

28740801

4280 Cartridge Tape Subsystem  
ILLUSTRATED PARTS CATALOG

**StorageTek.**

# **StorageTek.**

**4280 Cartridge Tape Subsystem  
and  
2110 Automatic Cartridge Loader  
Feature**

## **Illustrated Parts Catalog**

Pub. 28740801

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**WARNING:** This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions manual, may cause interference to radio communications.

It has been tested and found to comply with the limits for a Class A computing device pursuant to subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

## CHANGE PAGE

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	Incorporated Engineering Changes since last iteration. Addition of ICRC.



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## How To Use This Guide

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The StorageTek 4280 Illustrated Parts Catalog provides a rapid visual and numeric reference to all field replaceable units (FRUs) and orderable items associated with the 4280 product.

The guide is organized into two major sections: the 4280 assembly and the Automatic Cartridge Loader (ACL) assembly. These major sections are divided into the following sub-sections: Electro-Mechanical; Pneumatics; Cards; Cables; and Orderable Parts (non-FRU).

In each section are exploded views of the field replaceable units within the assembly.

Each illustration shows several FRUs in their surroundings. Callouts in the illustration correlate the drawing of the FRU to its part number and description on the facing page.

**Each FRU reference contains:**

1. Figure reference number
2. Part number
3. Description
4. Quantity

**Figure reference codes for sub-sections are:**

Electro-Mechanical Group - EM  
Pneumatics Group - PN  
Card Group - CD  
Cable Group - CB  
Orderable Parts (non-FRU) - OP

There are also two FRU Kits referenced. Their reference codes are:

Carrier FRU Kit - CR  
Lead Screw FRU Kit - LS

**NOTE:** In the ACL section, figure reference numbers begin with the letter "A" to distinguish them from 4280 numbering. (eg. CD01 refers to 4280 card group, figure reference number 01; ACD01 refers to ACL card group, figure reference number 01, etc.)

This manual contains a table of contents, table of figures, and an index, by part number, description and page.

### SPECIAL NOTES ON PART NUMBERS:

Certain part numbers contain "XX" as the last digits. These variables are used to track form/fit/function changes.

For Cards, the part numbers contain "XXX" as the last three digits. The first "X" indicates imbed changes while the last two track form/fit/function changes.

Part numbers for attaching hardware appear only for those hardware items which are unique and require ordering through the Illustrated Parts Catalog. Other attaching hardware is seen as generally available in the community and should be obtained locally.

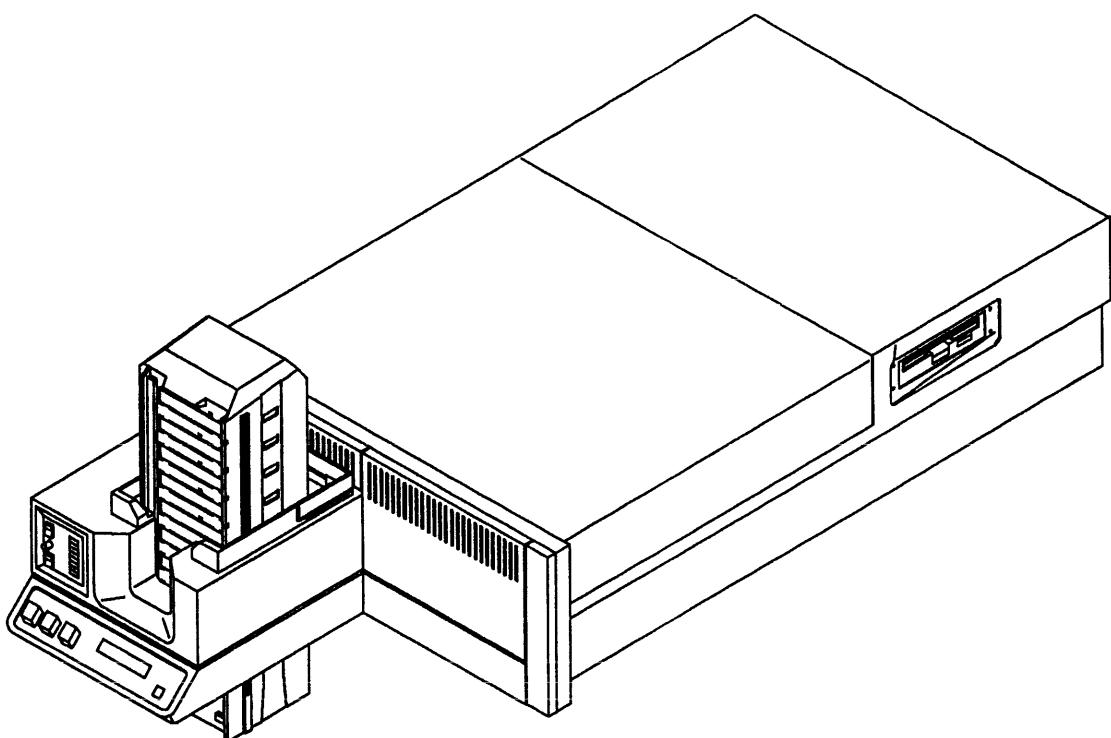


Figure 1.  
4280 Basic Assembly with ACL

## **4280 Assembly**

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### **Basic Assembly**

The 4280 basic assembly consists of the deck and all associated covers, hardware and electronic components.

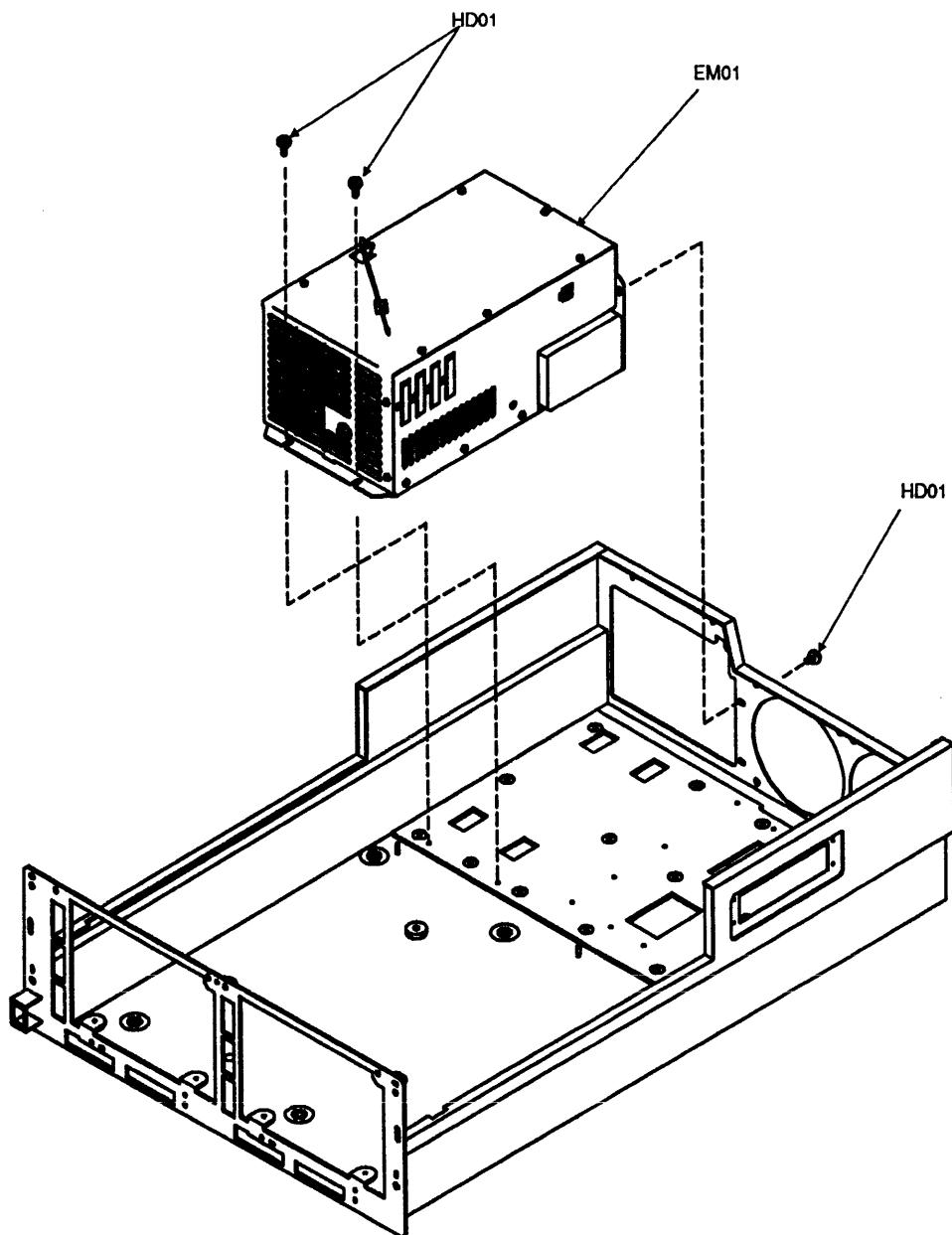


Figure 2.  
Power Module Assembly

**4280 Assembly**

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**Electro-Mechanical Group**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
EM01	288620XX	POWER MODULE ASSY (DC POWER SUPPLY)	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCR, PHT, SEMS, 6-32X3/8, ZINC	3

