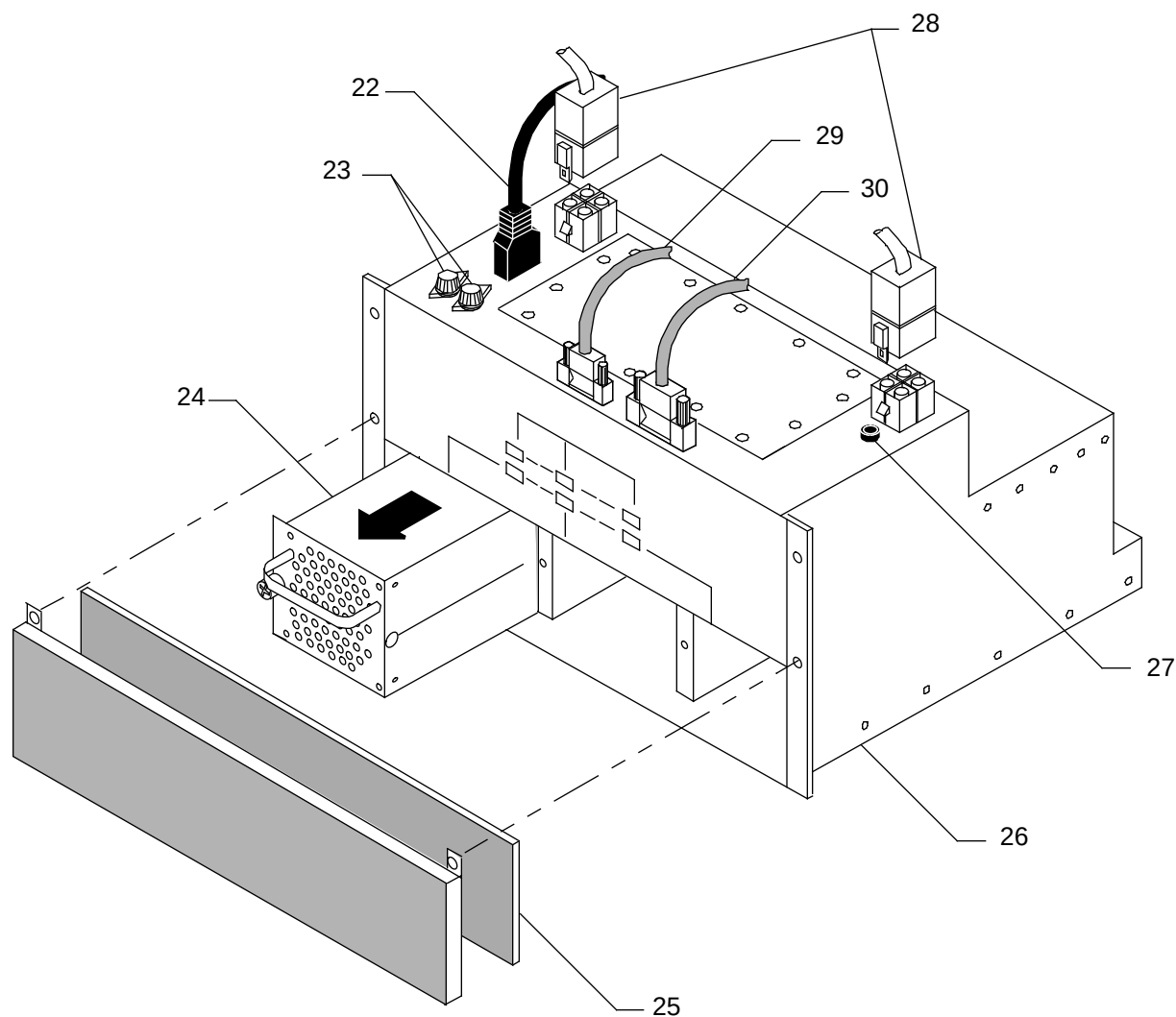
Ref.

No.	Part Number	Description
20	90278602	Clock Module
21	90350101	Sense Cable



Front-end Power Chassis

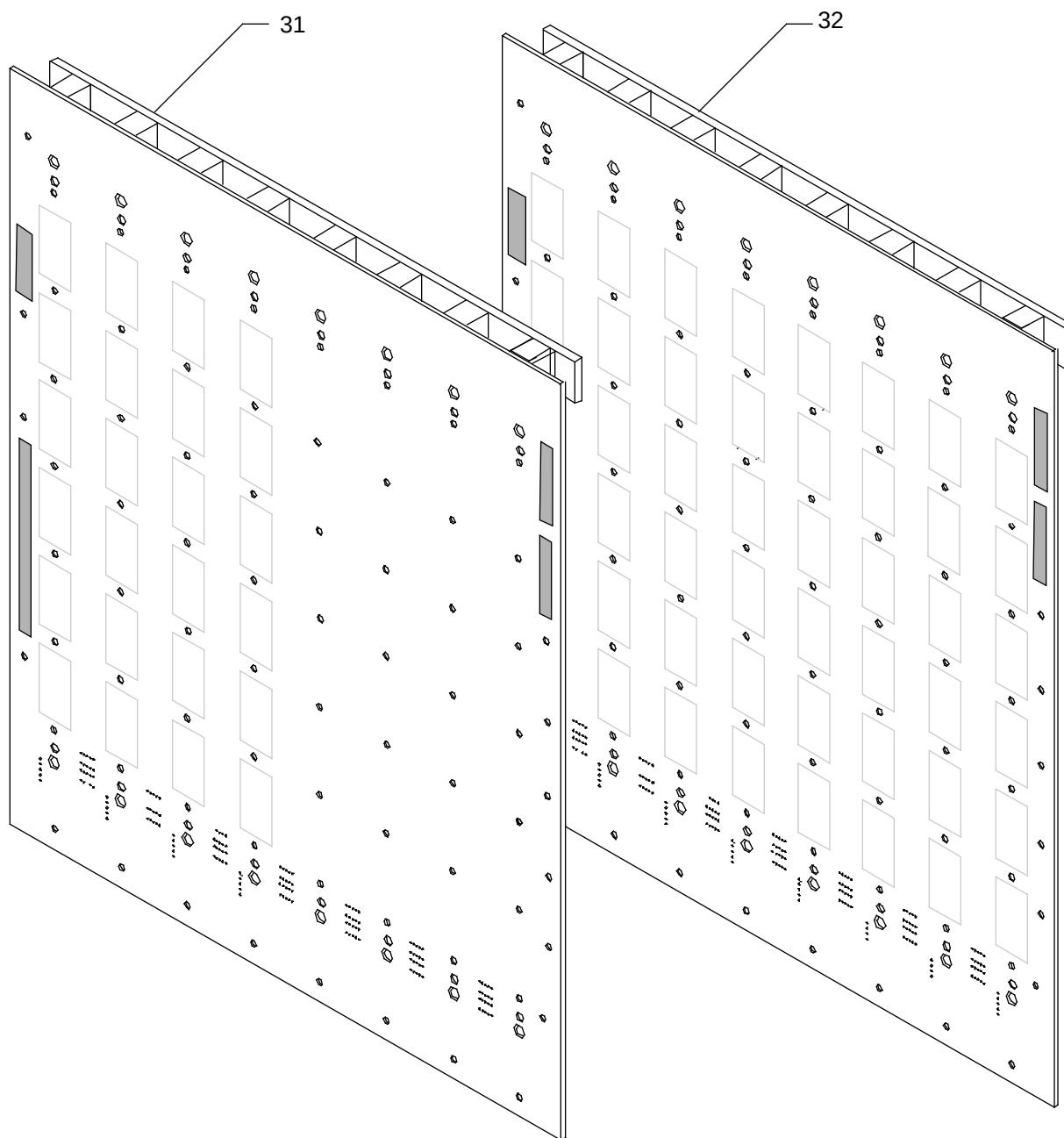
Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
22	90307101	Power Cord, 1 m	28	90360500	Front-end to CPU Backplane Cable, 48 V
23	90459600	Fuse, 10 A	29	90350400	Front-end Power Chassis to Blower Assembly Sense Cable
24	90327900	220 Vac/48 Vdc Power Supply	30	90350200	CCU to Front-end Power Sense Cable
25	90365200	Power Supply Air Filter			
26	90375700	Front-end Power Chassis			
27	01134006	Fuse, 1/2 A			



Backplane

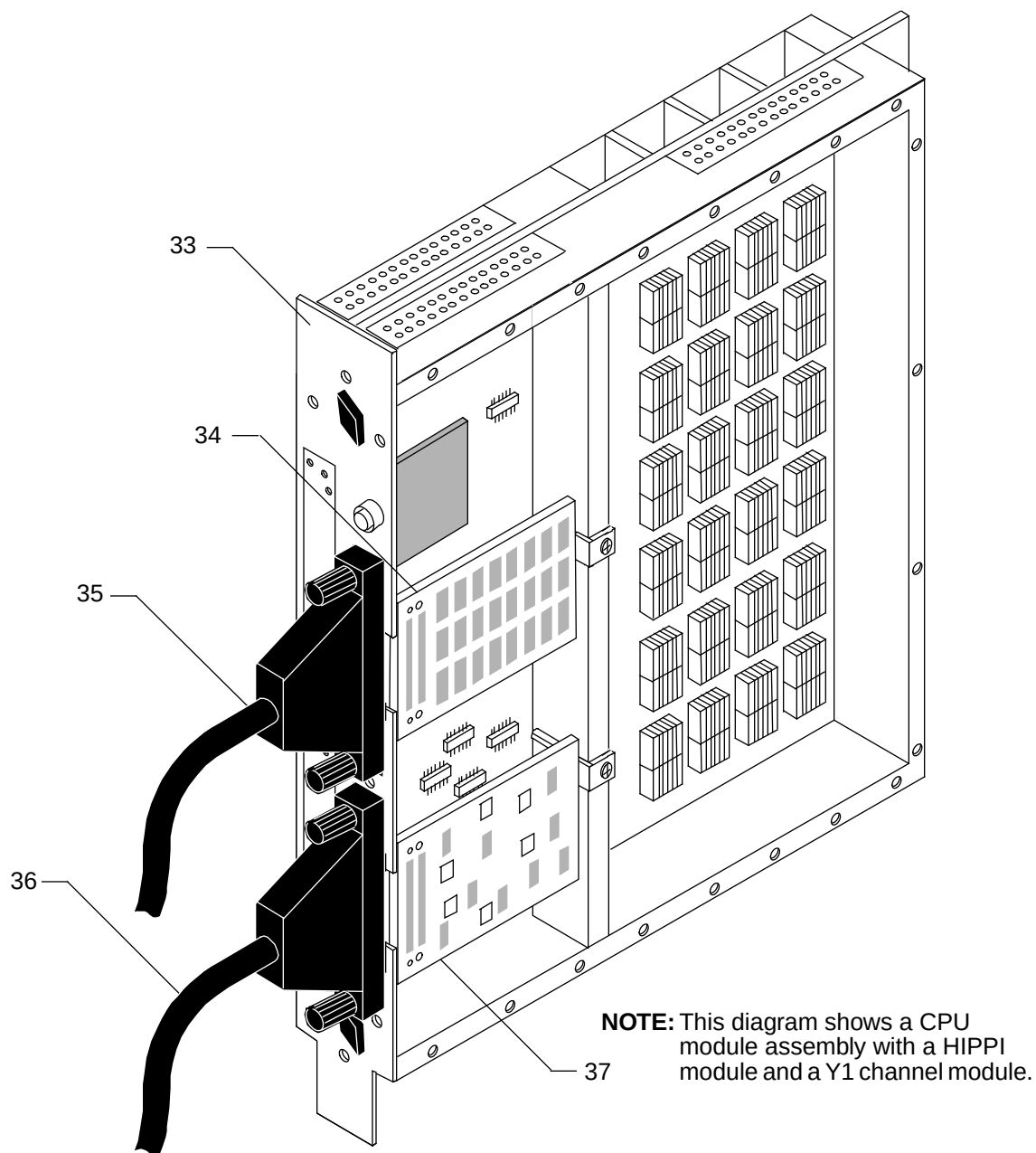
Ref.**No. Part Number Description**

31	90445000	2 x 2 Backplane Replacement Kit
32	90445200	4 x 4 Backplane Replacement Kit



Processor Module

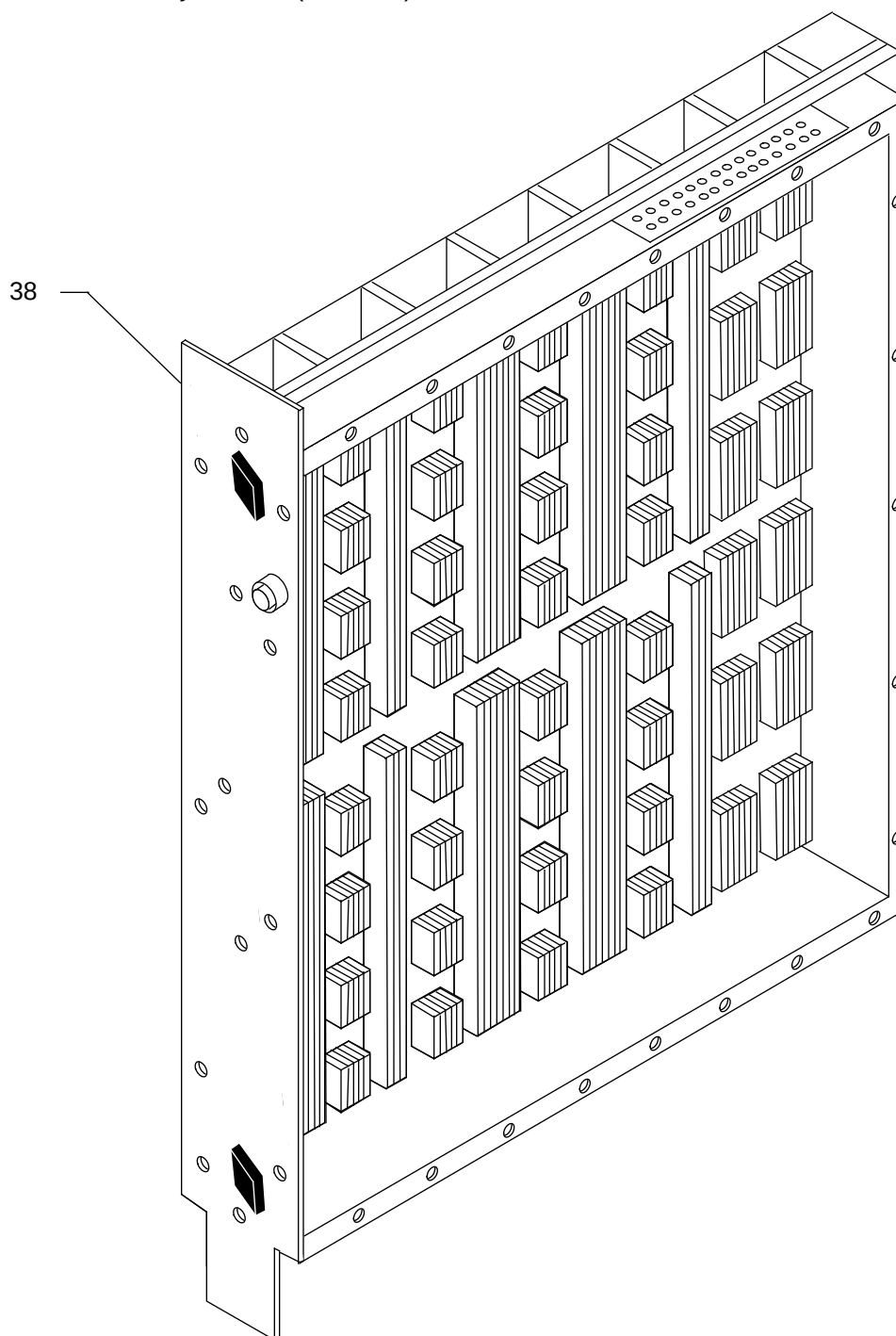
Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
33	90380002	CPU Module Assembly (HIPPI)	35	90390900	HIPPI CPU Cable, TA
	90380000	CPU Module Assembly (Non-HIPPI)		90390901	HIPPI CPU Cable, RA
34	90287500	HIPPI Source (TA) Module	36	90457200	Y1 Cable, 14 ft
	90288000	HIPPI Destination (RA) Module	37	90288400	Y1 Channel Module Assembly



Memory Module

Ref.	Part Number	Description
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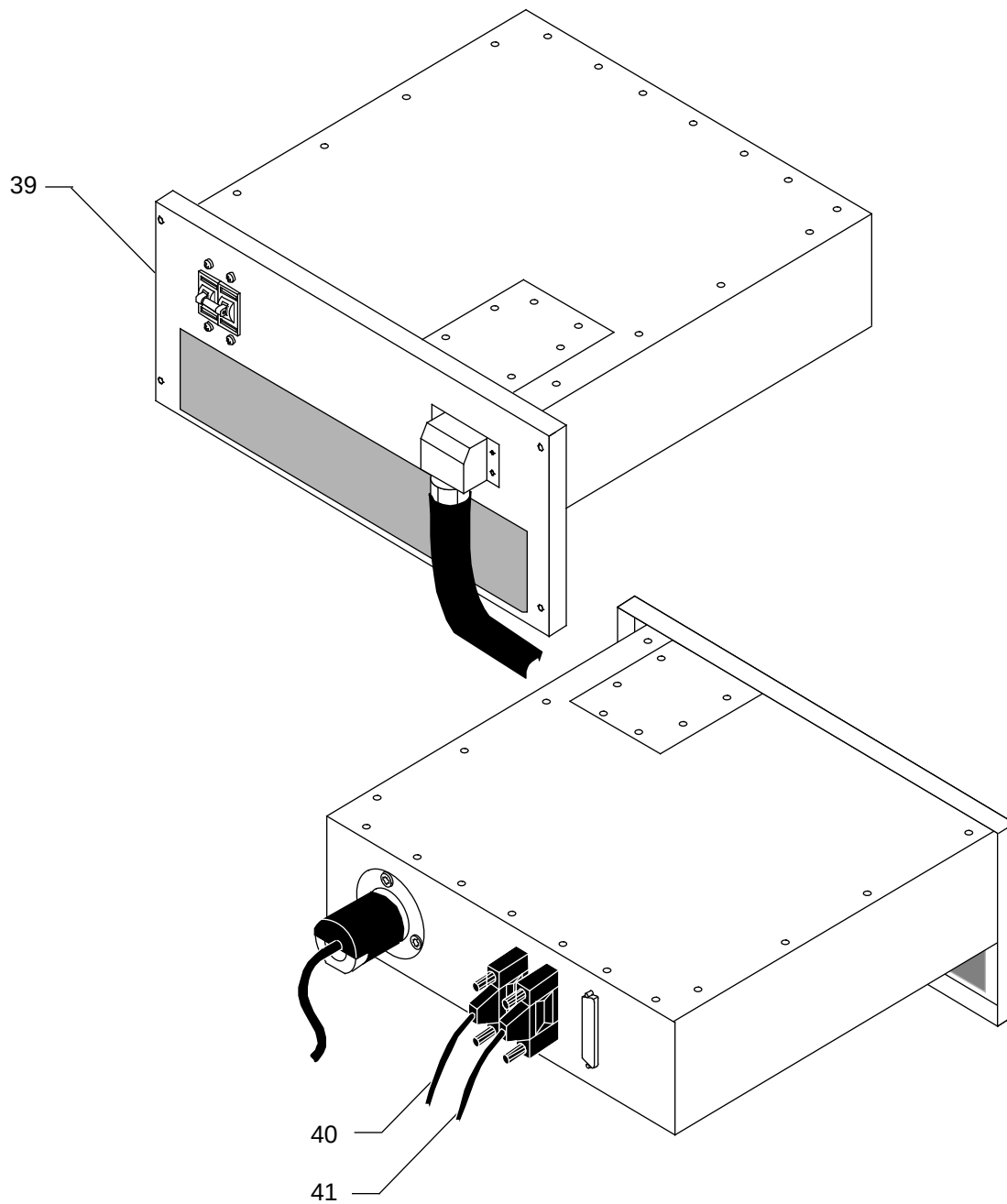
38	90373001	Memory Module, (MEM16)
	90380501	Memory Module, (MEM32)
	90373201	Memory Module, (MEM64)
	90373101	Memory Module, (MEM128)



AC Power Entry Chassis

Ref.**No. Part Number Description**

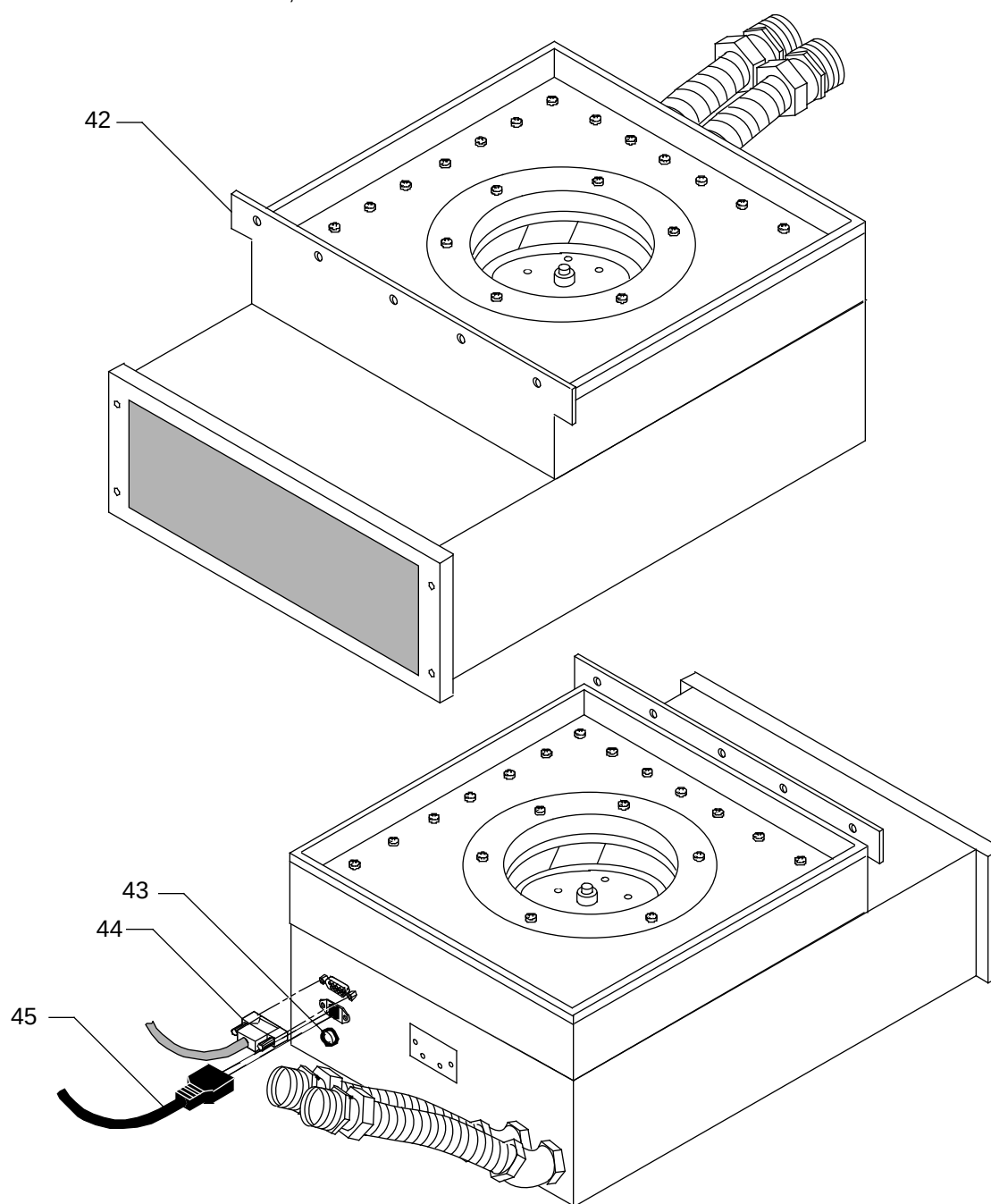
- | | | |
|----|----------|--|
| 39 | 90358501 | AC Power Entry Chassis Assembly |
| 40 | 90350301 | AC Power Entry to I/O AC Power Entry Sense Cable |
| 41 | 90350300 | CCU to AC Power Entry Sense Cable |



Blower Assembly

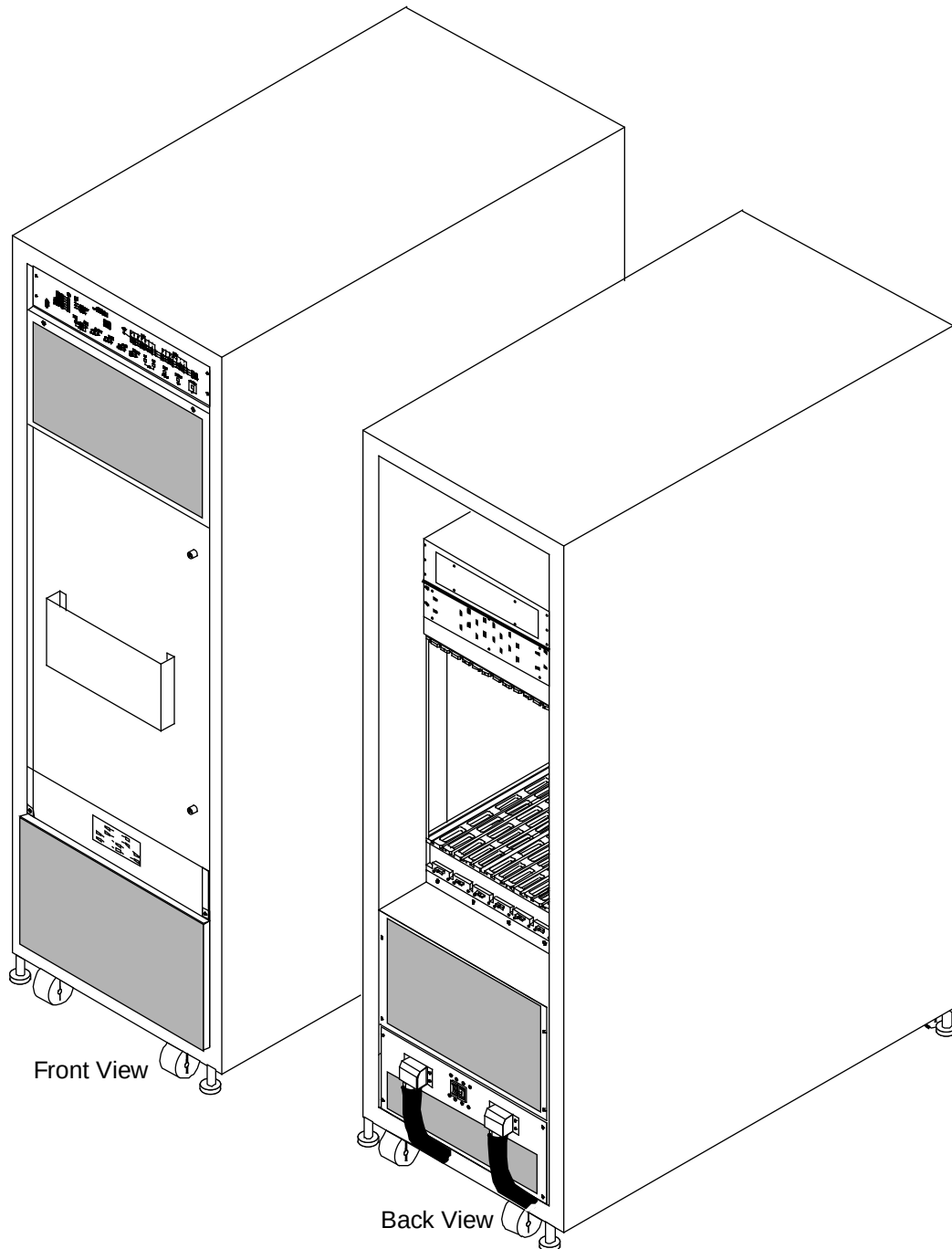
Ref.

No.	Part Number	Description
42	90361300	Blower Assembly
43	90311701	Fuse, 7 A
44	90350400	Front-end Power Chassis to Blower Assembly Sense Cable
45	90307101	Power Cord, 1 Meter



CRAY J932 Mainframe Cabinet Illustrated Parts Catalog

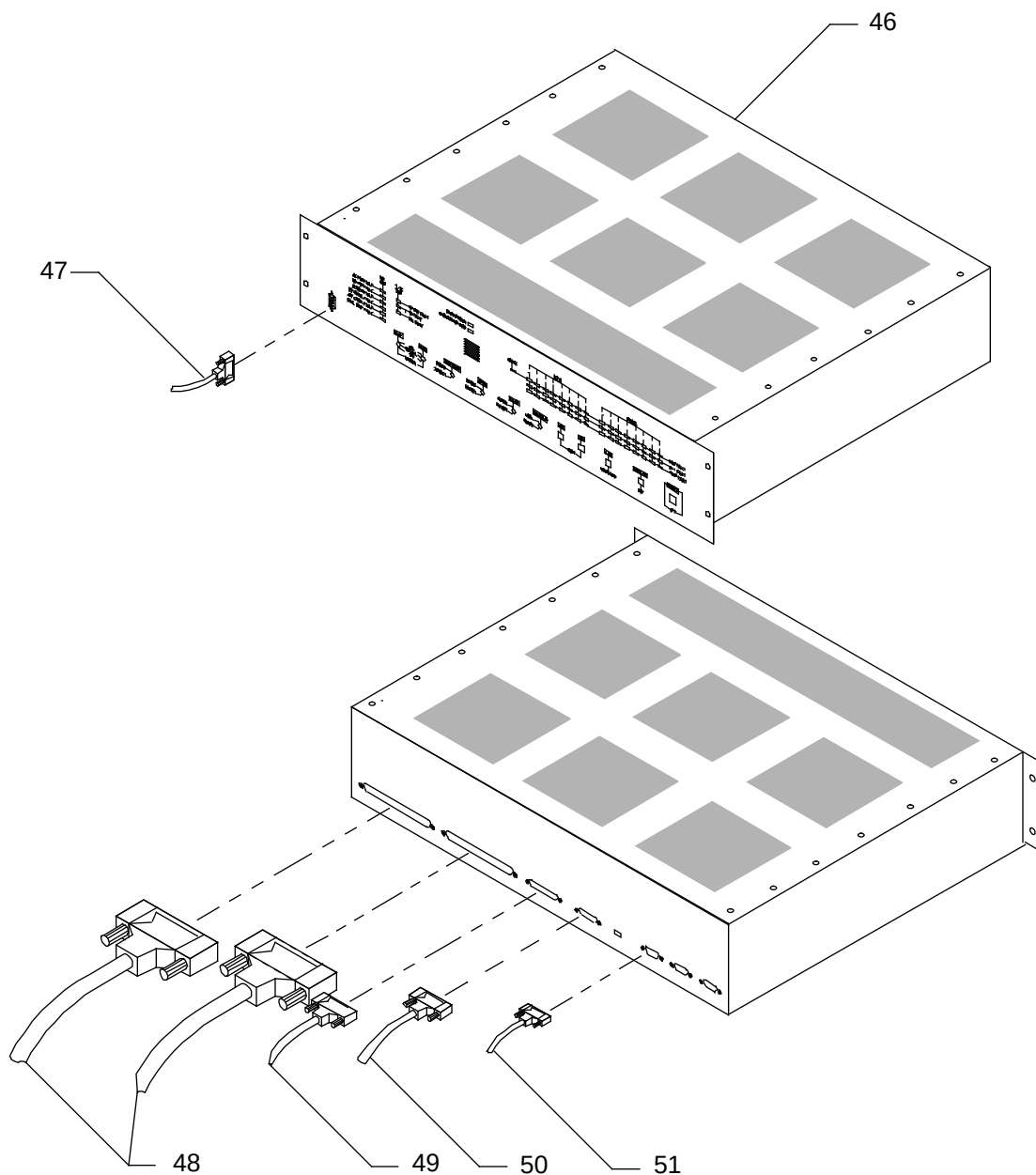
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NOTE: *When you order parts using the parts number in this catalog, you can be assured that you will receive the latest versions of the parts even if the part numbers have changed.*

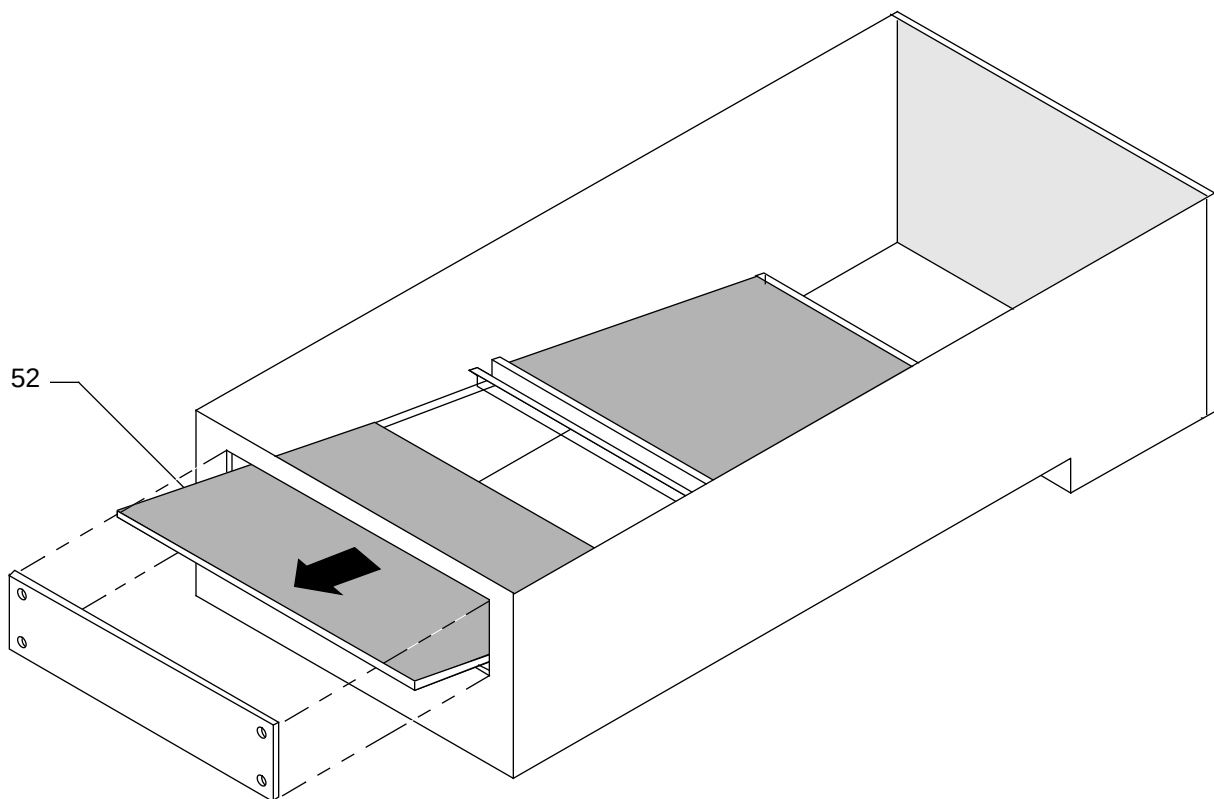
Central Control Unit

Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
46	90402100	Central Control Unit	50	90350300	CCU to AC Power Entry Sense Cable
47	90386400	CCU to Pod Cable	51	90350600	Alarm Cable
48	90350000	CCU to Card Cage Midplane Sense Cable			
49	90350200	CCU to Front-end Power Sense Cable			