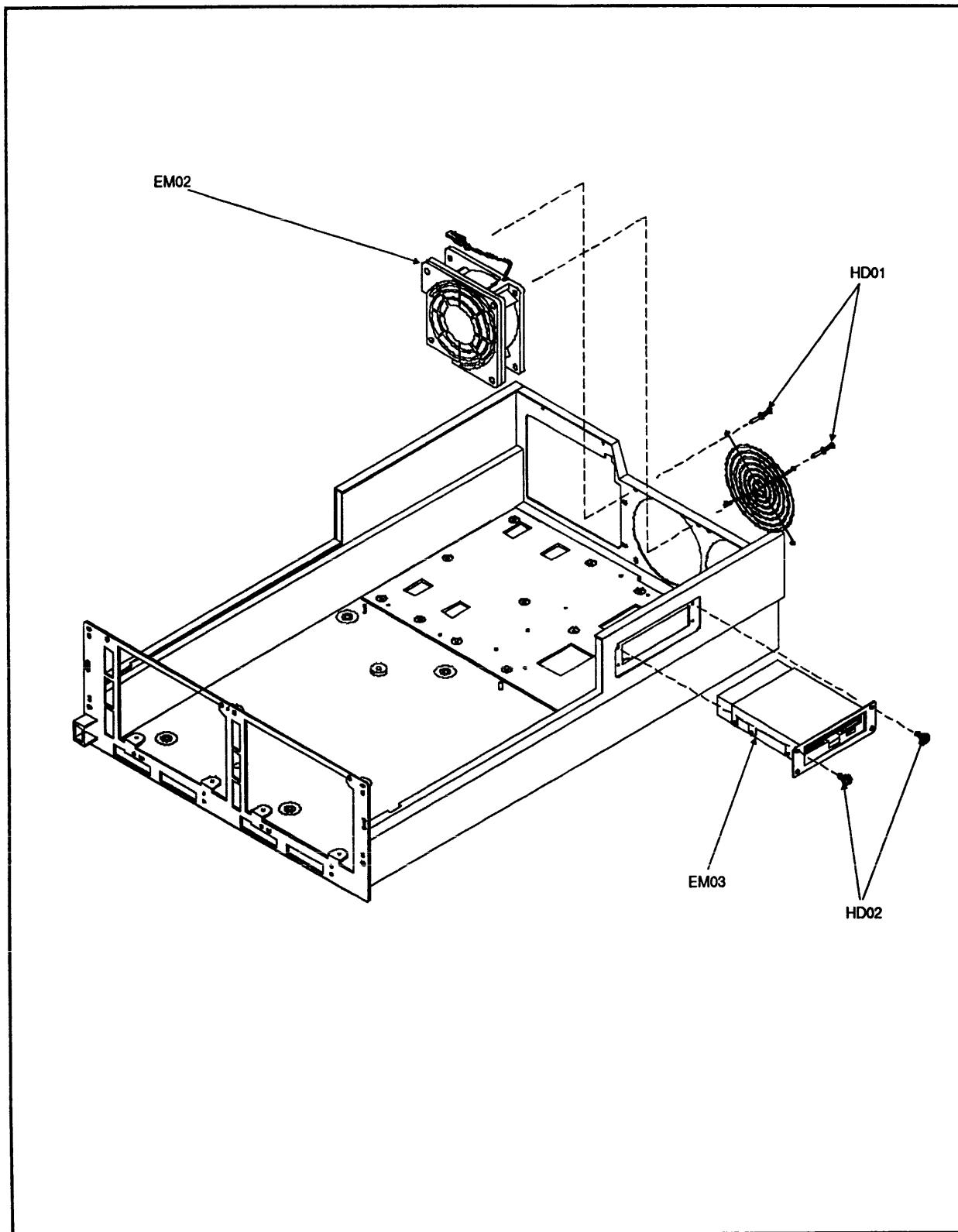


Figure 3.  
Floppy Disk Drive and Fan Assembly

**4280 Assembly****Electro-Mechanical Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
EM02	288567XX	FAN 24V ASSY	2
EM03	288614XX	FLOPPY DRIVE ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
HD01	24013201	SCREW, PHT, M5-0.8X12MM, S	8
HD02	10206215	SCR, PHT, SEMS, 6-32X3/8, ZINC	4

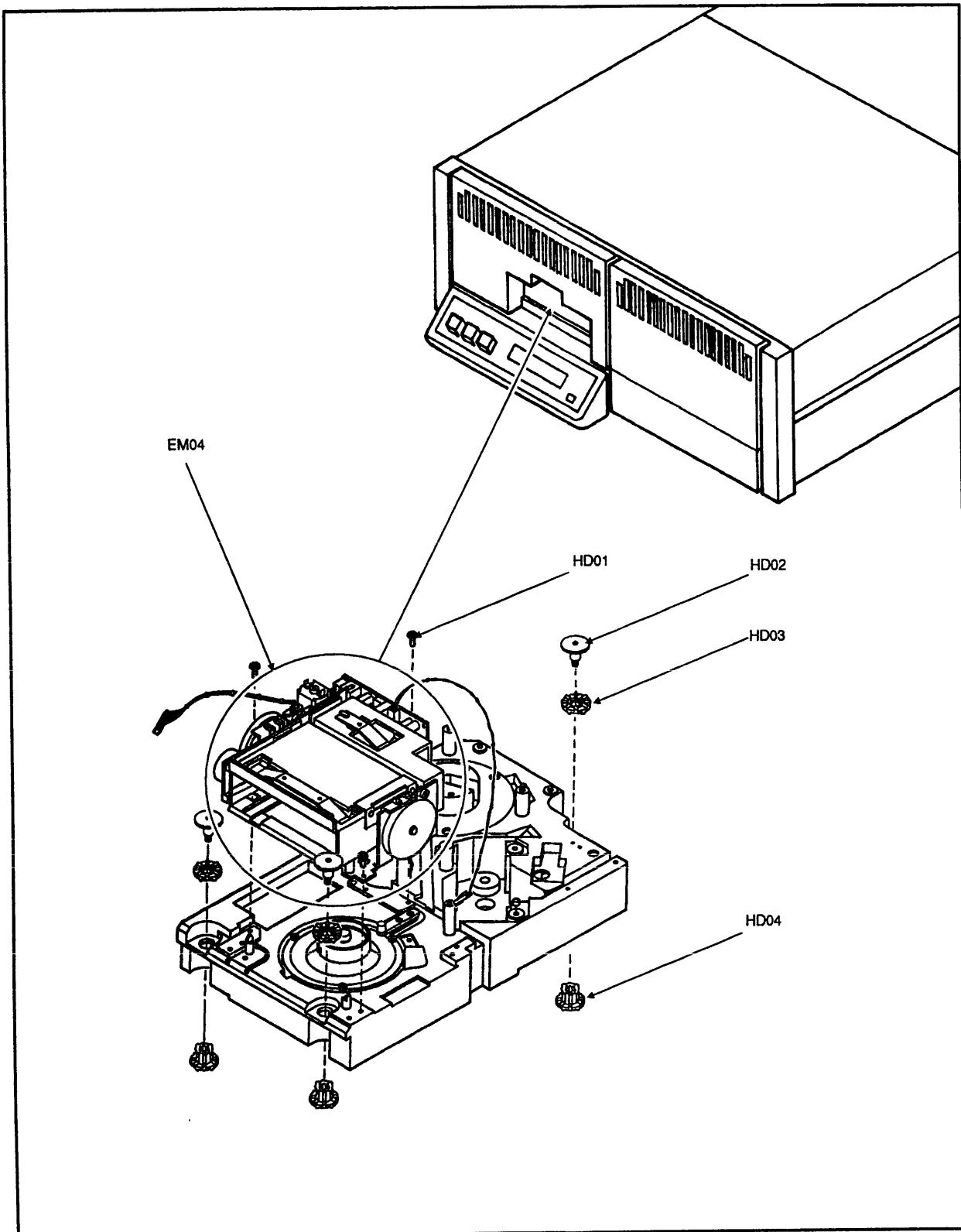


Figure 4.  
Manual Loader Assembly

**4280 Assembly****Electro-Mechanical Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
EM04	288589XX	MANUAL LOADER ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
HD01		SCR, PHT, SEMS, 6-32X3/8, ZINC	3
HD02	287663XX	SCREW, ISOLATOR	3
HD03	24020856	RING, ISOLATOR	3
HD04	2000290003	BUSHING, ISOLATOR	3

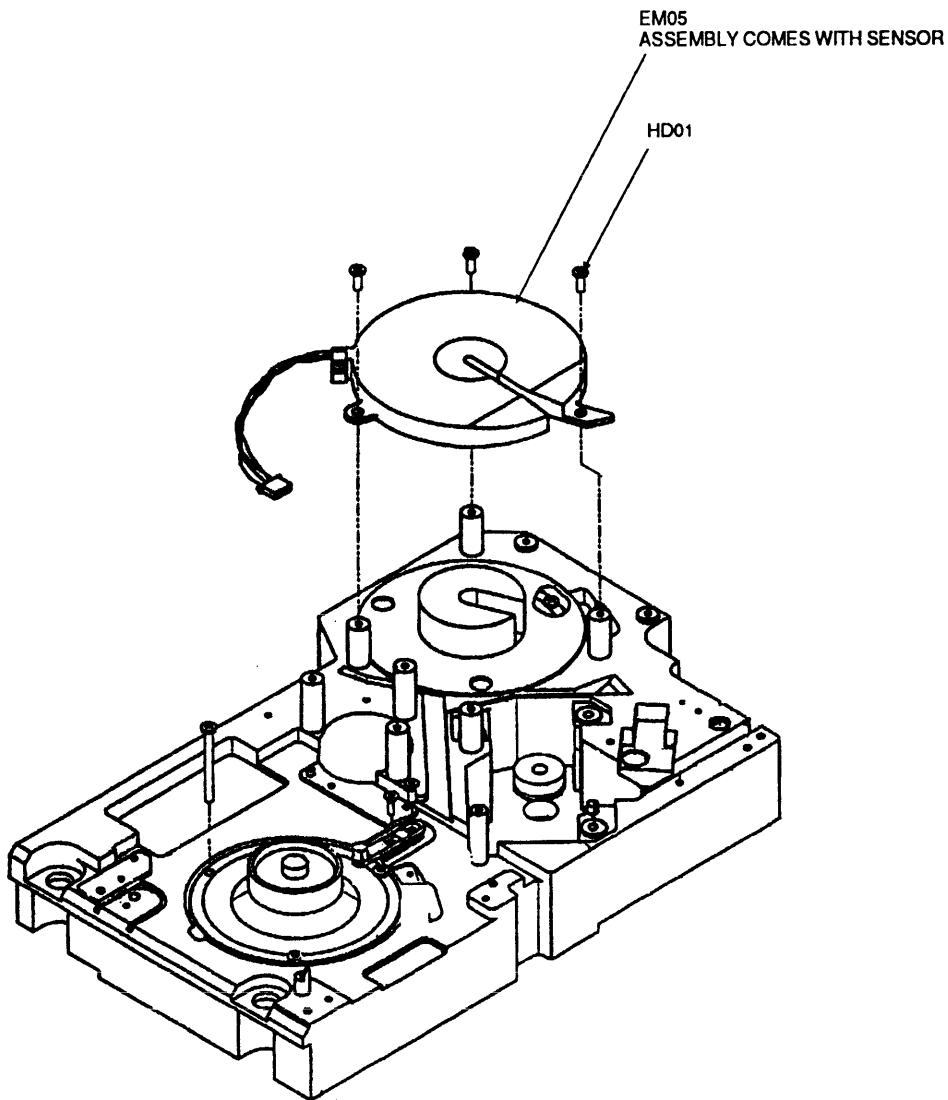


Figure 5.  
Locator Leader Block Assembly

**4280 Assembly****Electro-Mechanical Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
EM05	288552XX	LOCATOR LEADER BLK ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCR, PHT, SEMS, 6-32X3/8, ZINC	3