Input Air Filter

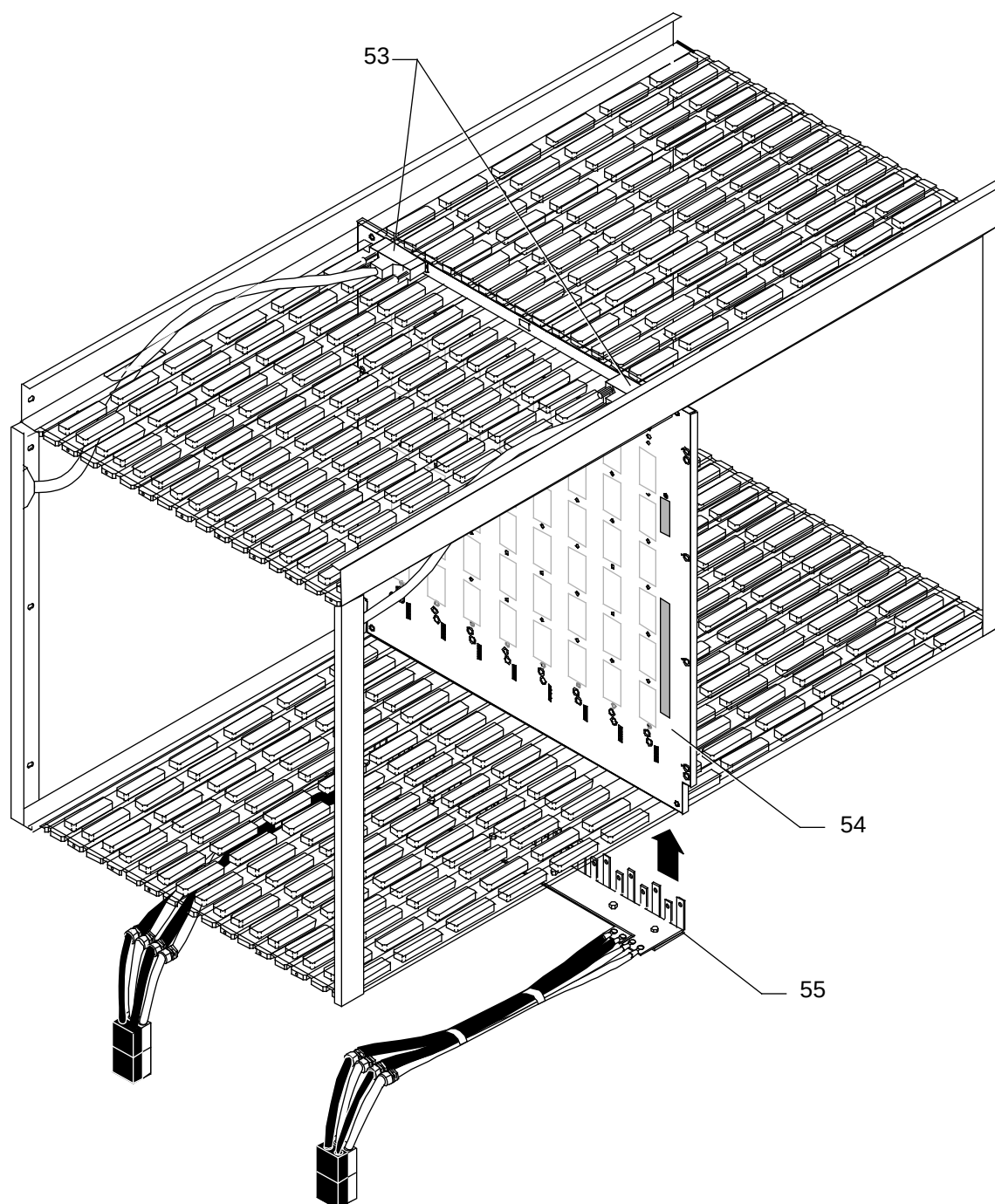
Ref. No.	Part Number	Description
52	90312400	Input Air Filter



CPU Card Cage

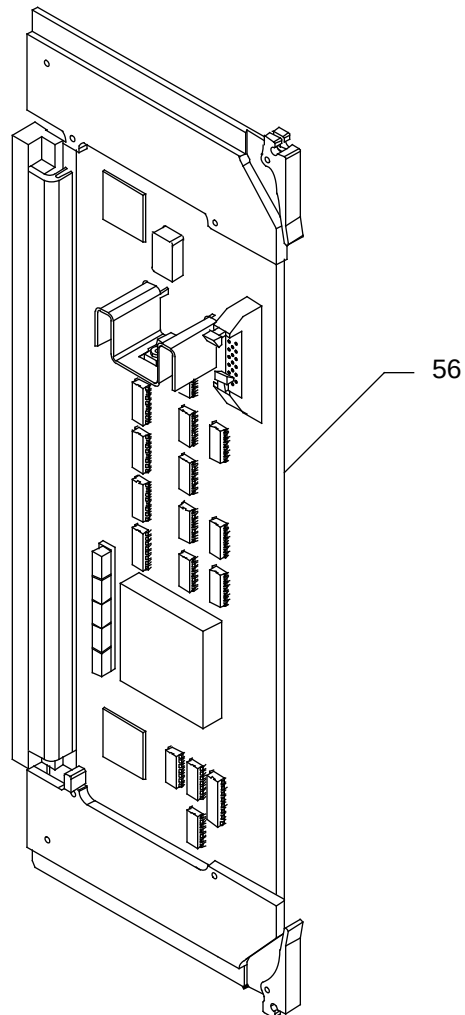
Ref.

No.	Part Number	Description
53	90350101	Sense Cables
54	90400700	8 x 8 Midplane Module Assembly
55	90430000	48 Vdc Midplane Bus Assembly



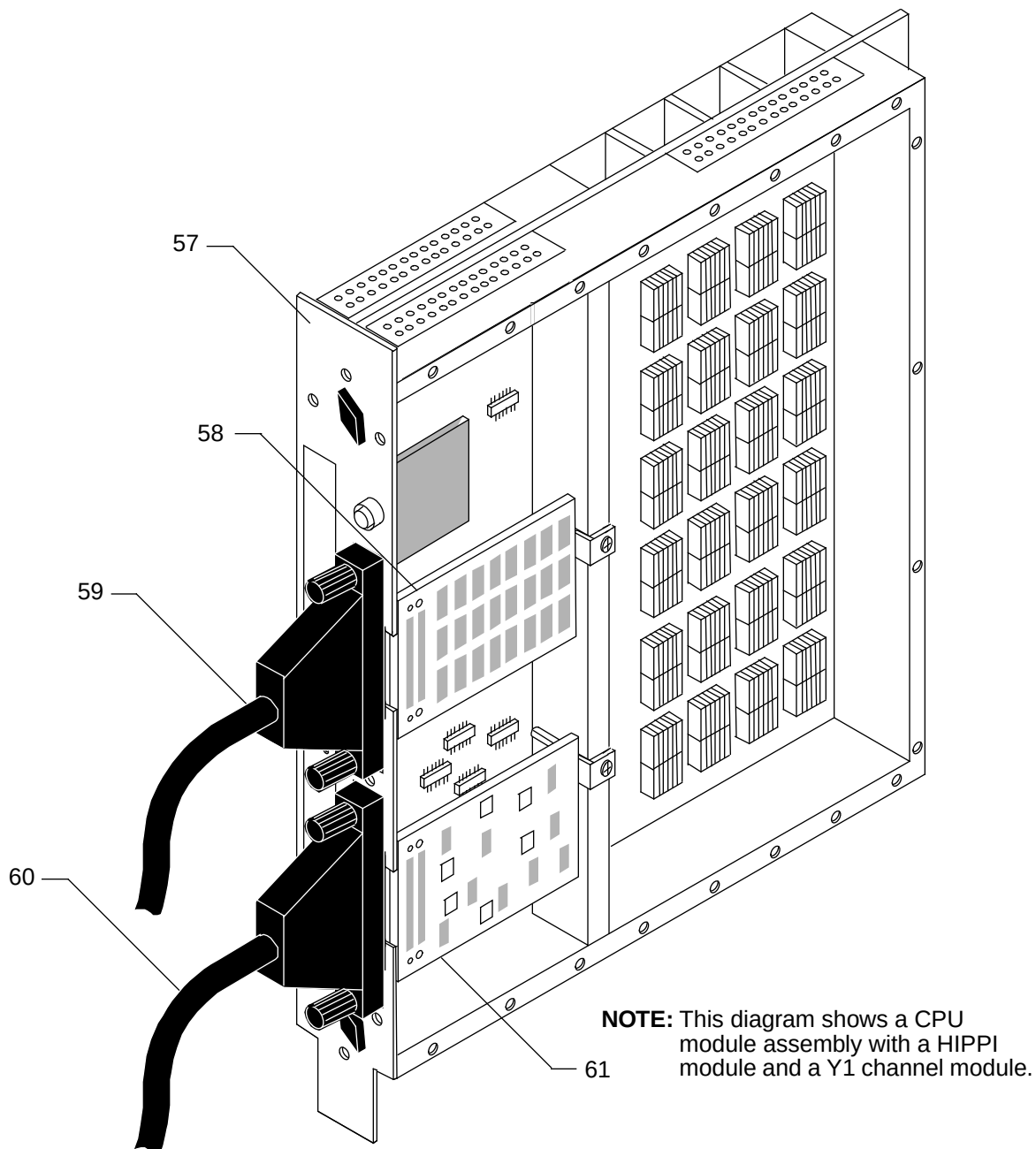
Clock Module

Ref. No.	Part Number	Description
56	90278602	Clock Module



Processor Module

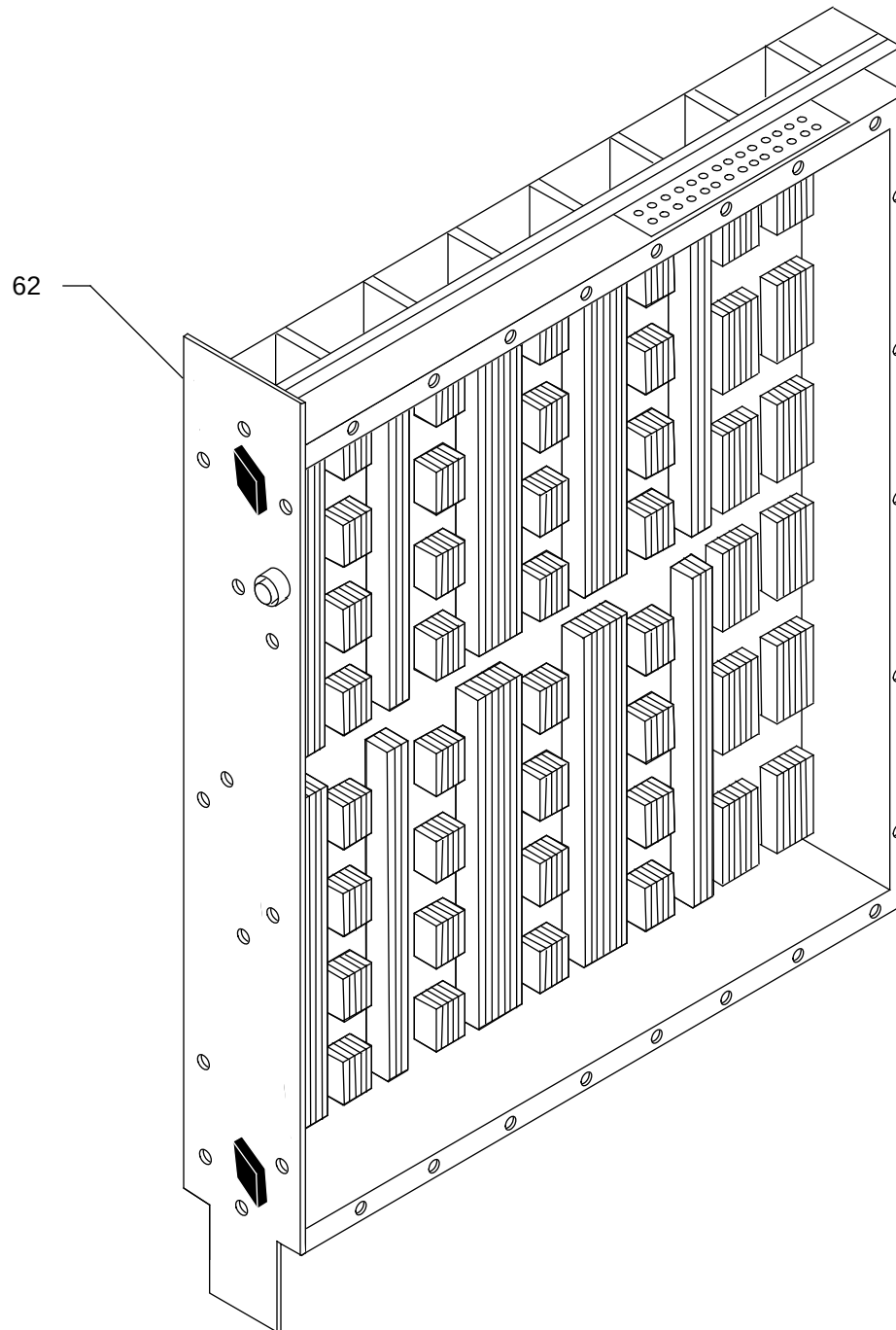
Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
57	90380003	CPU Module Assembly	60	90457200	Y1 Cable, 14 ft
58	90287500	HIPPI Source (TA) Module	61	90288400	Y1 Channel Module Assembly
	90288000	HIPPI Destination (RA) Module			
59	90390900	HIPPI CPU Cable, TA			
	90390901	HIPPI CPU Cable, RA			



Memory Module

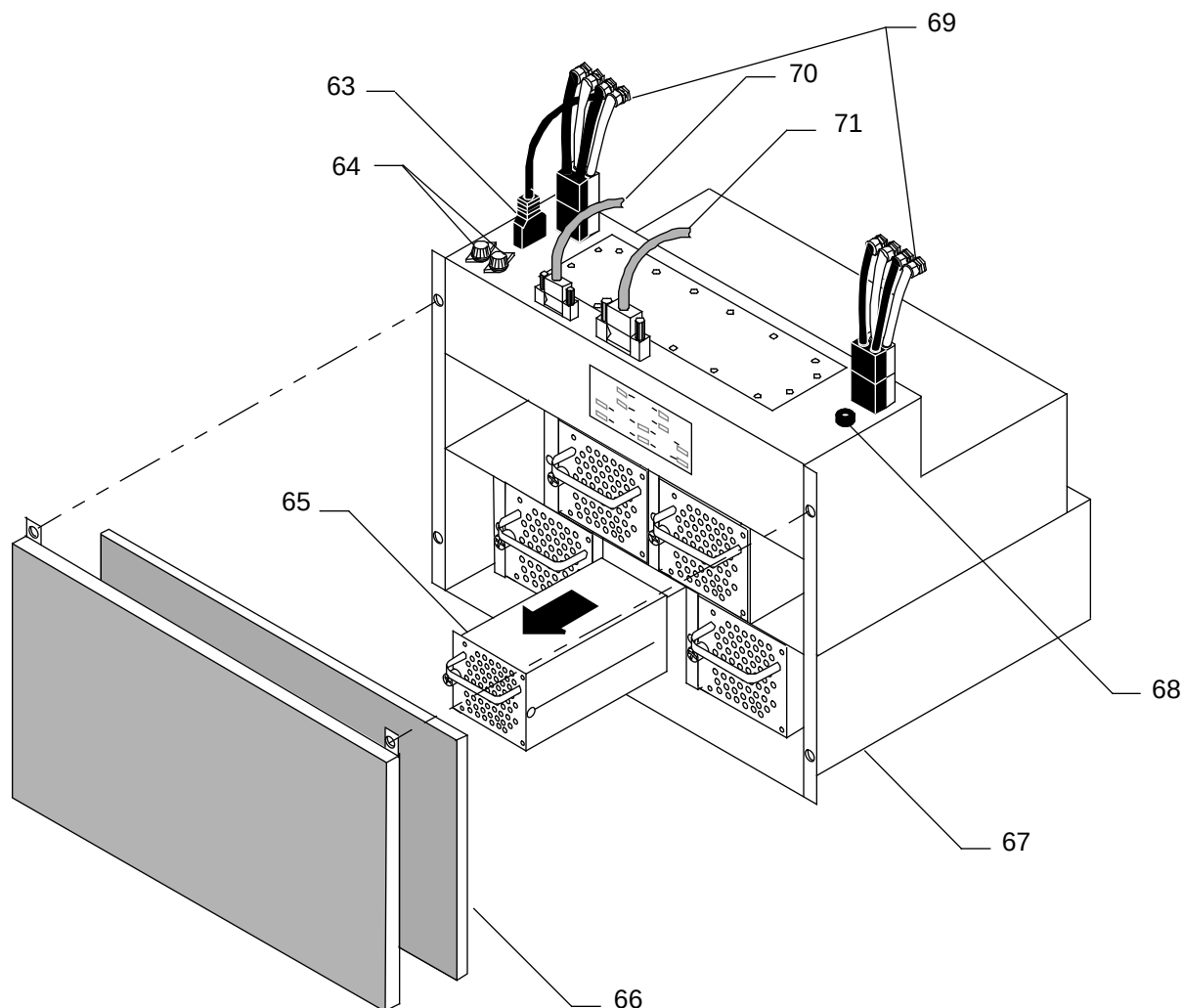
Ref.**No. Part Number Description**

62	90424100	Memory Module, (MEM16)
	90424200	Memory Module, (MEM32)
	90424300	Memory Module, (MEM64)
	90424400	Memory Module, (MEM128)