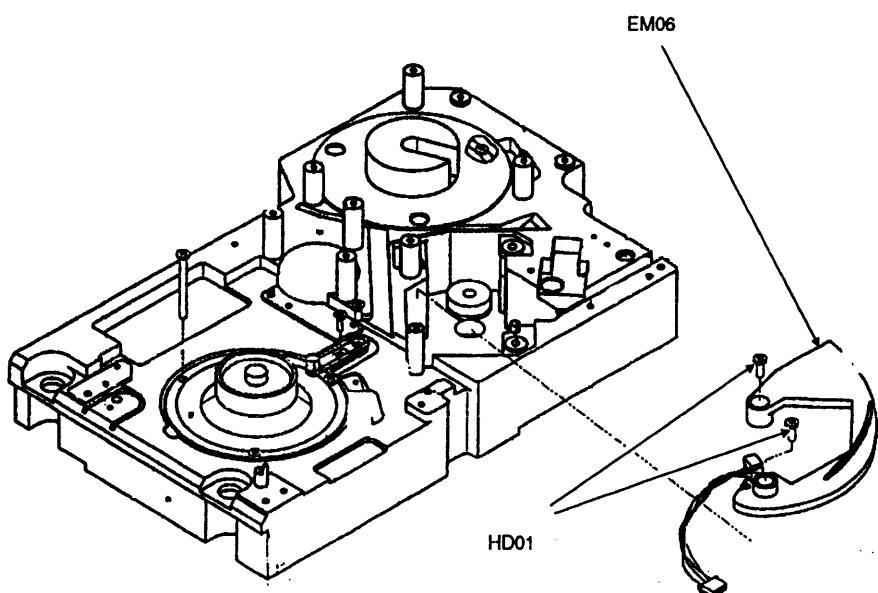


Figure 6.  
Thread Arm Cam Assembly

**4280 Assembly****Electro-Mechanical Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
EM06	288554XX	THREAD ARM CAM ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCR, PHT, SEMS, 6-32X3/8, ZINC	2

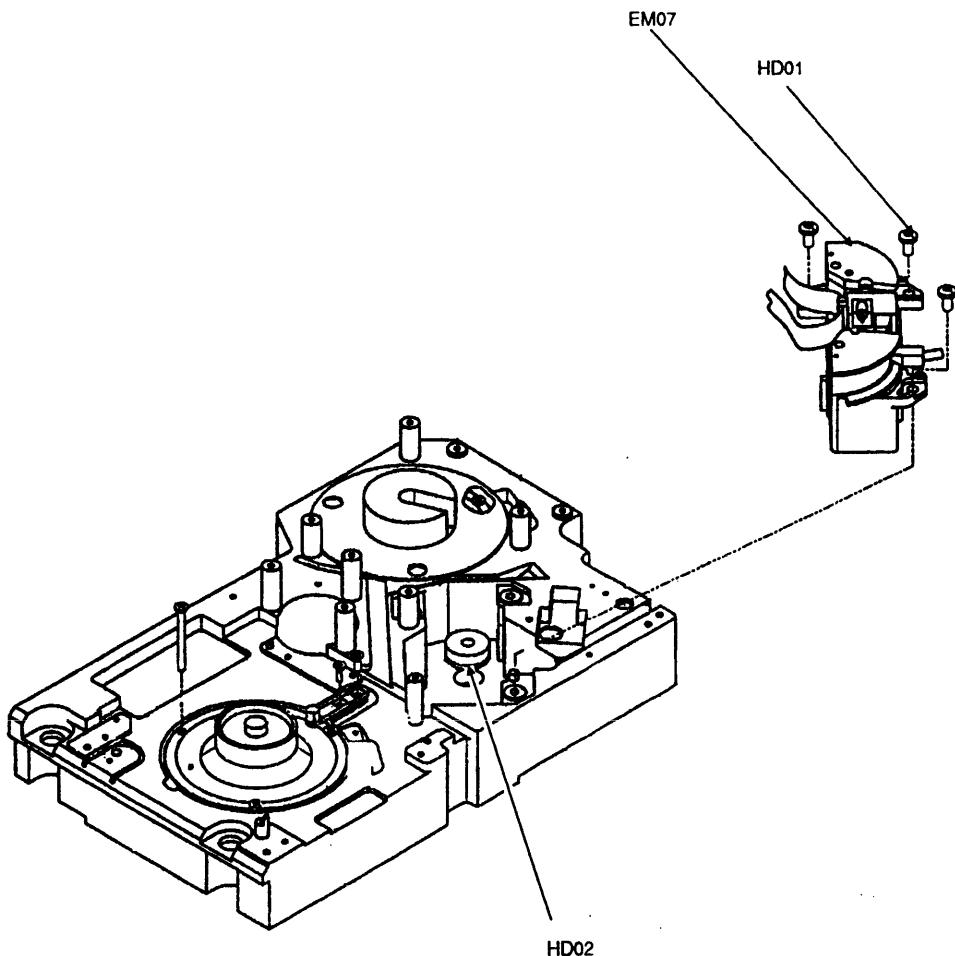


Figure 7.  
Head FRU Assembly

**4280 Assembly****Electro-Mechanical Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
EM07	4043231XX	HEAD FRU ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
HD01		SCR, PHT, SEMS, 10-32X1/2, ZINC	3
HD02	28946500	GASKET, HEAD ASSEMBLY	1

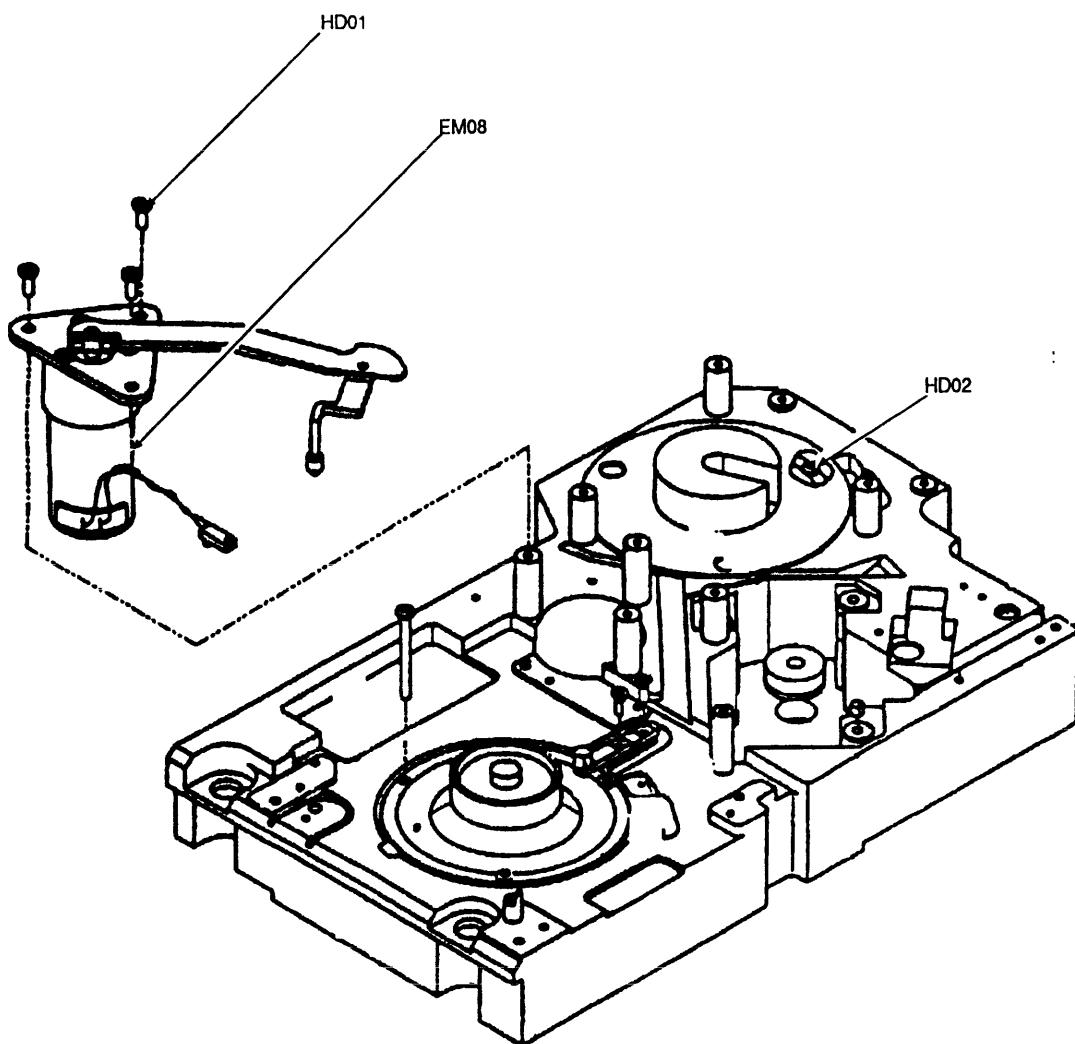


Figure 8.  
Thread Arm Motor

**4280 Assembly****Electro-Mechanical Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
EM08	288534XX	MTR/THR ARM ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCR, PHT, SEMS, 6-32X3/8, ZINC	3

SEE MORE ATTACHING HARDWARE FOR MOTOR ASSY ON NEXT PAGE

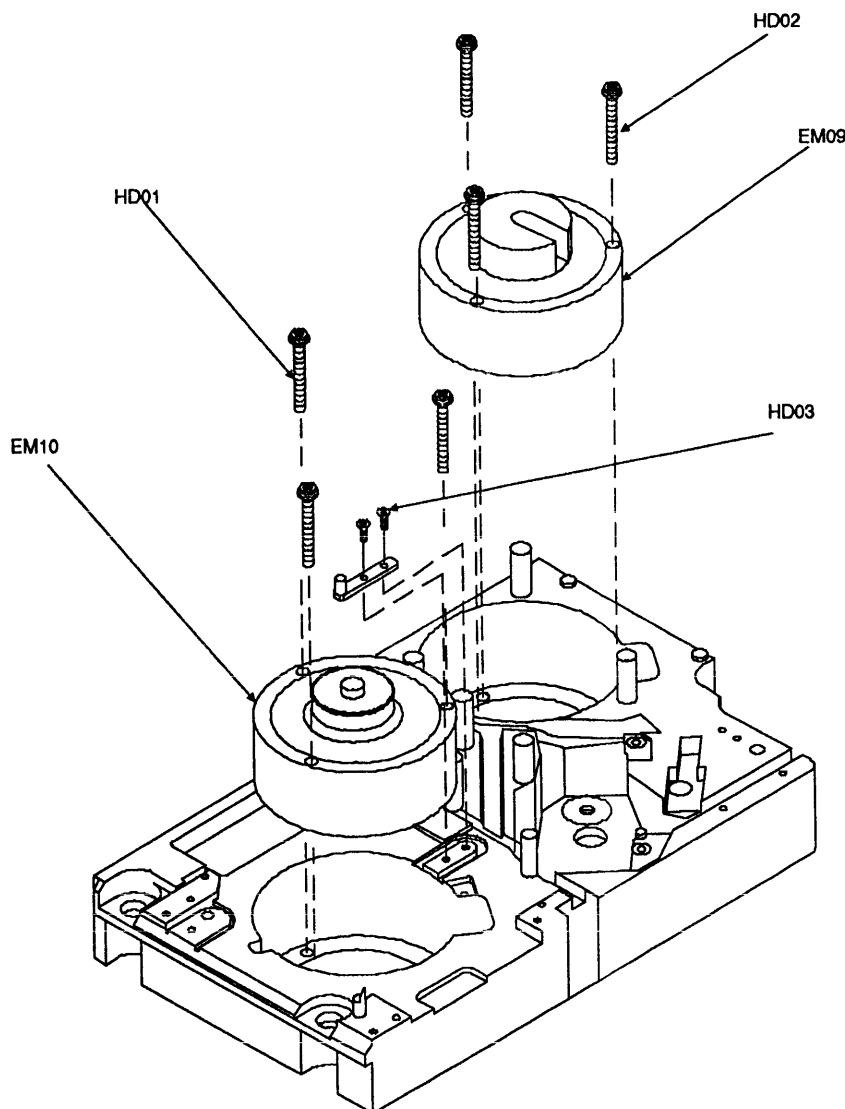


Figure 9.  
Take-Up and Supply Motors

**4280 Assembly****Electro-Mechanical Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
EM09	288533XX	TAKE-UP MOTOR ASSY	1
EM10	288532XX	SUPPLY MOTOR ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCR, PHT, SEMS, 6-32X1-5/8, Z	3
HD02	SCR, PHT, SEMS, 6-32X1-5/8, Z	3
HD03	SCR, FLAT HEAD, 6-32X3/8, BO	2

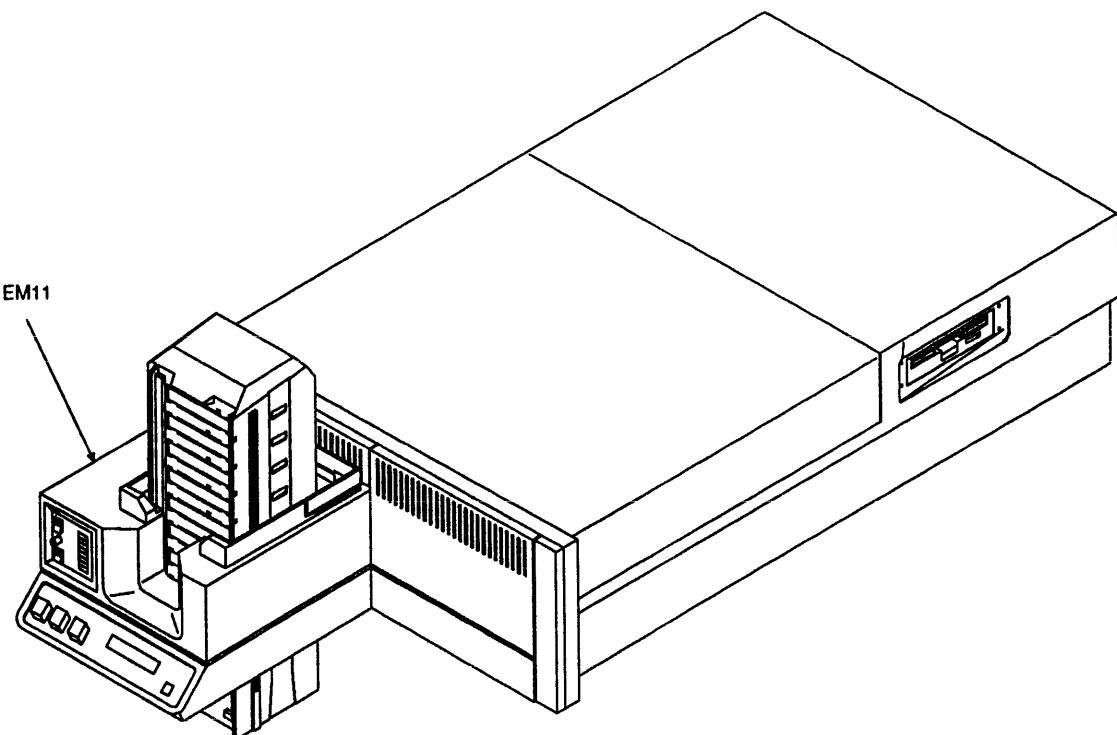


Figure 10.  
Autoloader Assembly

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**StorageTek**

**4280 Assembly**

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**Electro-Mechanical Group, cont.**

<b><u>Fig Number</u></b>	<b><u>Part Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
EM11	276271XX	AUTOLOADER ASSY	1

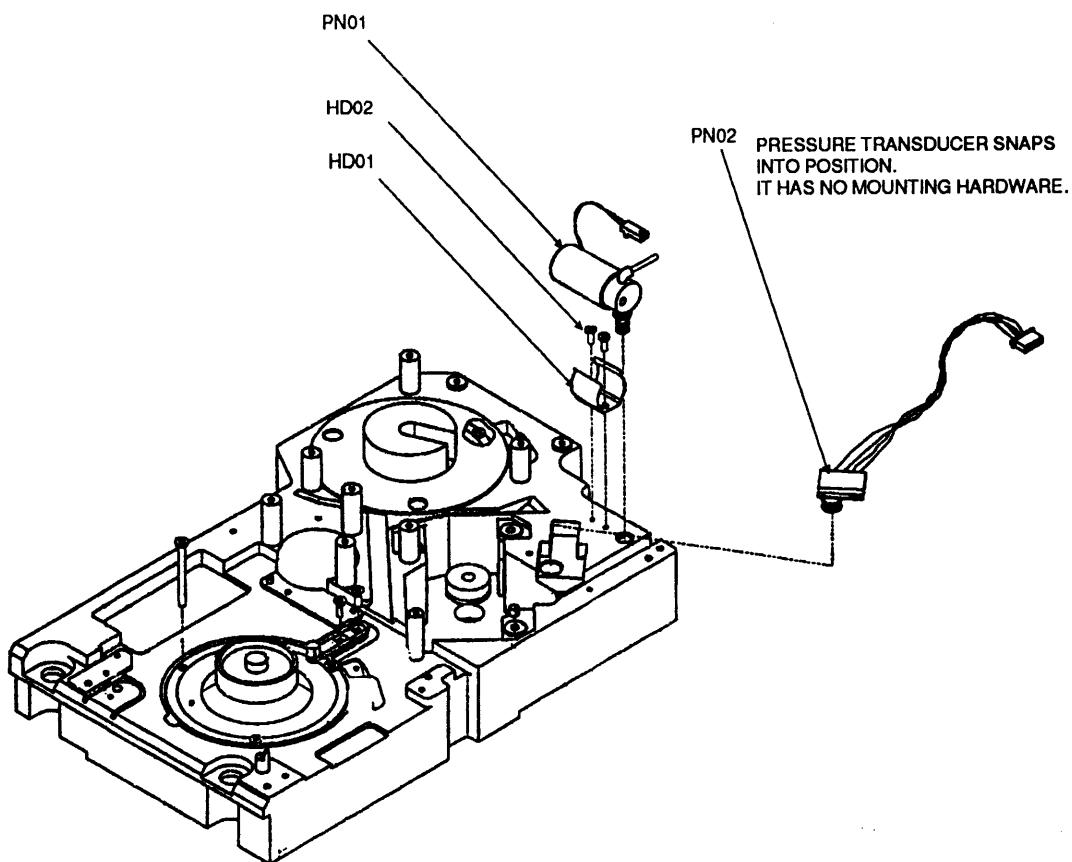


Figure 11.  
Pressure Transducer and Air Valve Assembly

**4280 Assembly****Pneumatics Group**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
PN01	288536XX	AIR VALVE ASSY	1
PN02	288551XX	PRESSURE TRANSDUCER ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
HD01	24021716	CLIP, SPRING	1
HD02		SCR, PHT, SEMS, 4-40X3/8, Z	2