Front-end Power Chassis

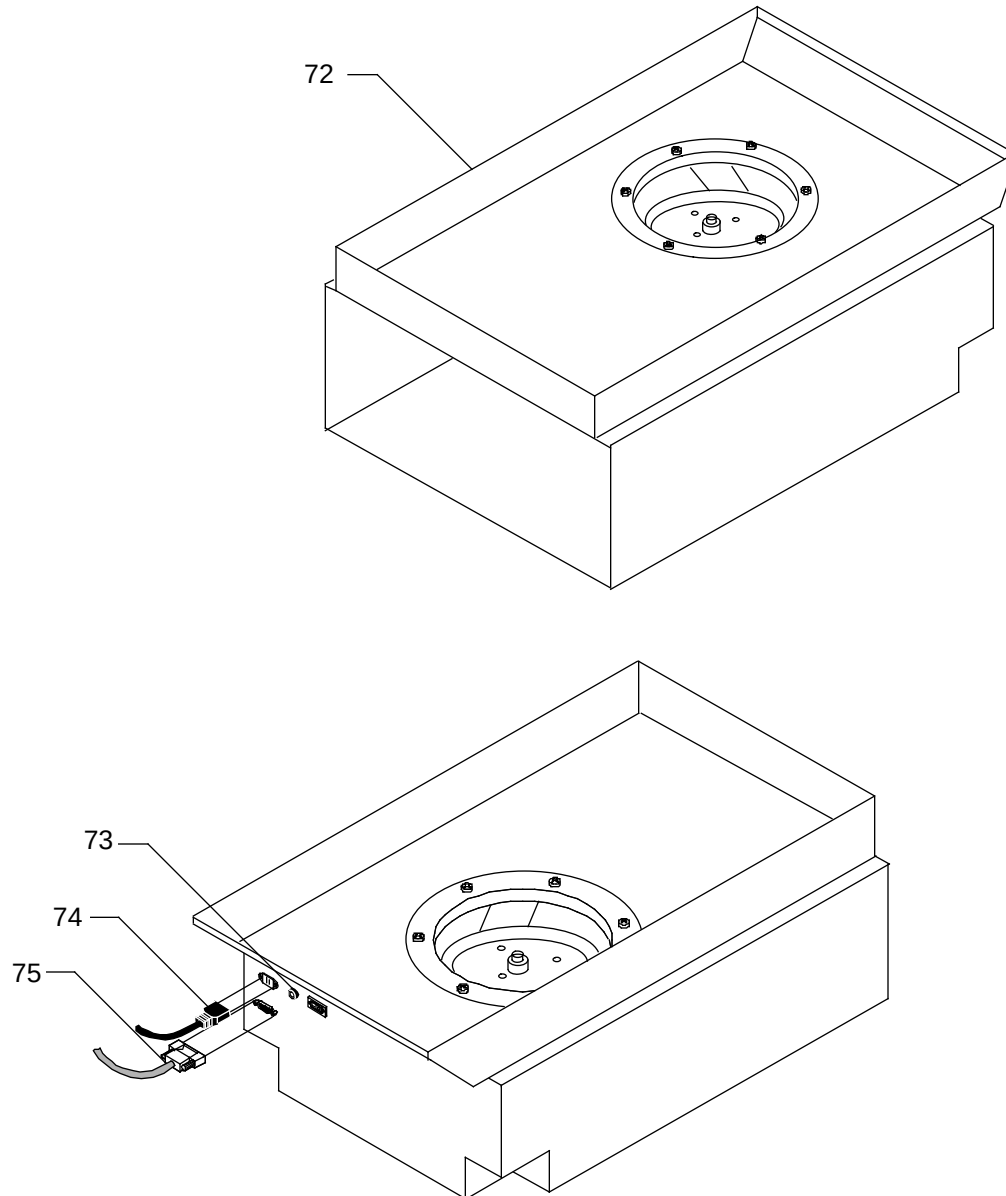
Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
63	90307101	Power Cord, 1 m	69	90360500	Front-end to CPU Midplane Cable, 48 Vdc
64	90459600	Fuse, 10 A	70	90350400	Front-end Power Chassis to Blower Assembly Sense Cable
65	90327900	220 Vac/48 Vdc Power Supply	71	90350200	CCU to Front-end Power Sense Cable
66	90405700	Power Supply Air Filter			
67	90401900	Front-end Power Chassis			
68	01134006	Fuse, 1/2 A			



Blower Assembly

Ref.

No.	Part Number	Description
72	90401800	Blower Assembly
73	90311700	Fuse, 10 A
74	90307101	Power Cord, 1 m
75	90350400	Front-end Power Chassis to Blower Assembly Sense Cable

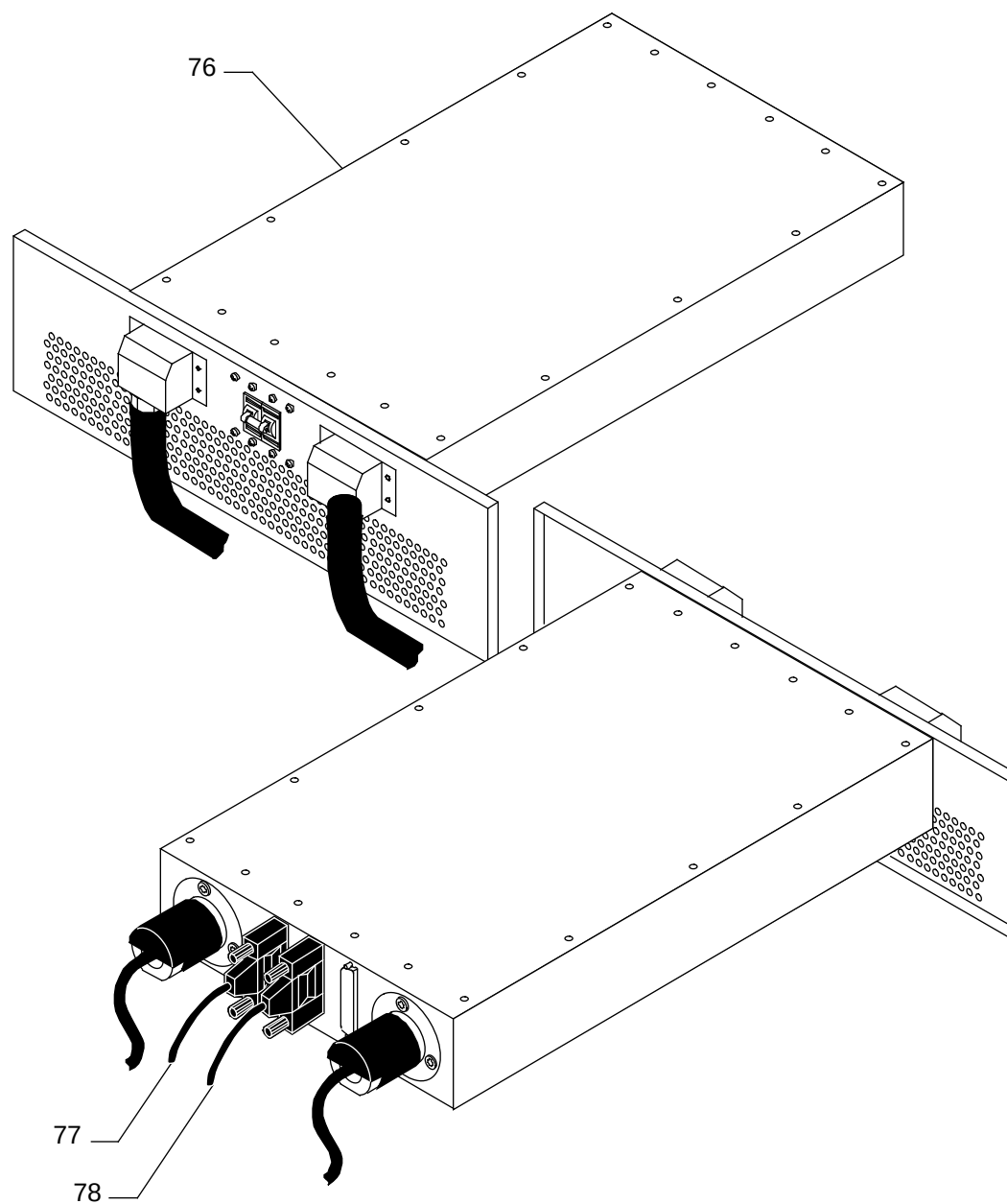


AC Power Entry Chassis

Ref.

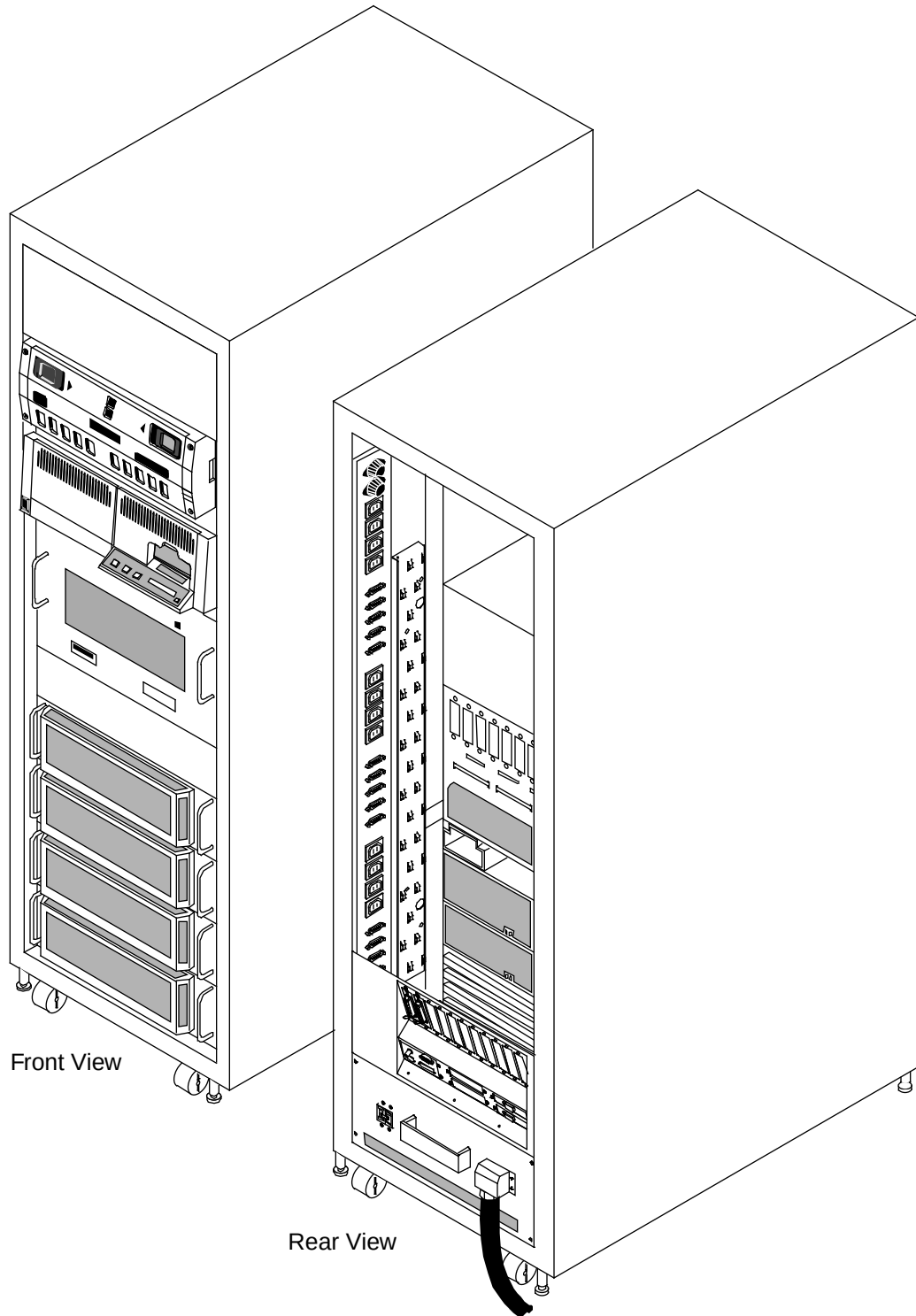
No. Part Number Description

- | | | |
|----|----------|--|
| 76 | 90402000 | AC Power Entry Chassis Assembly |
| 77 | 90350301 | AC Power Entry to I/O AC Power Entry Sense Cable |
| 78 | 90350300 | CCU to AC Power Entry Sense Cable |



Peripheral Cabinet Illustrated Parts Catalog

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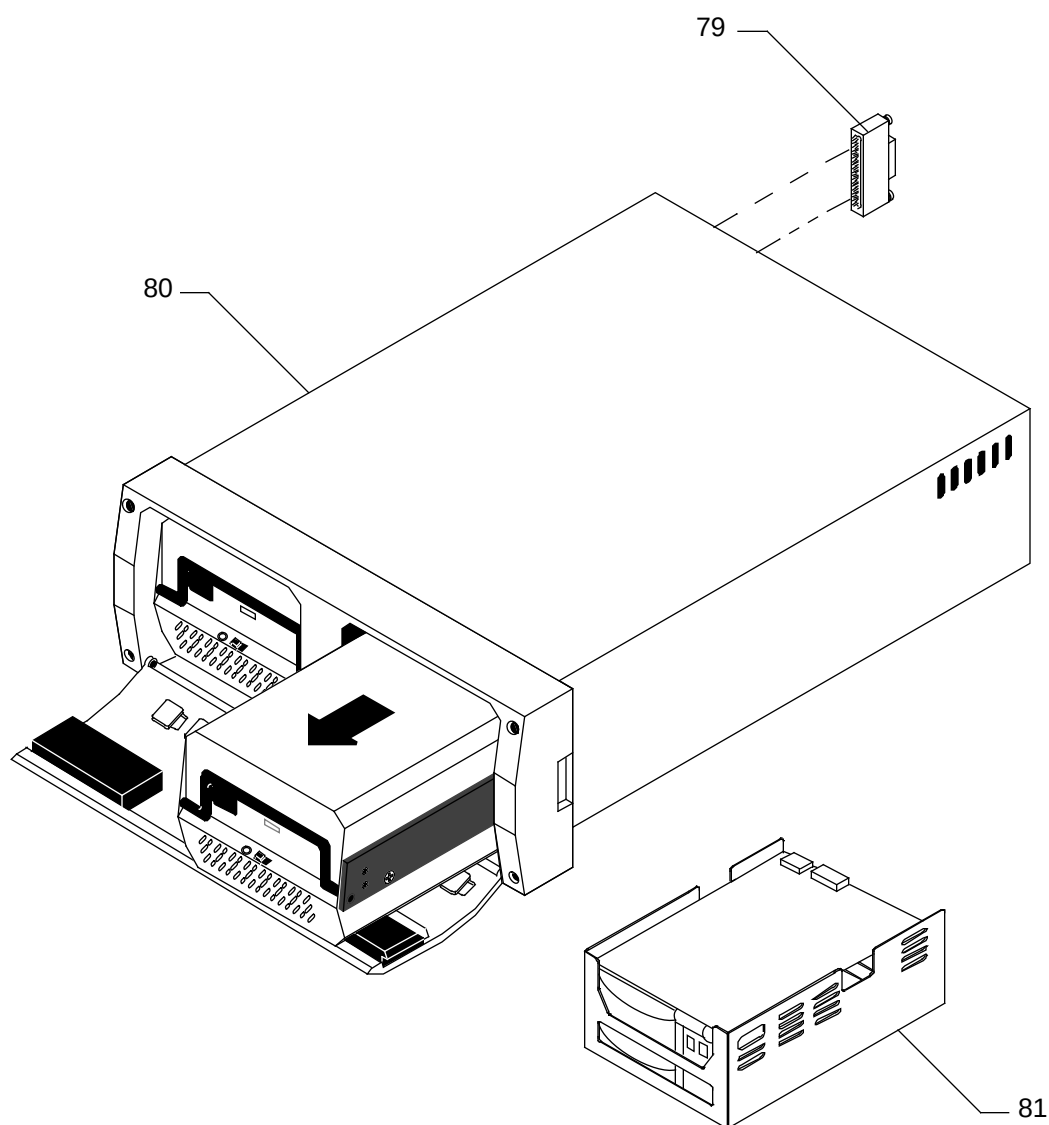


NOTE: When you order parts using the part numbers in this catalog, you can be assured that you will receive the latest versions of the parts even if the part numbers have changed.

DR-5I Removable Disk Drive Chassis

Ref.

No.	Part Number	Description
79	90266100	Standard Profile Terminator
80	90241600	DR-5I Removable Disk Drive Chassis (part includes empty cannisters)
81	90244500	DD-5I Disk Drive

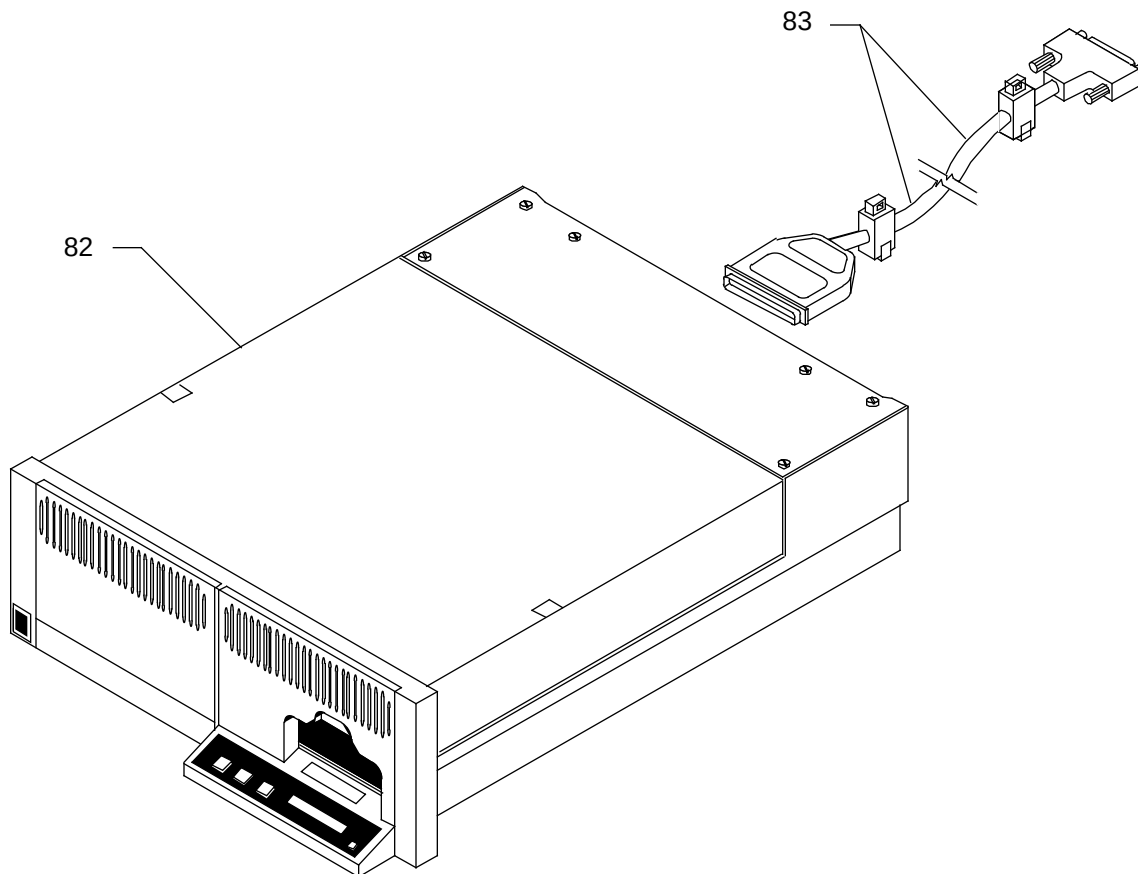


TD-3 Tape Drive

Ref.