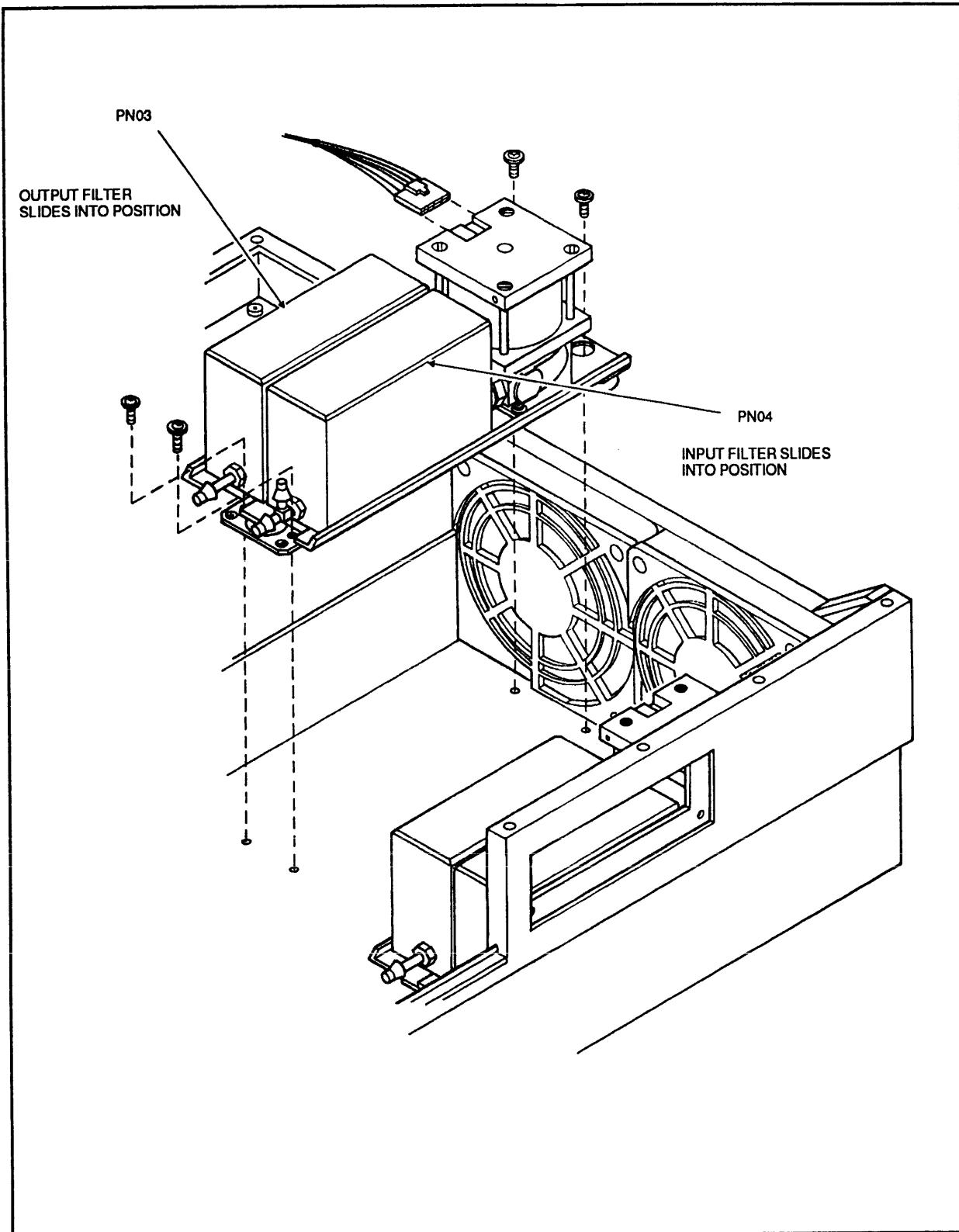


Figure 12.  
Input Filter and Output Filter

**4280 Assembly**

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**Pneumatics Group, cont.**

<b><u>Fig Number</u></b>	<b><u>Part Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
PN03	288548XX	OUTPUT FILTER SUB-ASSY	1
PN04	288549XX	INPUT FILTER SUB-ASSY	1

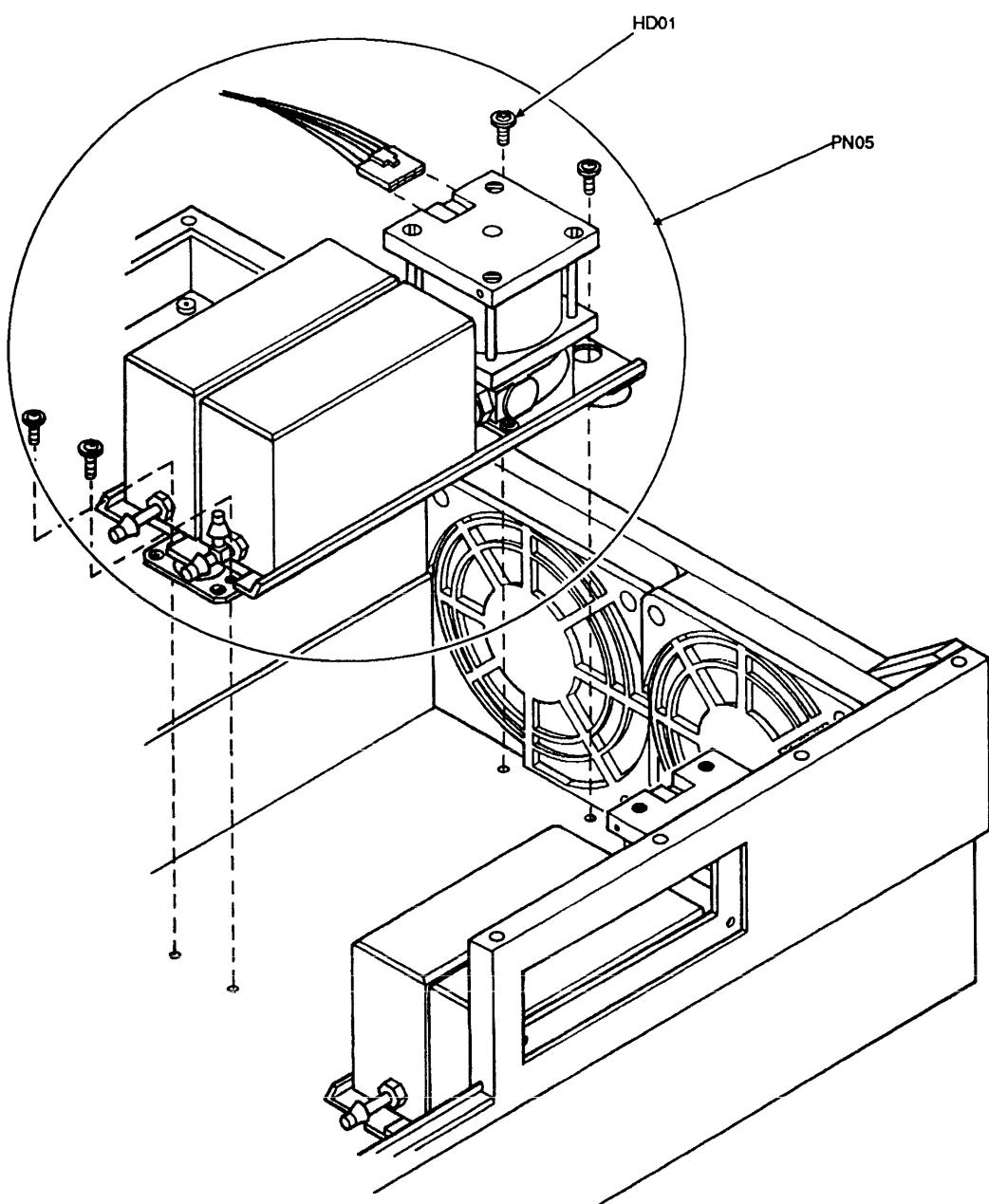


Figure 13.  
Pneumatics Assembly

**4280 Assembly**

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**Pneumatics Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
PN05	288537XX	PNEUMATICS ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 6-32X3/8, Z	4

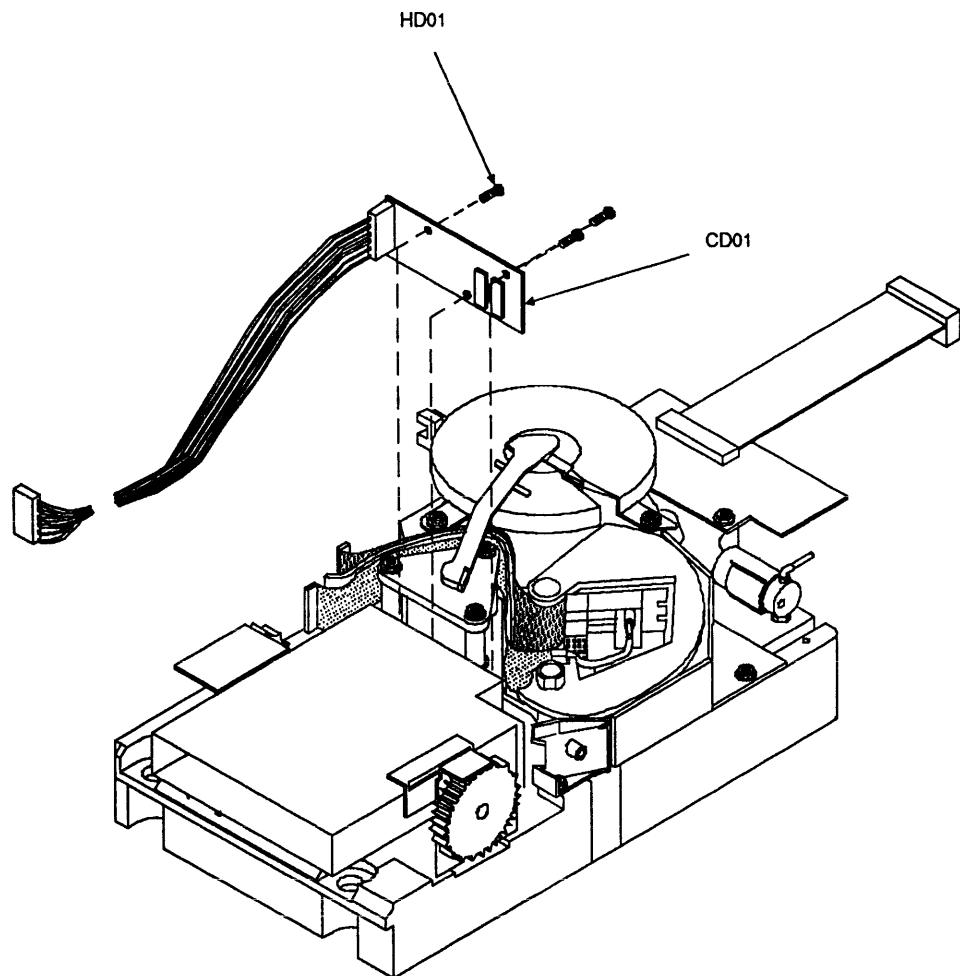


Figure 14.  
ML Card

**4280 Assembly****Card Group**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
CD01	29330XXX	CKT CD ML ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, THR FM, PHT, 4-20X3/8	3

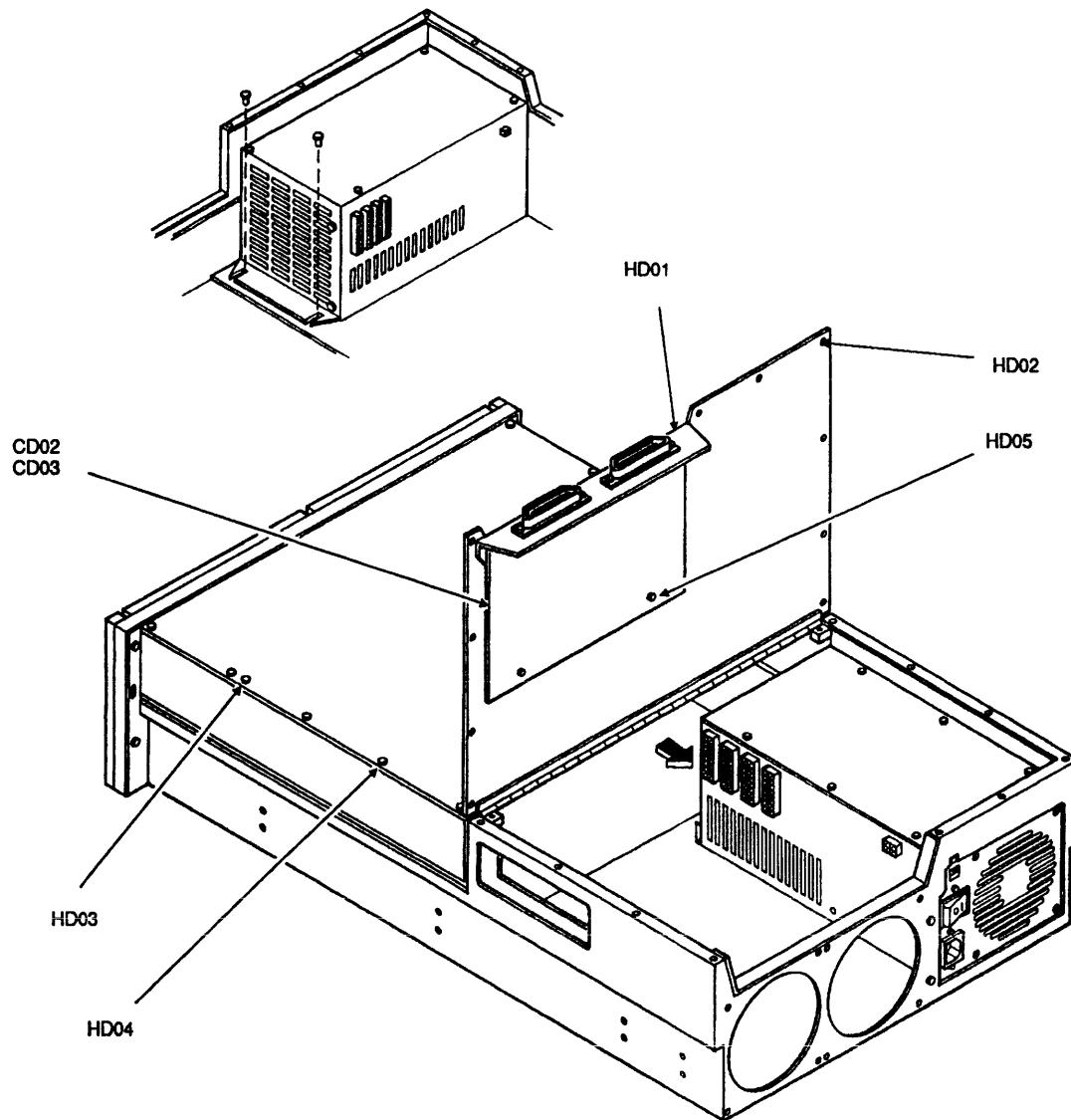


Figure 15.  
SZ/SZI Card or SK Card

**4280 Assembly****Card Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
CD02	29306XXX	CKT CD SZ/SZI ASSY	1
CD03	29297XXX	CKT CD SK ASSY	1

NOTE: Choice of SZ/SZI or SK Card depends upon which interface is being used.

**Attaching Hardware**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
HD01		SCREW, PHT, SEMS, 6-32X1/4, Z	4
HD02		SCREW, PHT, SEMS, 6-32X3/8, Z	12
HD03		SCREW, PHT, SEMS, 6-32X1-5/8, Z	2
HD04		SCREW, PHT, SEMS, 6-32X3/8, Z	10
HD05		SCREW, PHT, SEMS, 6-32X3/8, Z	2

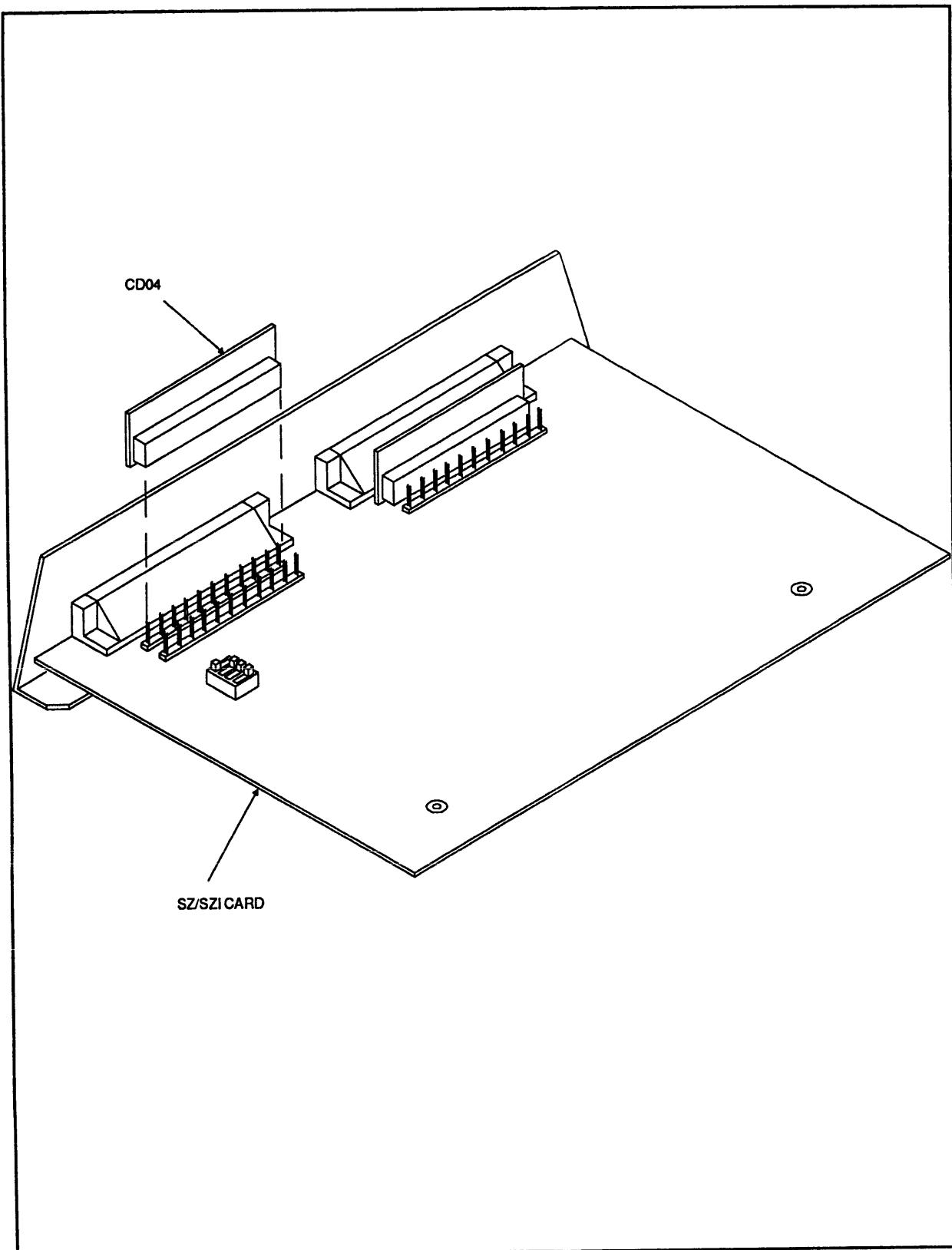


Figure 16.  
SH Card

**4280 Assembly****Card Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
CD04	29321XXX	CKT CD SH ASSY	1

NOTE: SH card attaches only to SZ/SZI Card.