No. Part Number Description

82	90250700	TD-3 Tape Unit Assembly
83	90269300	TD-3 Logic Harness Assembly

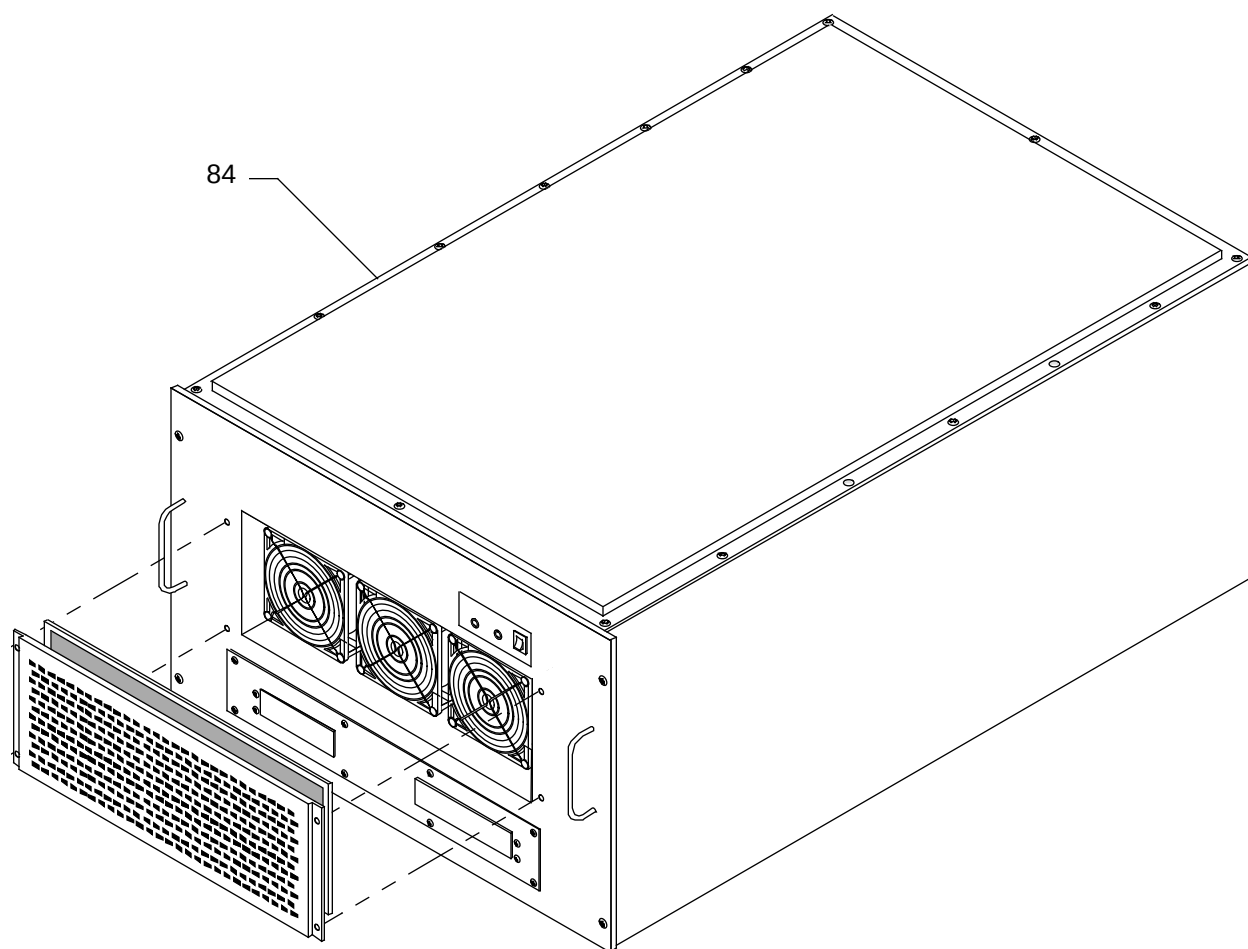


VME Unit Assembly

Ref.

No. Part Number Description

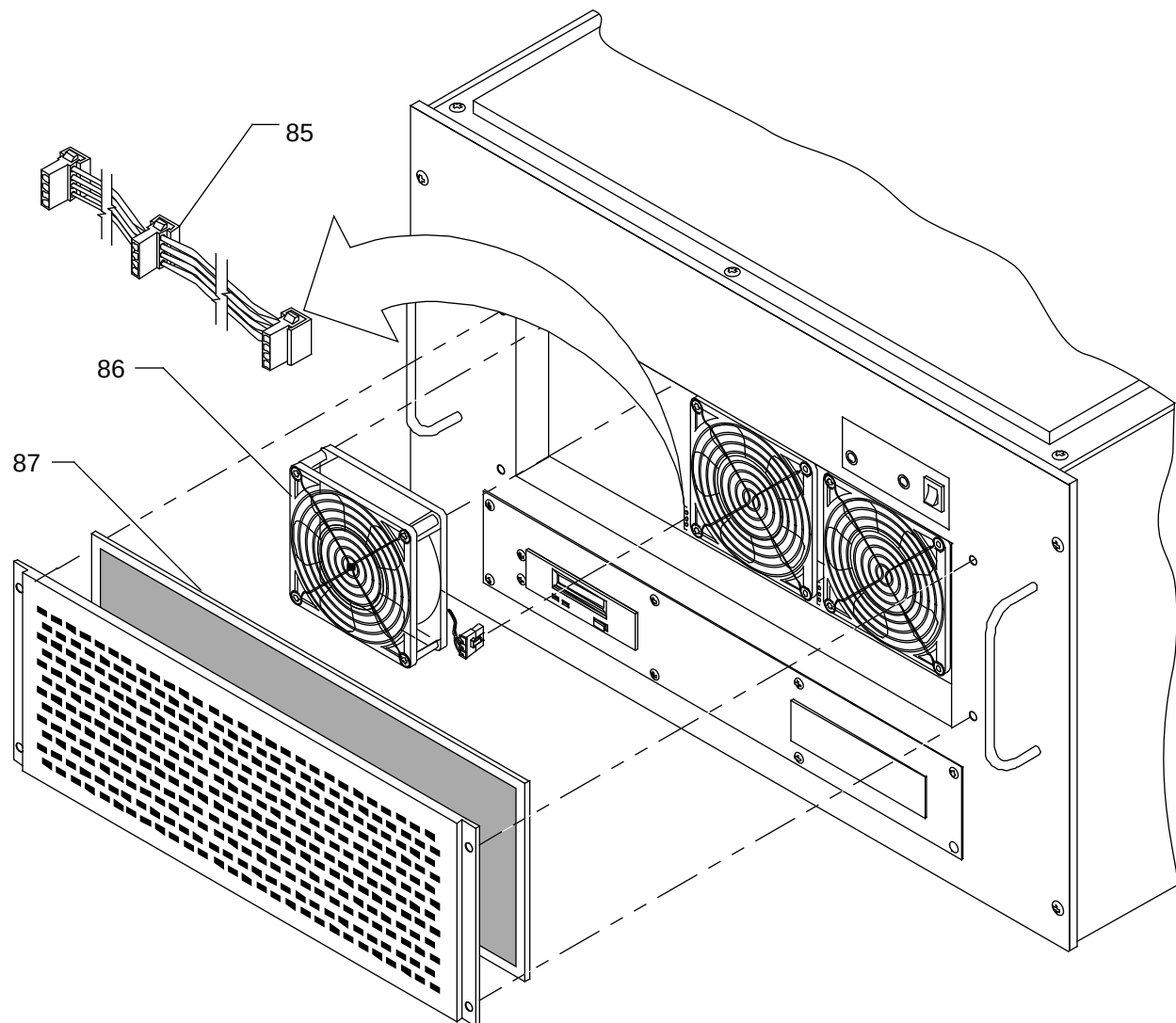
84 90382400 VME Unit Assembly



VME Drawer

Ref.

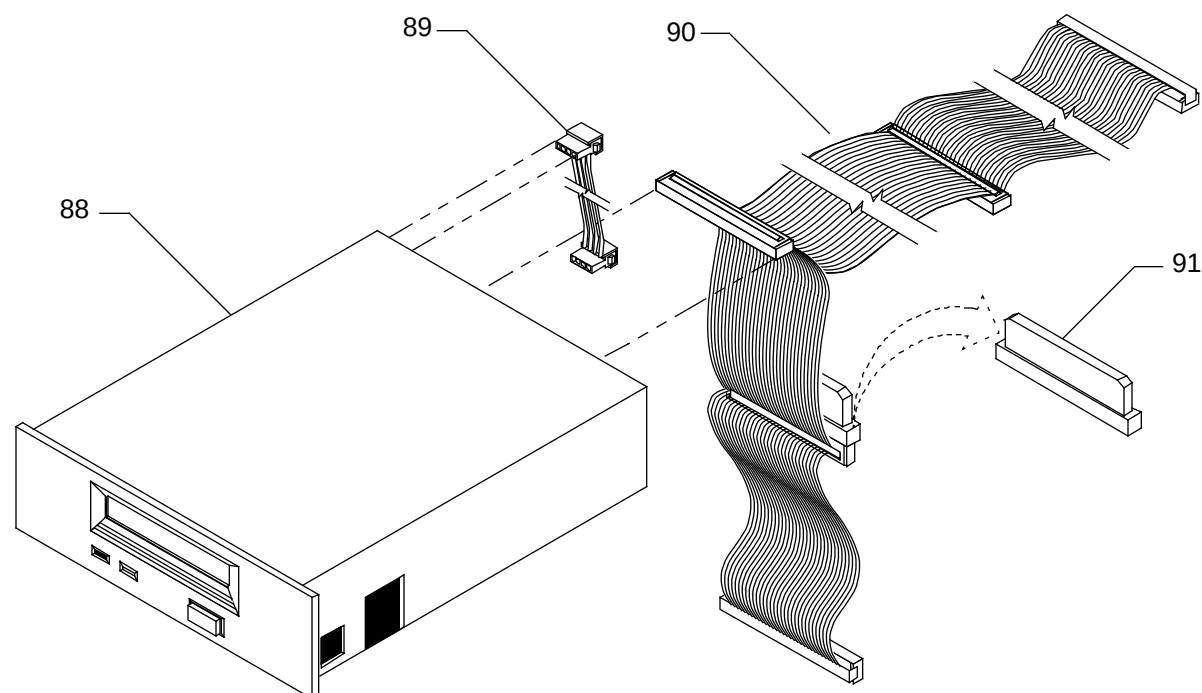
No.	Part Number	Description
85	90364300	Fan Cable Harness Assembly
86	90312000	VME Hot Swap Fan Assembly
87	90308000	Air Filter



DS-3 Tape Drive

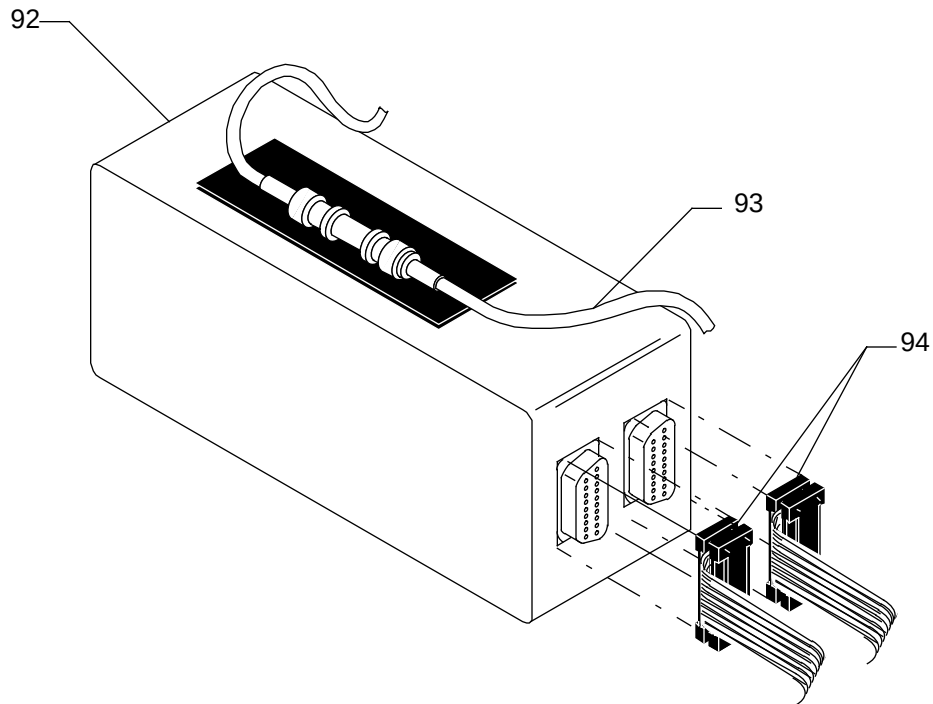
Ref.

No.	Part Number	Description
88	90317700	DS-3 Tape Unit Assembly
89	90307100	Power Cable
90	90360400	SCSI System Cable
91	90436800	DS-3 Terminator



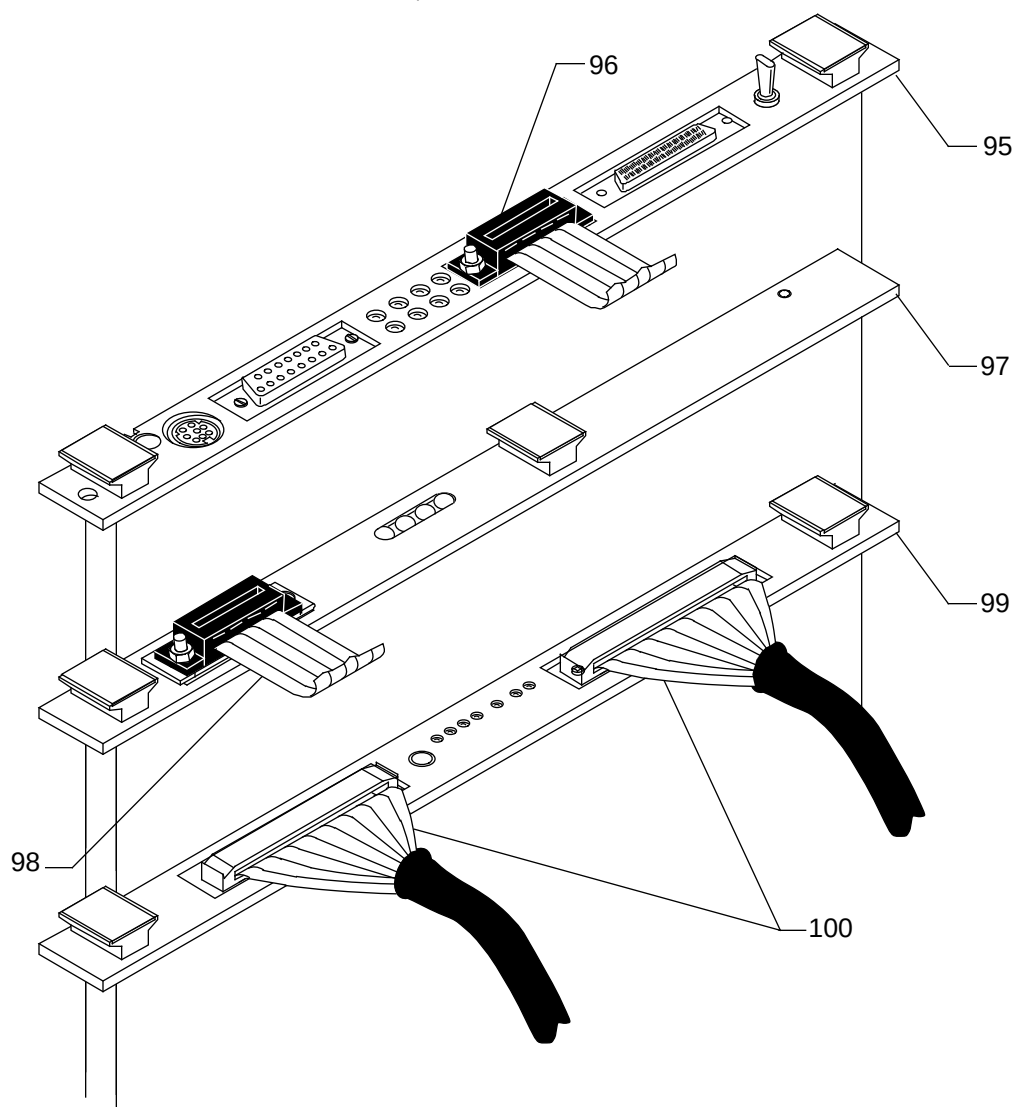
Ethernet Transceiver

Ref. No.	Part Number	Description
92	90366500	Ethernet Transceiver
93	90386900	Ethernet ThinNet Cable, 2.6 ft
94	90369600	Internal Ethernet Cable



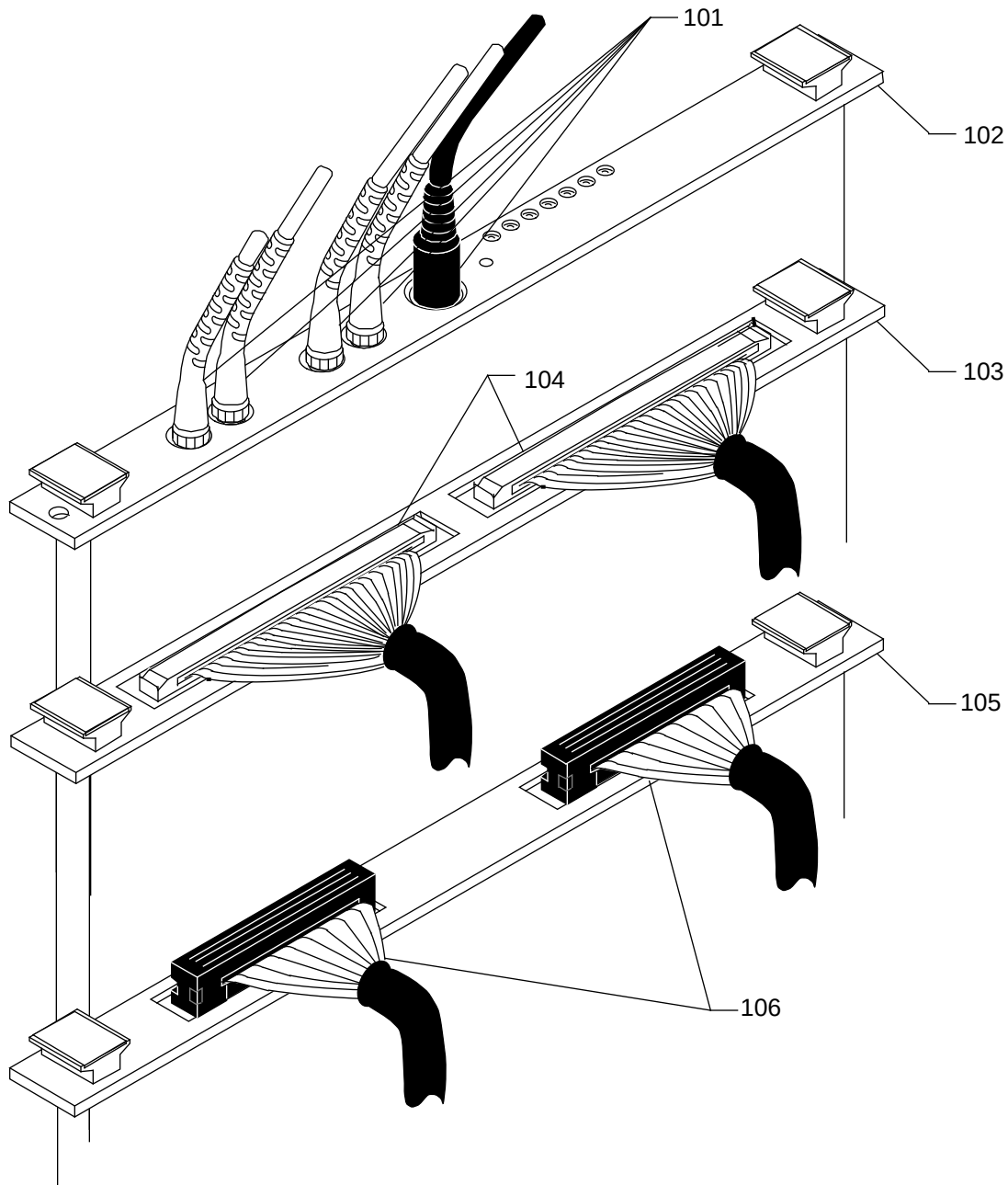
VME Boards

Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
95	90384402	SPARC Based CPU PC Board (requires IOS Kernel below revision 8.0.3.2K)	97	90227200	EI-1 Module
	90384403	SPARC Based CPU PC Board (requires IOS Kernel revision 8.0.3.2K)	98	90347600	Internal Ethernet Cable, 2.5 ft
	90384404	SPARC Based CPU PC Board (requires IOS Kernel revision 8.0.4 and above)	99	90360801	SI-3 PC Board (DC6S)
	90384405	SPARC Based CPU (does not require a specific IOS Kernel revision)	100	90317400	SCSI-3 Cable
96	90369600	Internal Ethernet Cable, 1.5 ft			



VME Boards (continued)

Ref. No.	Part Number	Description
101	90365500	Multimode FDDI Cable Assembly, 18 in.
102	90319100	FI-2 Module
103	90256603	IOBB-64 Module
104	90457300	Y1 Intermediate Cable
105	90257401	IPI-2 Controller Board (DC5I)
106	90417600	IPI Intermediate Cable

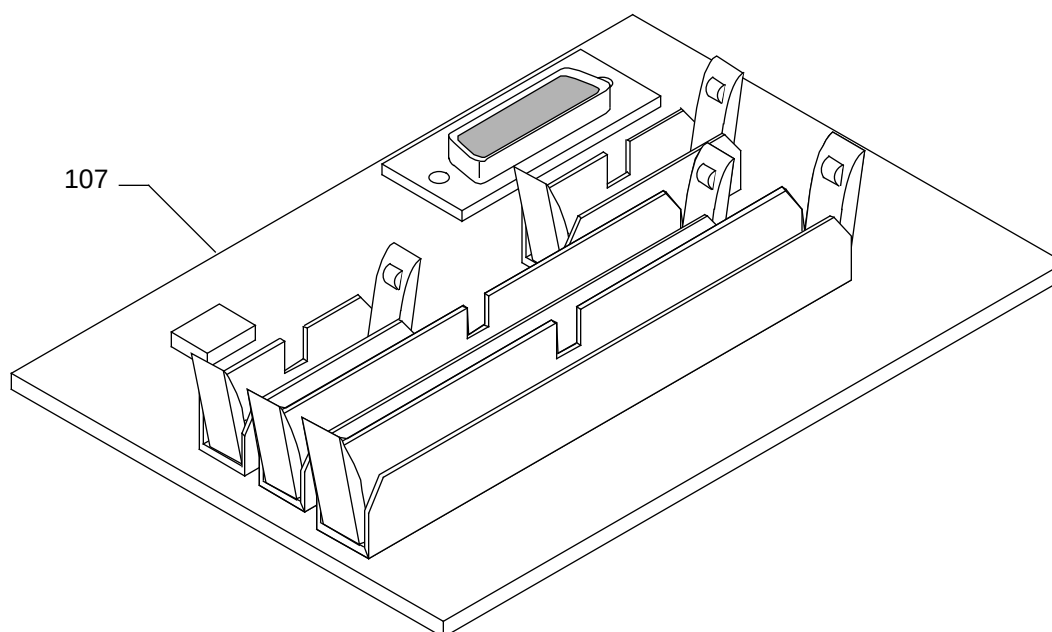


Themis P2 Adapter Board

Ref.

No. Part Number Description

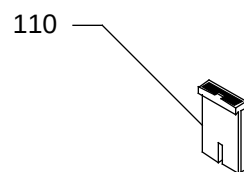
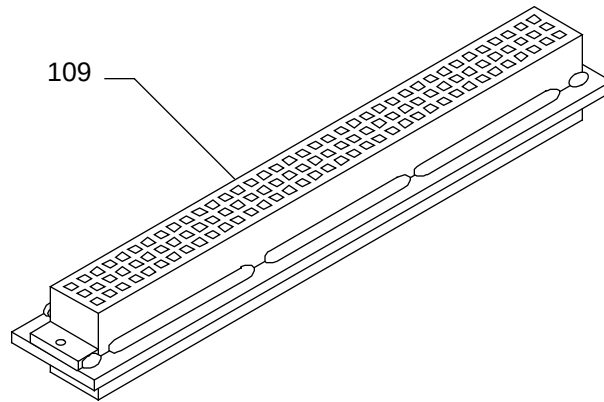
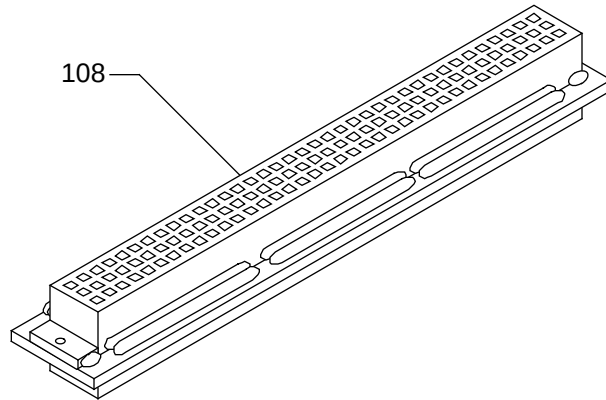
107 90379500 Themis P2 Adapter Board



VME Backplane Terminators and Jumper

Ref.

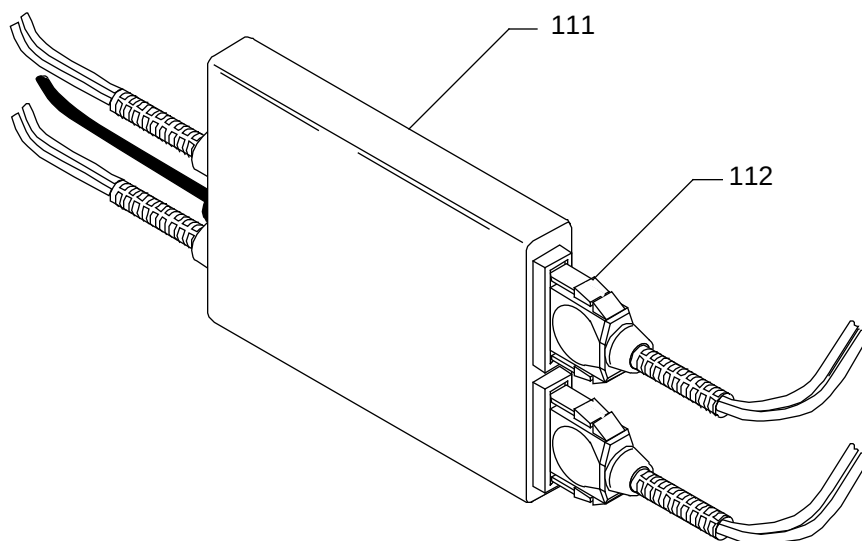
No.	Part Number	Description
108	90107500	VME J1 Terminator
109	90107600	VME J2 Terminator
110	90108200	Jumper



FDDI Module

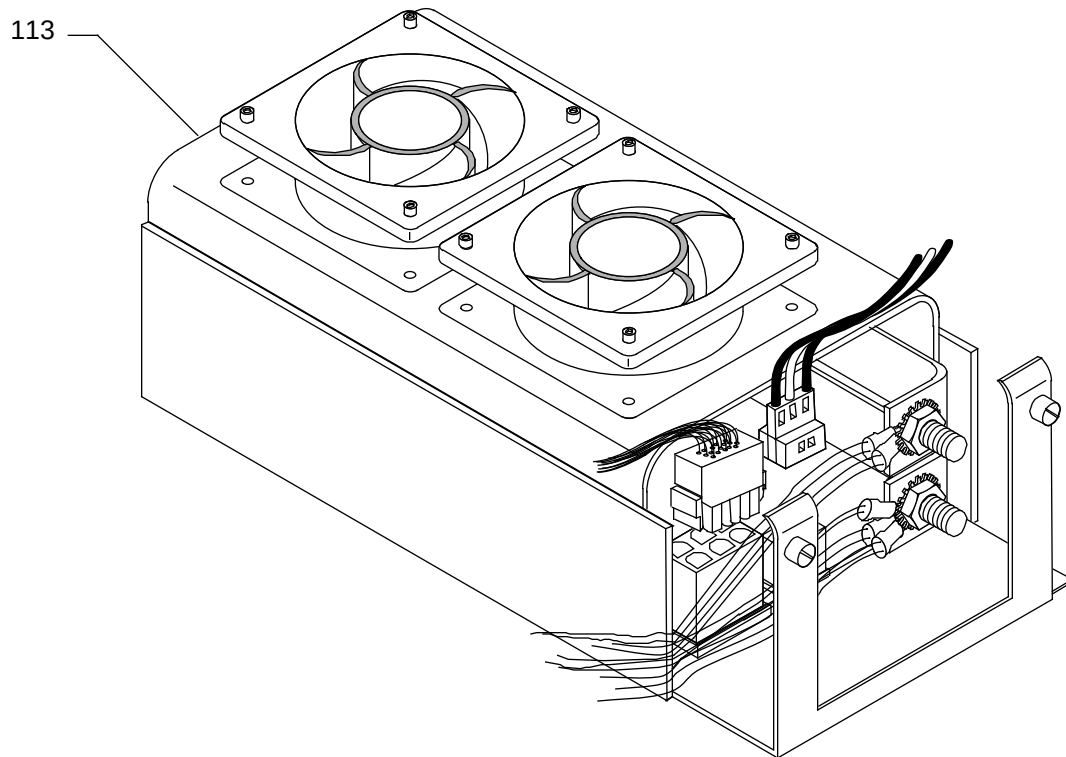
Ref.

No.	Part Number	Description
111	90365600	FDDI Module Switch
112	90365500	Multimode FDDI Cable Assembly, 18 in.