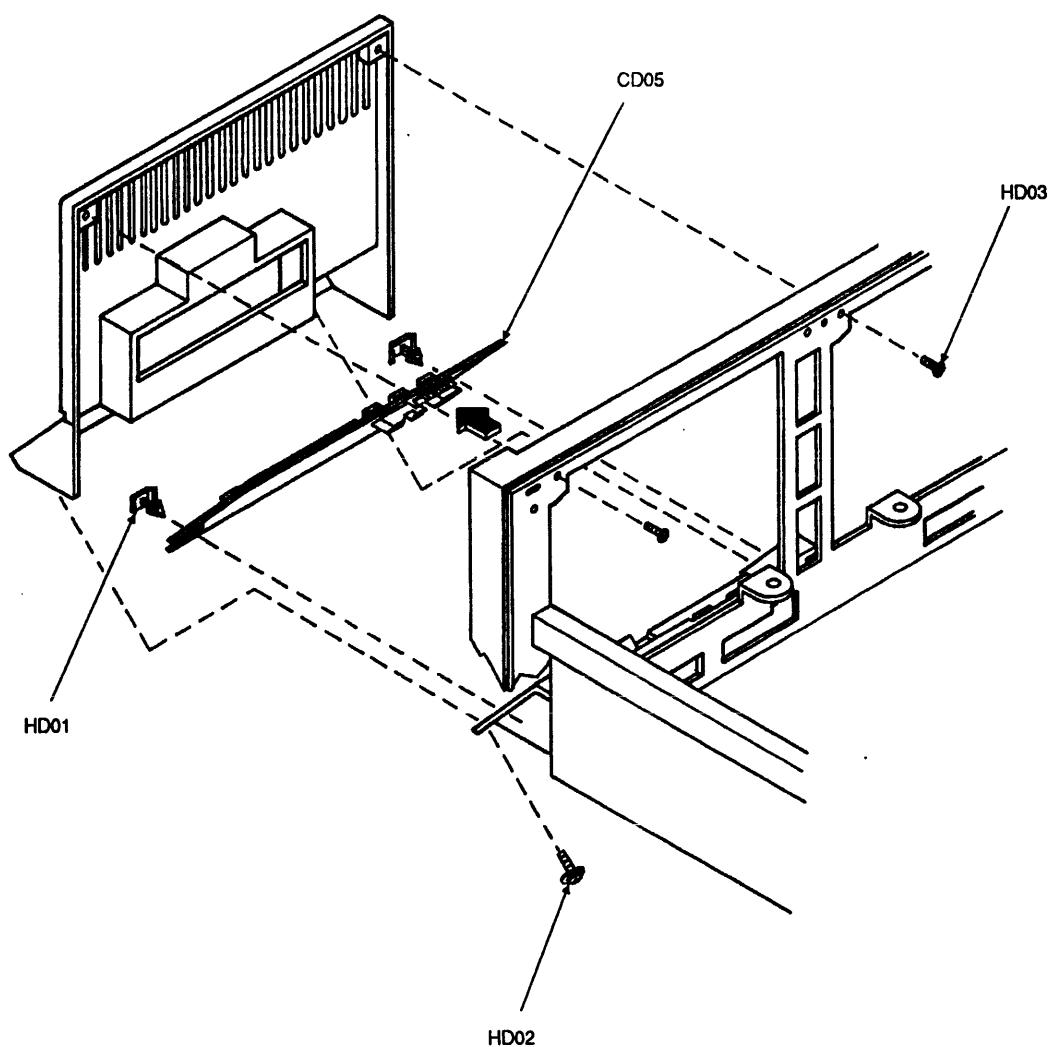


Figure 17.  
DP Card

**4280 Assembly****Card Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
CD05	29318XXX	CKT CD DP ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
HD01	24022049	RIVIT, MTG BTN, 5/32, N	2
HD02		SCREW, PHT, SEMS, 6-32X3/8, Z	2
HD03		SCREW, MACH, TXPH, 6-32X7/8, Z	2

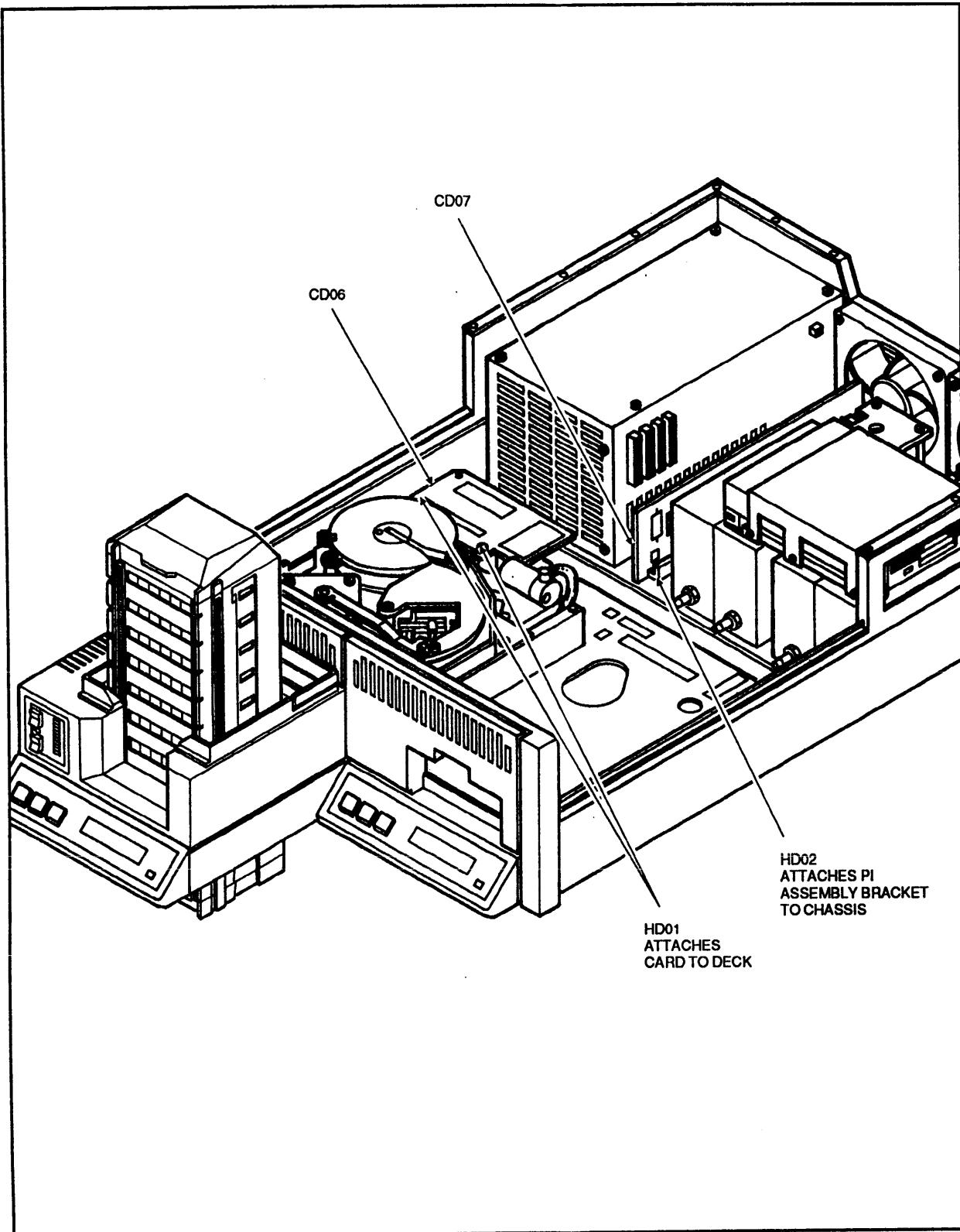


Figure 18.  
ST and PI Cards

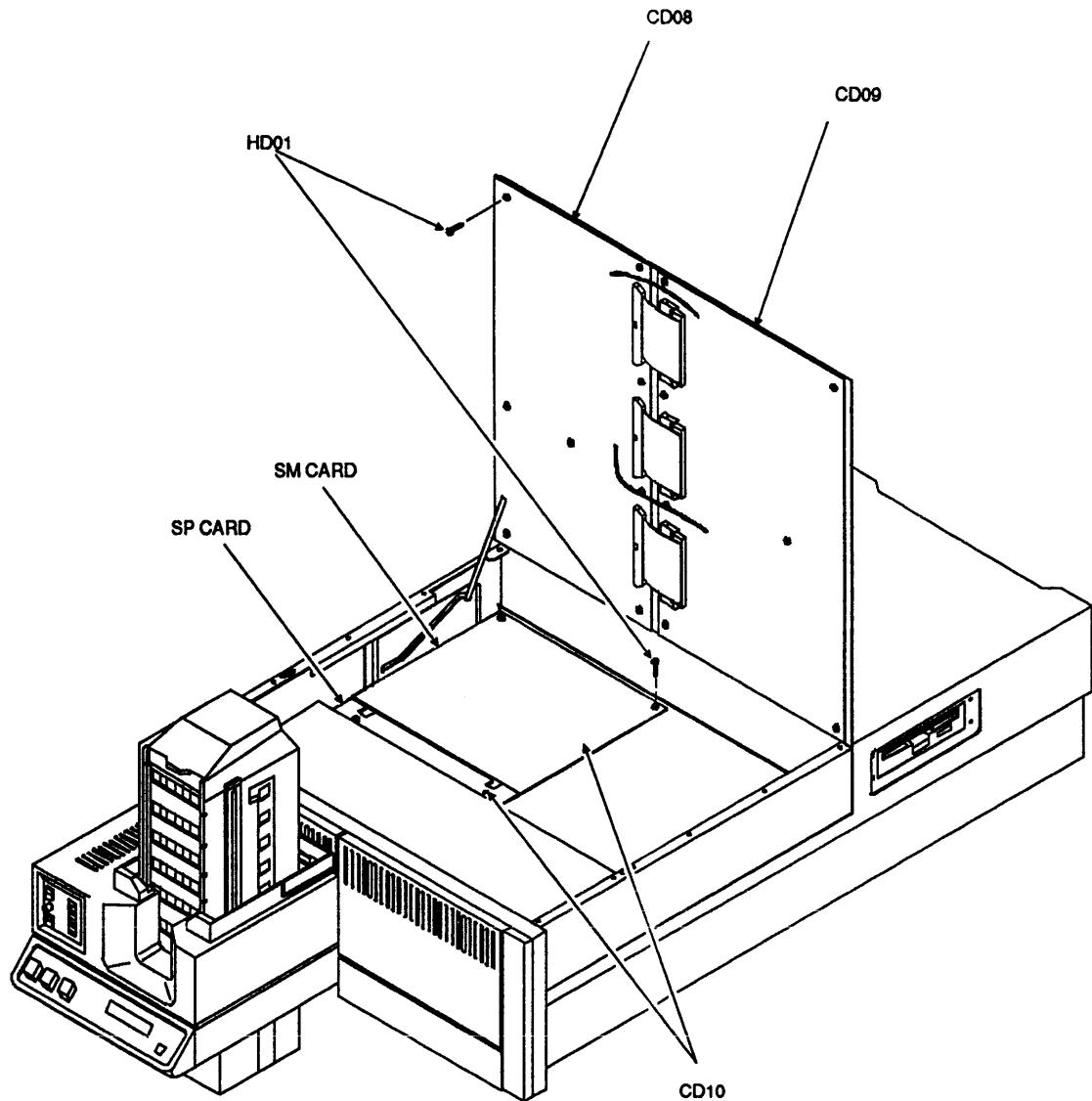
**4280 Assembly**Card Group, cont.

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
CD06	29312XXX	CKT CD ST ASSY	1
CD07	29303XXX	CKT CD PI ASSY	1

Attaching Hardware

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 6-32X3/8, ZINC	2
HD02	SCREW, PHT, SEMS, 6-32X1/2, ZINC	3

IDENTICAL MOUNTING HARDWARE IS USED FOR THESE FOUR CARDS. TWO SCREWS ARE CALLED OUT ON THIS ILLUSTRATION BUT THERE ARE NINETEEN IN ACTUAL USE.



THE SM AND SP CARDS MUST BE ORDERED TOGETHER AS A UNIT.  
REPLACING ONLY ONE MAY  
CAUSE THE FAILURE OF THE  
OTHER.