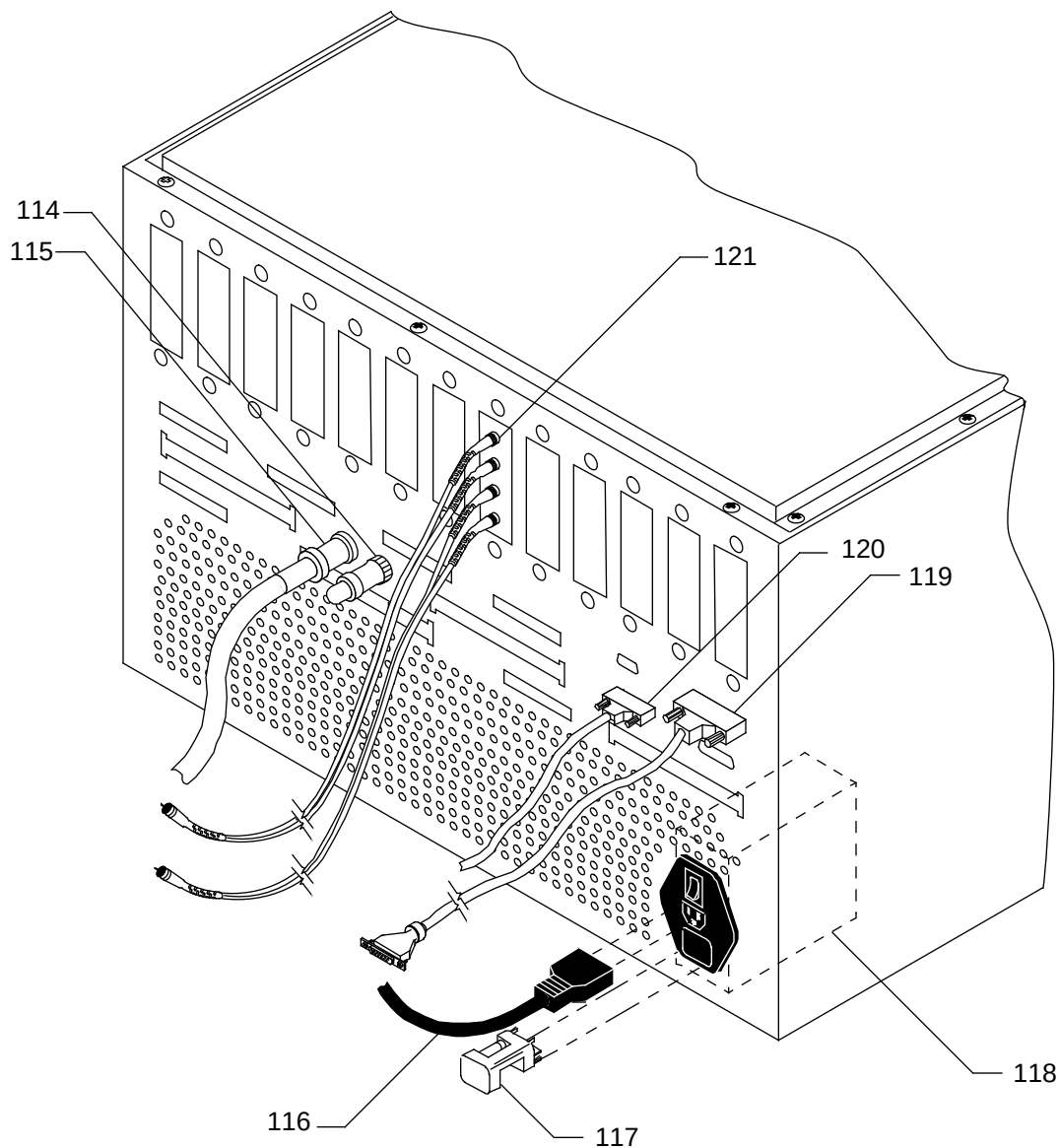
VME Power Supply

Ref. No.	Part Number	Description
113	90311400	VME Power Supply



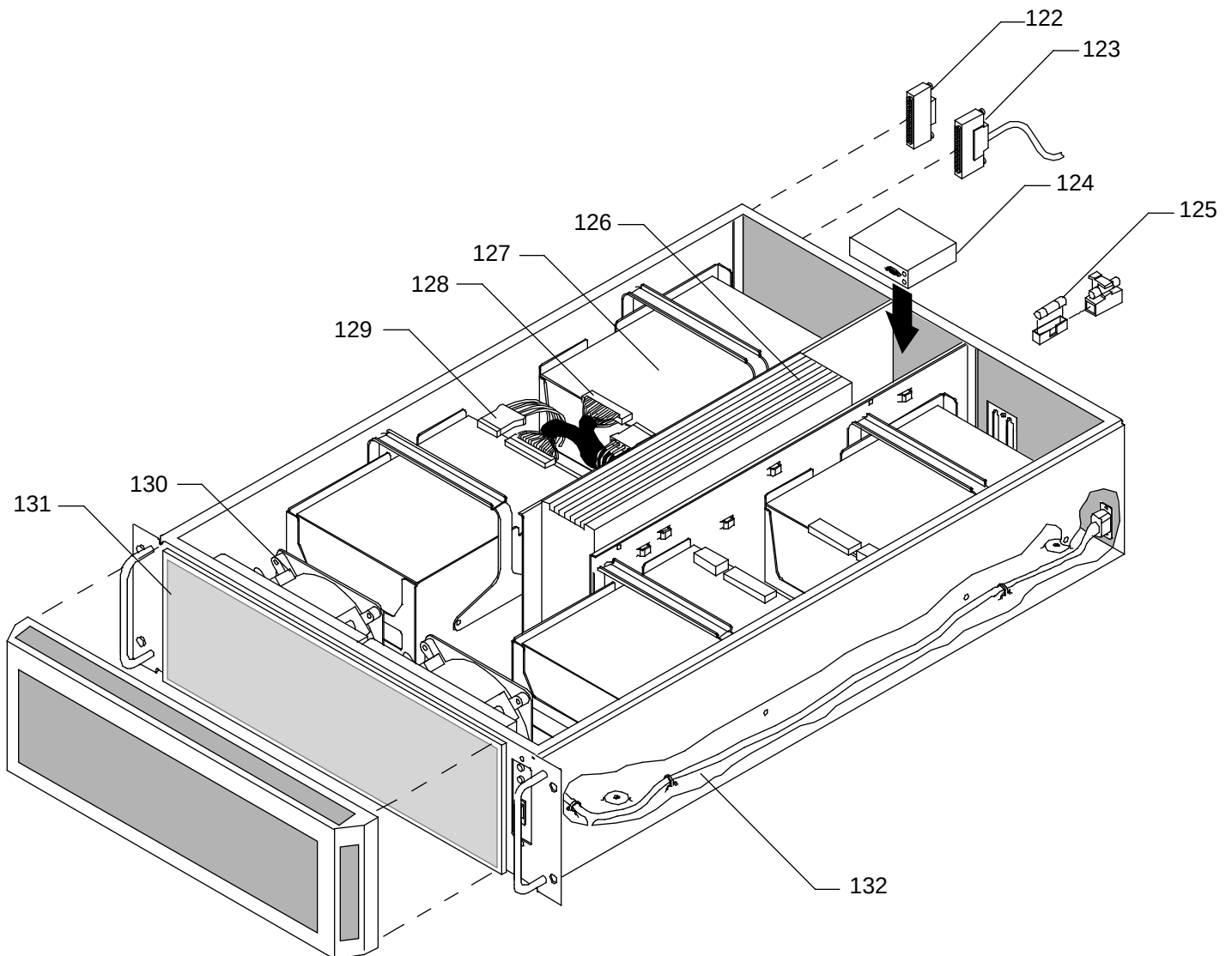
VME Chassis Bulkhead

Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
114	90157000	BNC Terminator	118	90311600	Input Power-fused Filter
115	90387000	Ethernet ThinNet Cable, 10 ft	119	90349200	VME Chassis to Bulkhead Ethernet Cable
116	90307100	Universal Power Cord, 10 A	120	90307000	VME Signal Cable
117	90311700	Fuse, 10 A	121	90369300	FDDI Multimode Cable, 3 m



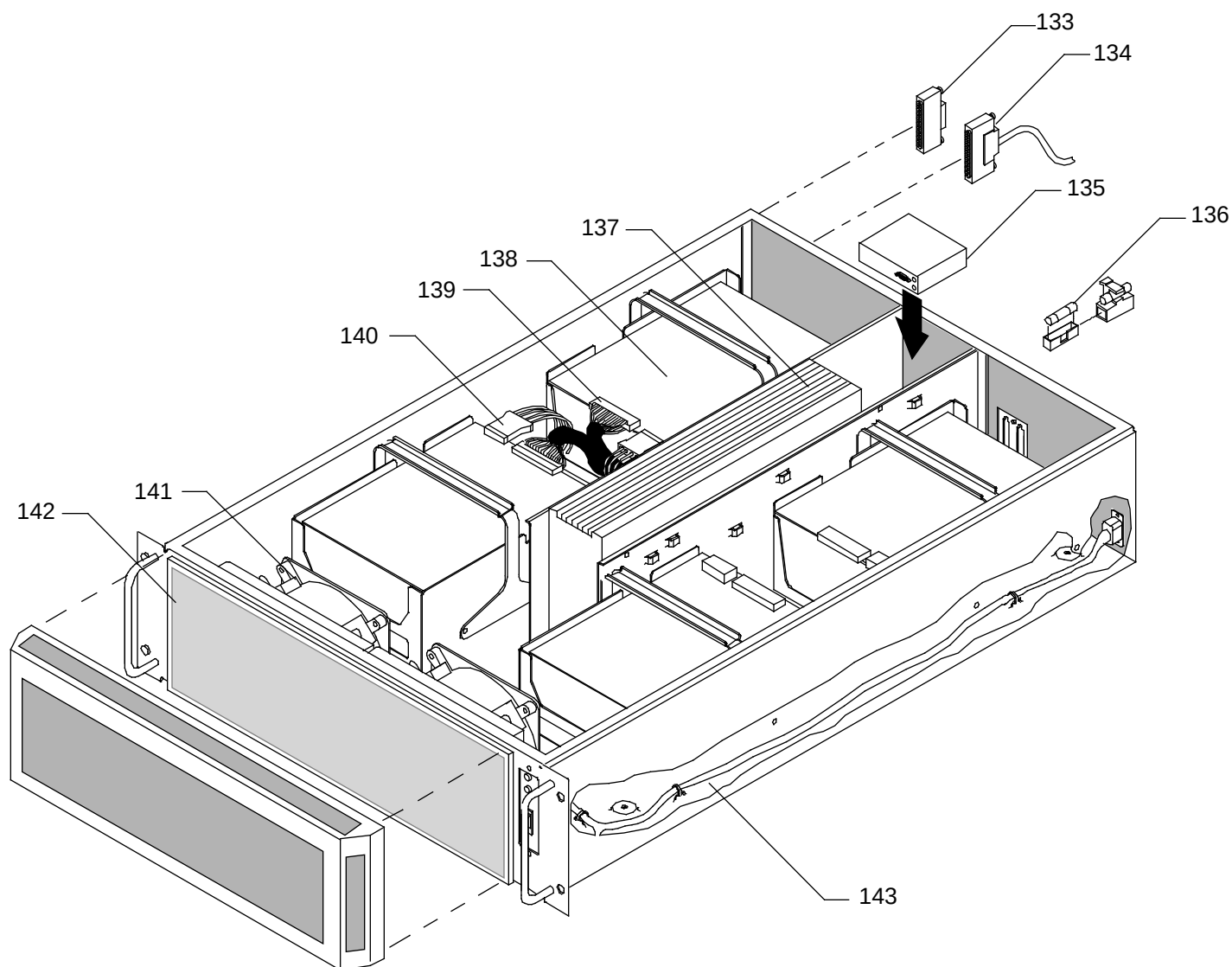
PE-10S Drawer

Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
122	90266200	Low-profile Terminator	127	90244600	DD-5S Disk Drive
123	90272200	SCSI-3 Bulkhead Device Cable	128	90266400	Internal Cable
124	90306200	Input Power Filter	129	90306400	Drive and Fan Power Cable
125	90306800	Fuse, 4 A	130	90305600	Disk Drive Fan Assembly
126	90306101	Power Supply	131	90306600	Air Filter
			132	90306500	Control Logic Harness Assembly



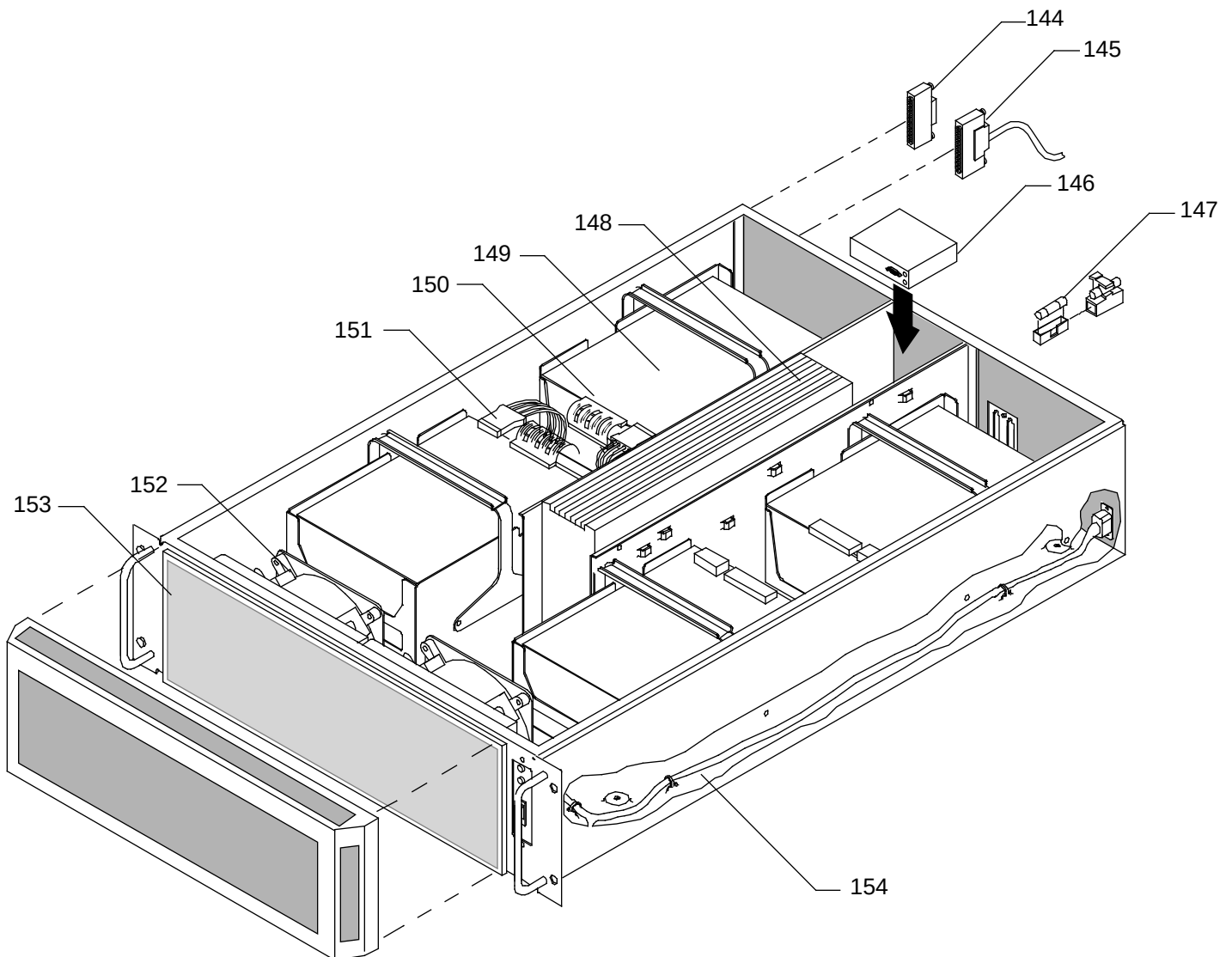
PE-30S Drawer

Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
133	90266200	Low-profile Terminator	138	90399700	DD-6S Disk Drive
134	90272200	SCSI-3 Bulkhead Device Cable	139	90266400	Internal Cable
135	90306200	Input Power Filter	140	90306400	Drive and Fan Power Cable
136	90306800	Fuse, 4 A	141	90305600	Fan Assembly
137	90306101	Power Supply	142	90306600	Air Filter
			143	90306500	Control Logic Harness Assembly



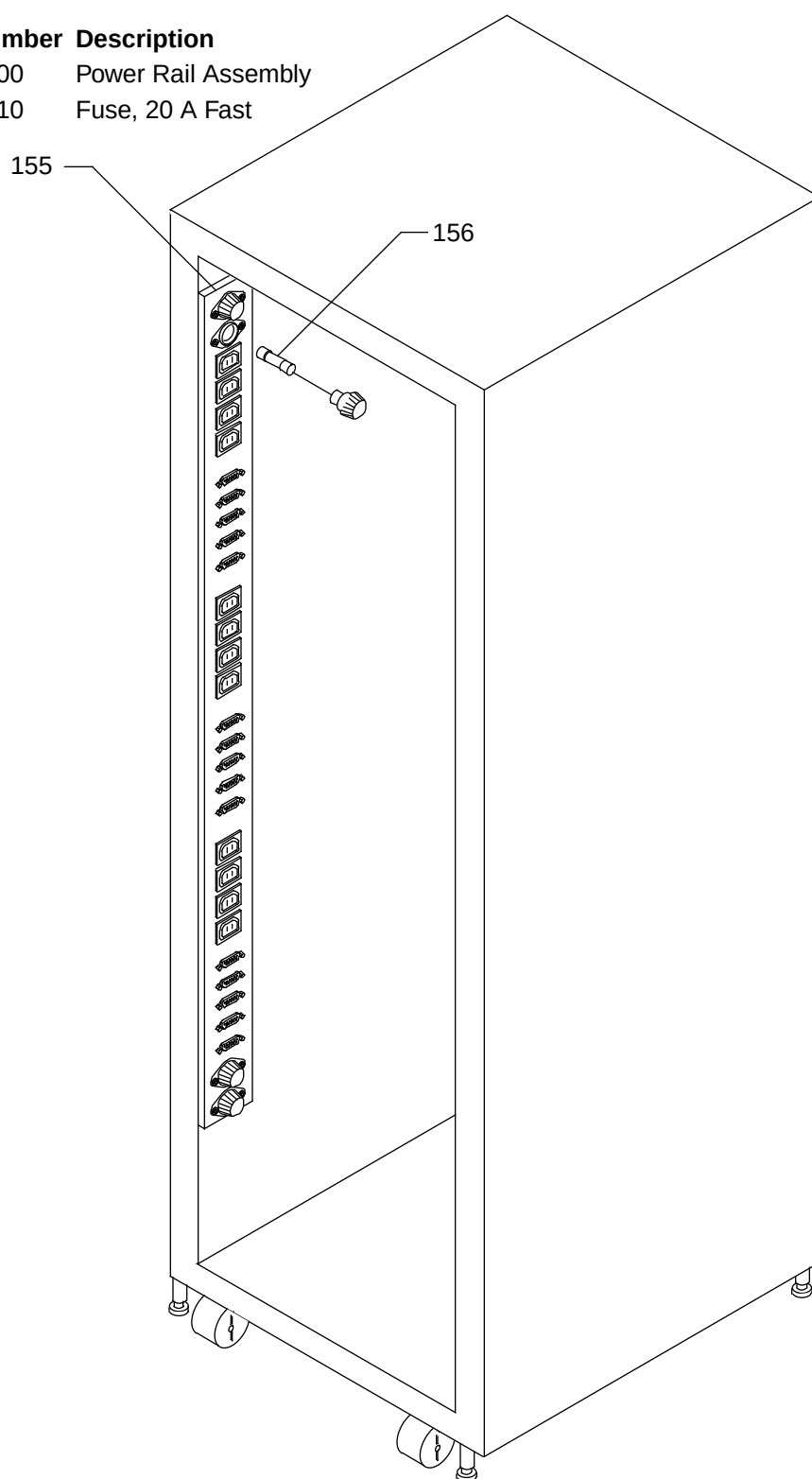
PE-10I Drawer

Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
144	90266100	Std-profile Terminator	149	90244500	DD-5I Disk Drive
145	90268100	DR-5I Cable	150	90390600	Ribbon Cable
146	90306200	Input Power Filter	151	90306400	Drive and Fan Power Cable
147	90306800	Fuse, 4 A	152	90305600	Disk Drive Fan Assembly
148	90306101	Power Supply	153	90306600	Air Filter
			154	90306500	Control Logic Harness Assembly



Power Rail Assembly

Ref. No.	Part Number	Description
155	90371500	Power Rail Assembly
156	90031110	Fuse, 20 A Fast

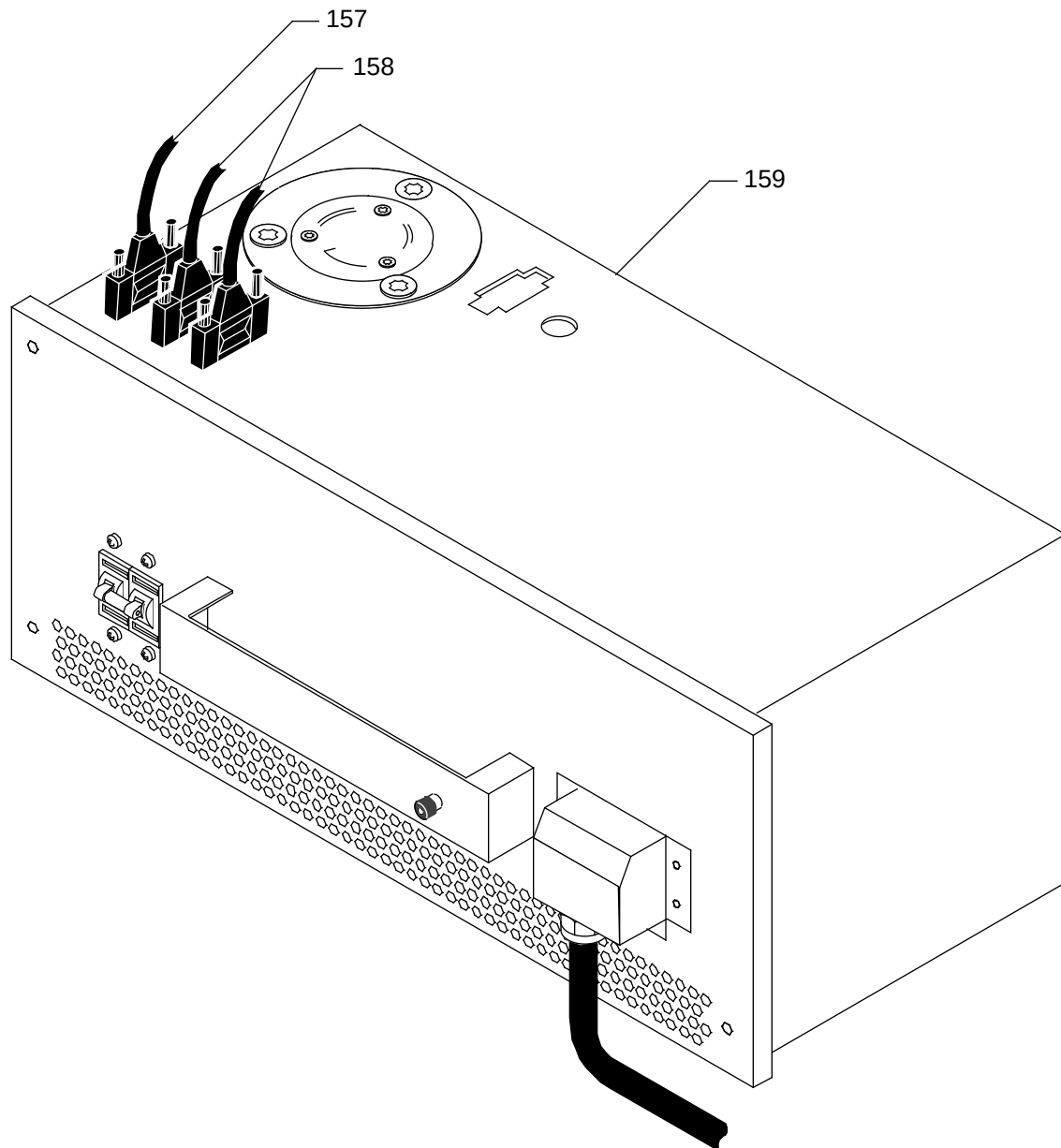


I/O AC Power Entry Chassis

Ref.

No. Part Number Description

- | | | |
|-----|----------|---|
| 157 | 90366300 | AC Power Entry to Power Rail
Sense Cable |
| 158 | 90350301 | AC Power Entry to I/O AC Power
Entry Sense Cable |
| 159 | 90359101 | AC Power Entry Chassis
Assembly |

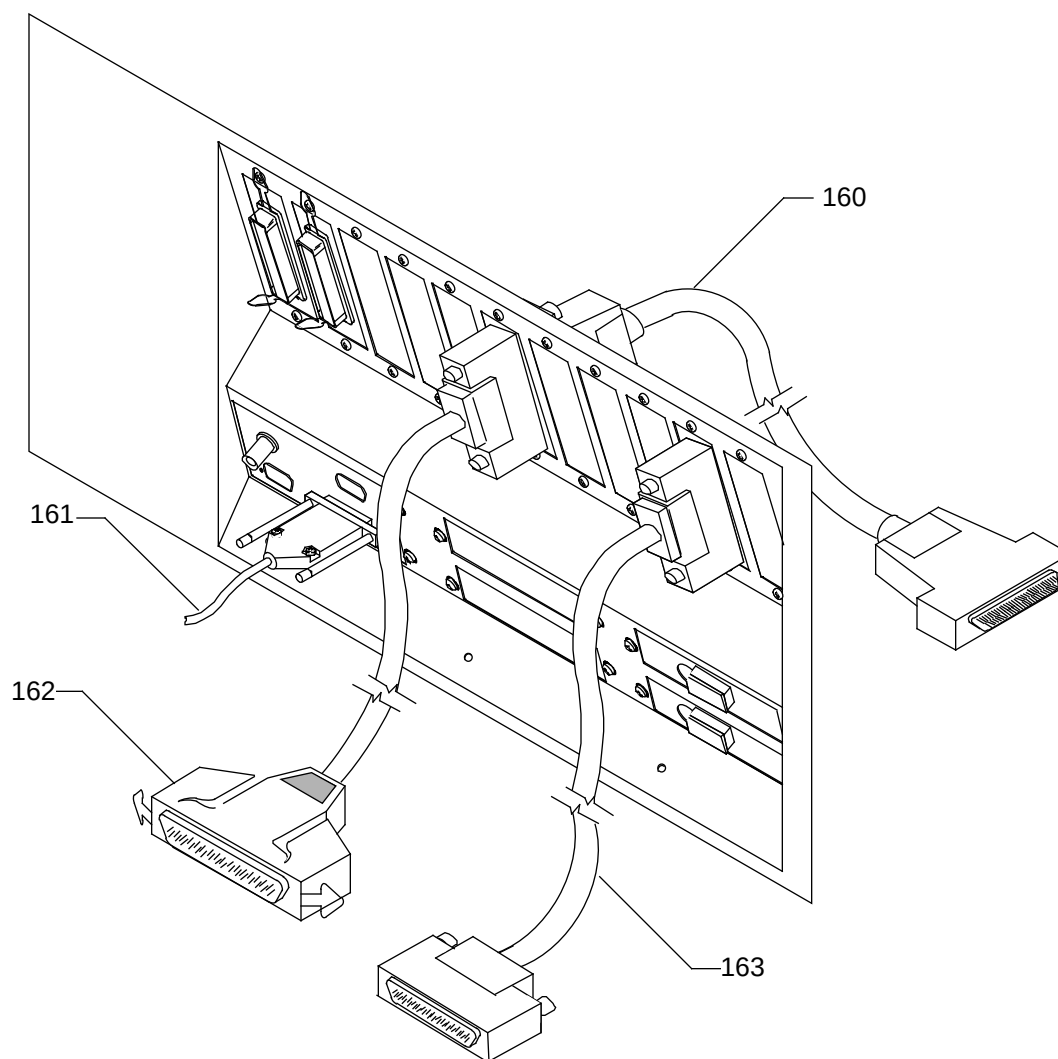


Bulkhead

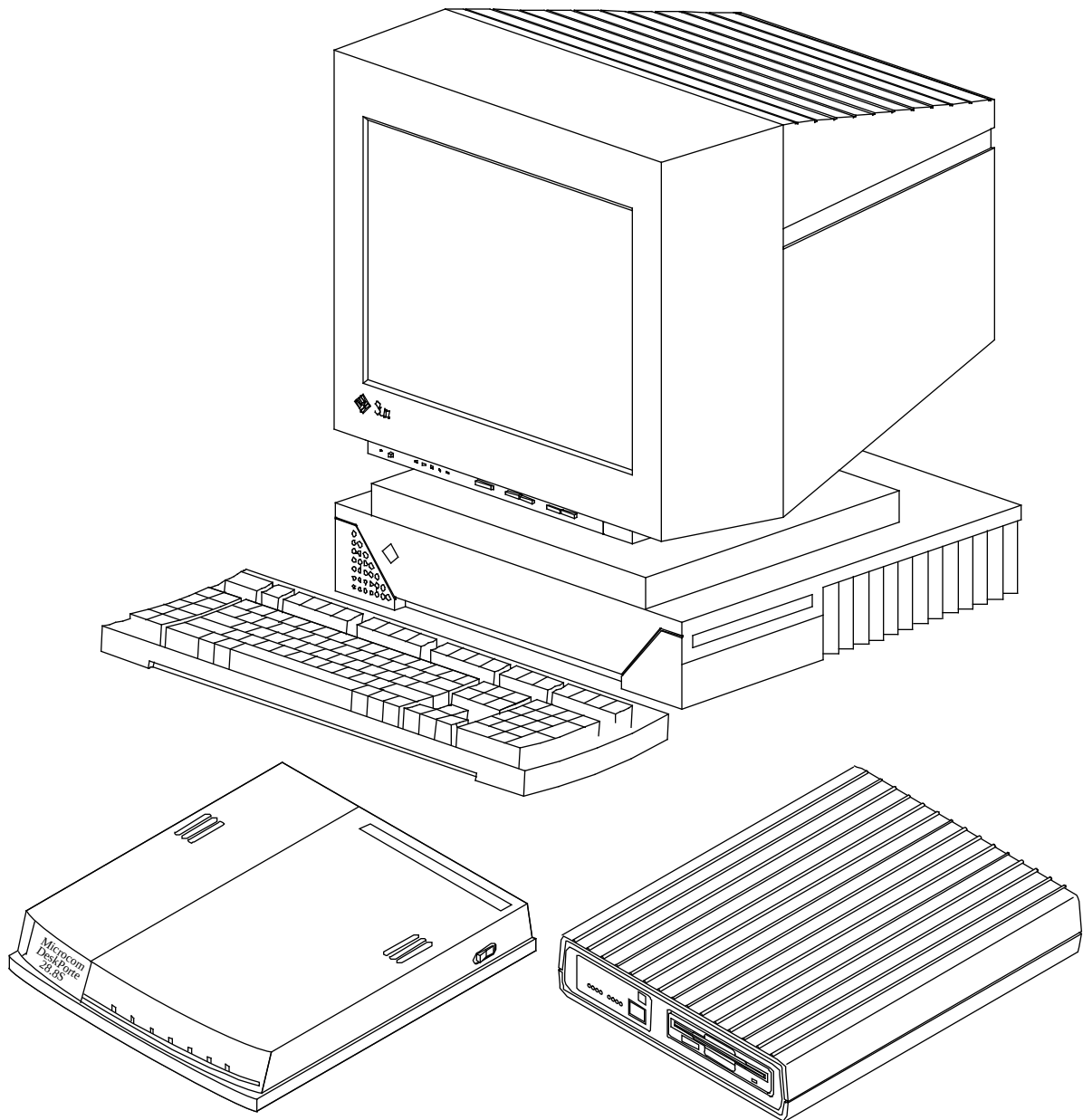
Ref.

No. Part Number Description

160	90272300	SCSI-3 Bulkhead Cable
161	90323900	Ethernet Cable
162	90289000	SCSI-3 to SCSI-1 Adapter Cable 3 ft
163	90216400	HIPPI External Cable 50 ft



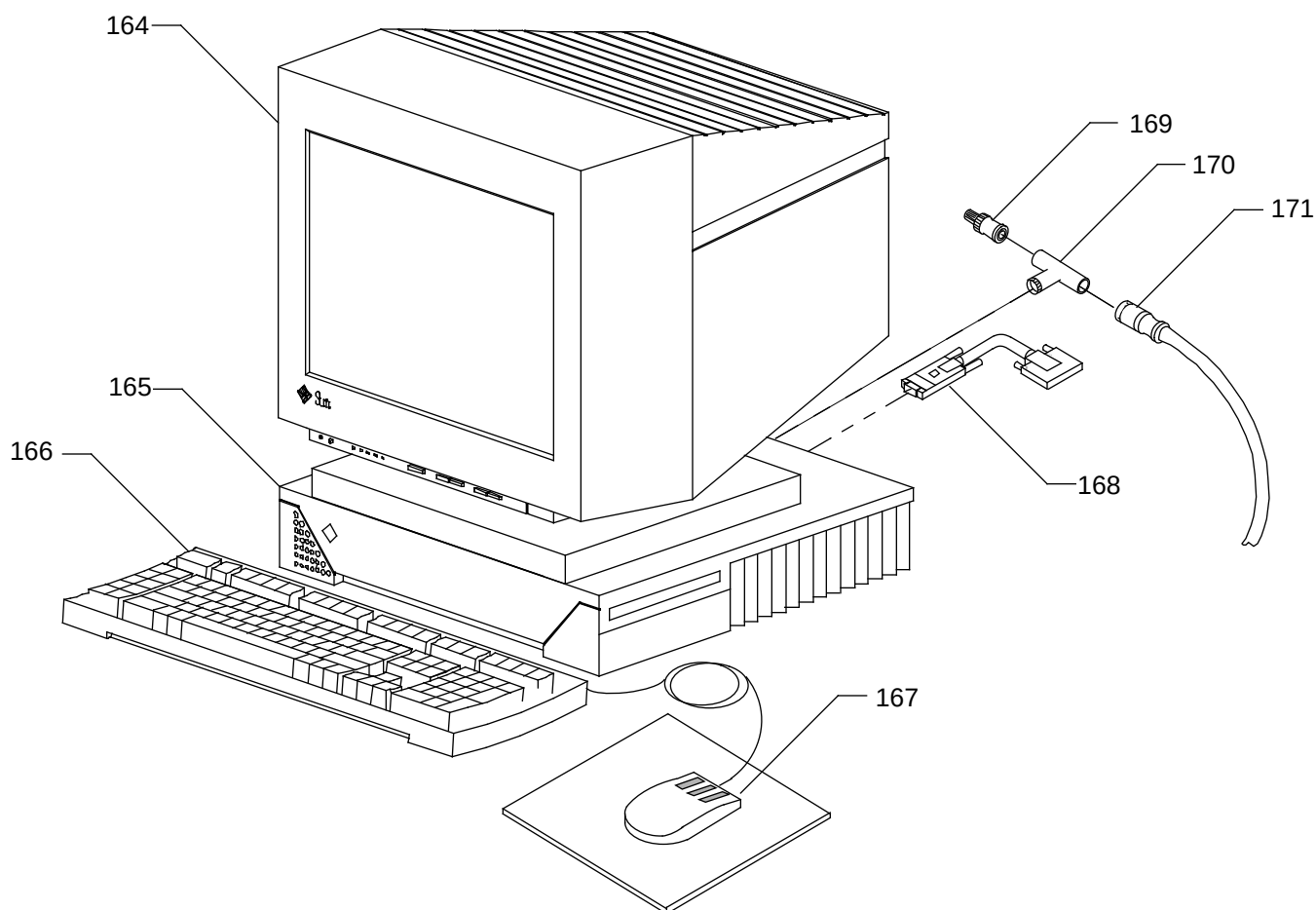
System Support



NOTE: When you order parts using the part numbers in this catalog, you can be assured that you will receive the latest versions of the parts even if the part numbers have changed.

SPARCstation 5 Workstation

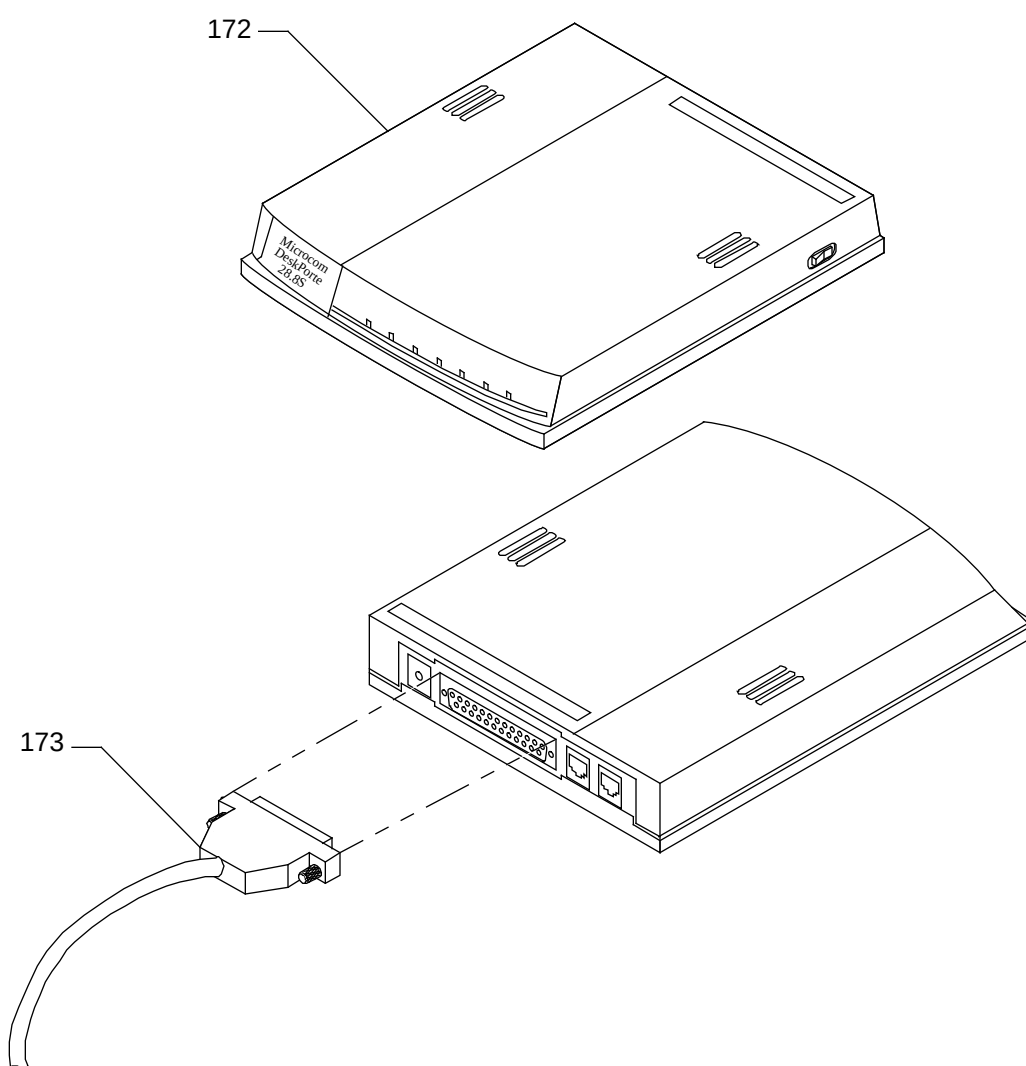
Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
164	35496700	Monitor, 17 in. color	169	90157000	BNC Terminator
165	35517900	CPU Box Assembly, SPARCstation 5	170	90150400	T-type ThinNet Connector
166	01497300	Keyboard	171	90392100	Ethernet ThinNet 50-ft Cable
167	01820600	Mouse with Pad			
168	90395800	Adapter Miniature D-AUI Cable			



Remote Support

Ref.

No.	Part Number	Description
172	35487700	Microcom Modem
173	12171100	RS-232 Cable



NetBlazer Kit – Optional

Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
174	35457100	PN2 NetBlazer Router	179	90160300	International Power Cord, VDE 8 ft
175	90150500	Terminator	180	90414800	SBus Controller PC Board
176	90150400	T-type ThinNet Connector			
177	35548900	Ethernet Cable			
178	01751000	RS-232 Cable (supplied with NetBlazer router)			