Figure 19.  
SB/SBI, RI, SM and SP Cards

**4280 Assembly****Card Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
CD08	29291XXX	CKT CD RI ASSY	1
CD09	29204XXX	CKT CD SB/SBI ASSY	1
Order SM and SP cards together as SM/SP FRU Kit listed below			
CD10	29800XXX	SM/SP FRU KIT	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 6-32X3/8	19

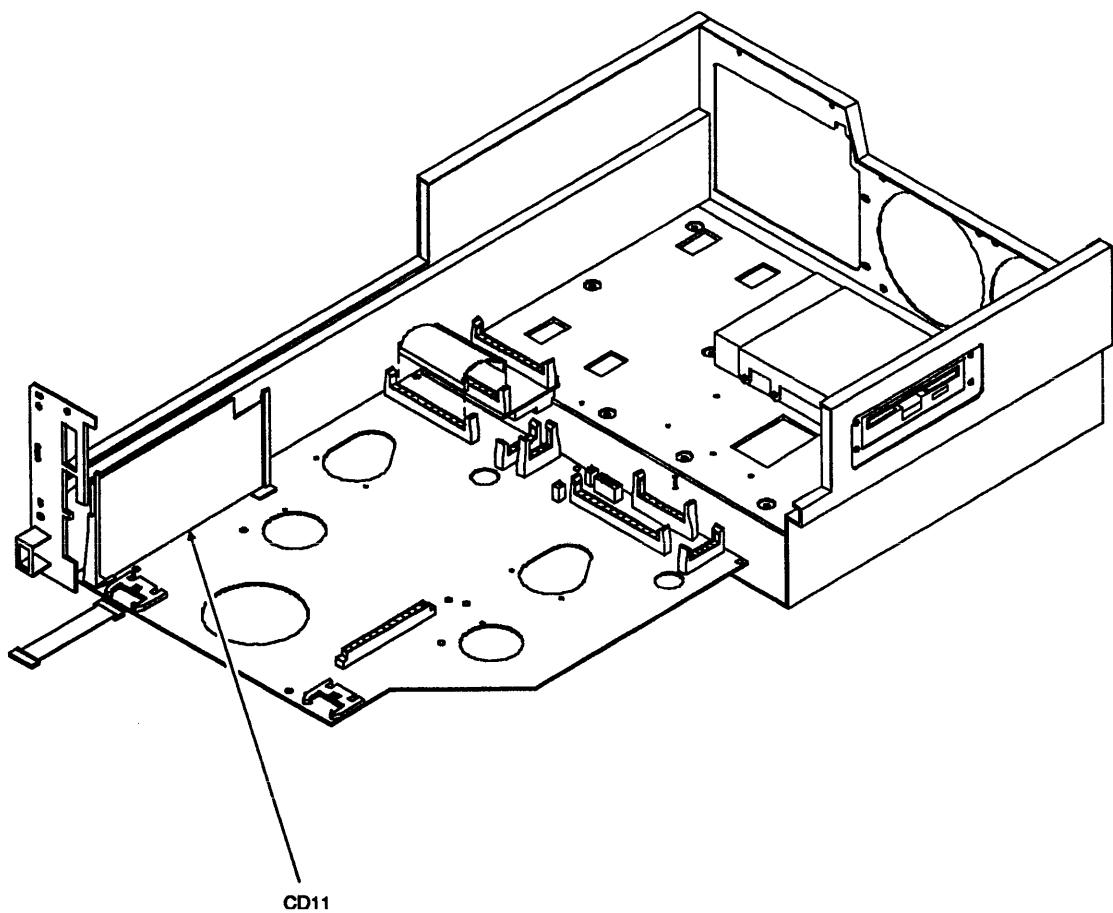


Figure 20.  
HI Card

**4280 Assembly****Card Group, cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
CD11	29294XXX	CKT CD HI ASSY	1

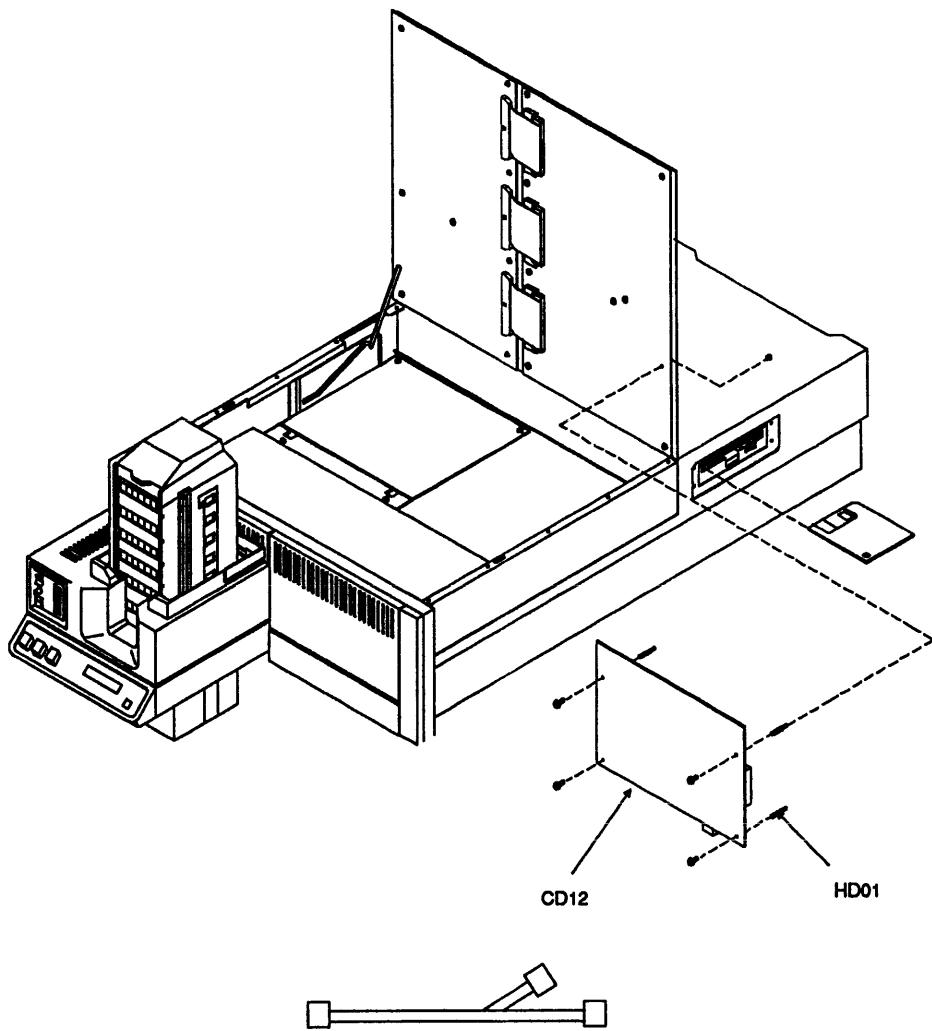


Figure 21.  
DCI Card

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<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
CD12 .....	29402XXX .....	CKT CD DCI ASSY .....	1 .....

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01 .....	SPACER, ICRC, M/F .....	4 .....

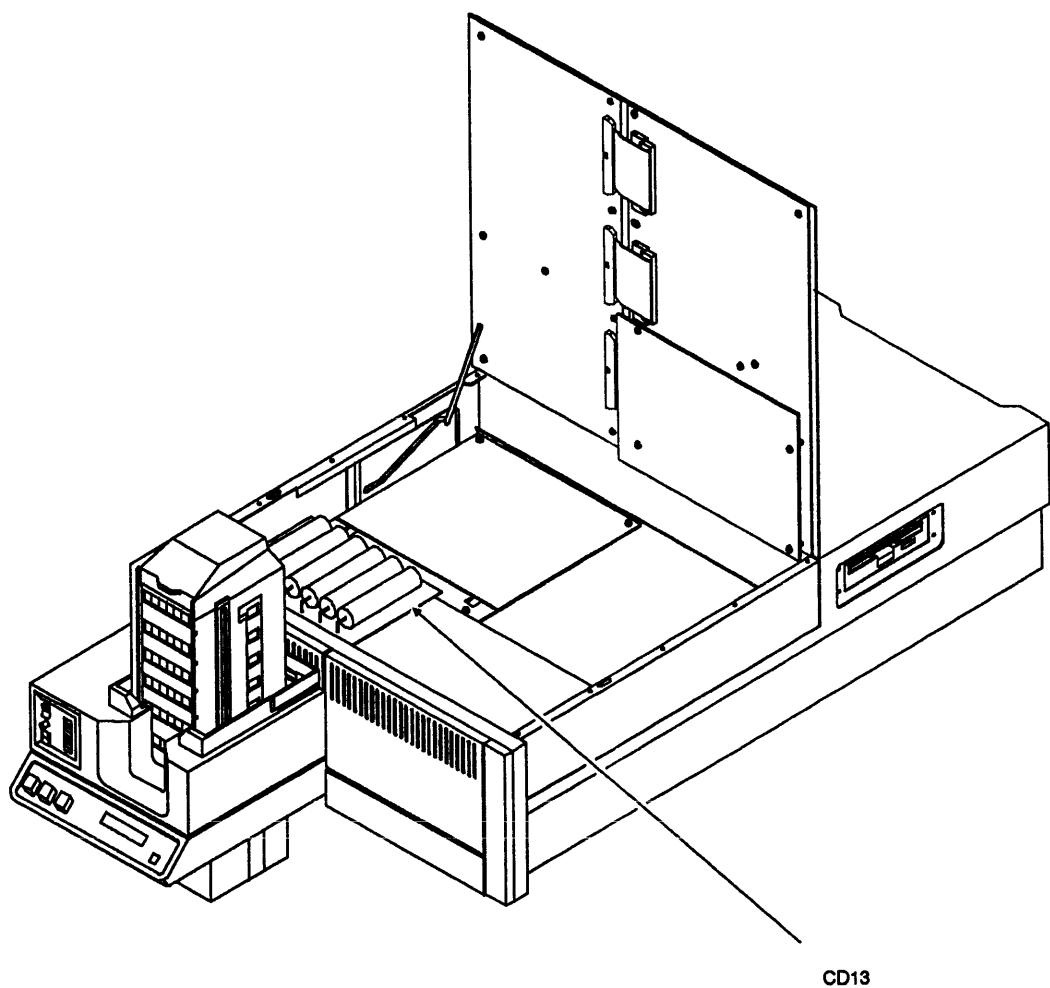


Figure 22.  
CC Card

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**4280 Assembly**

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**Card Group, cont.**

<b><u>Fig Number</u></b>	<b><u>Part Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
CD13	29353XXX	CKT CD CC ASSY	1

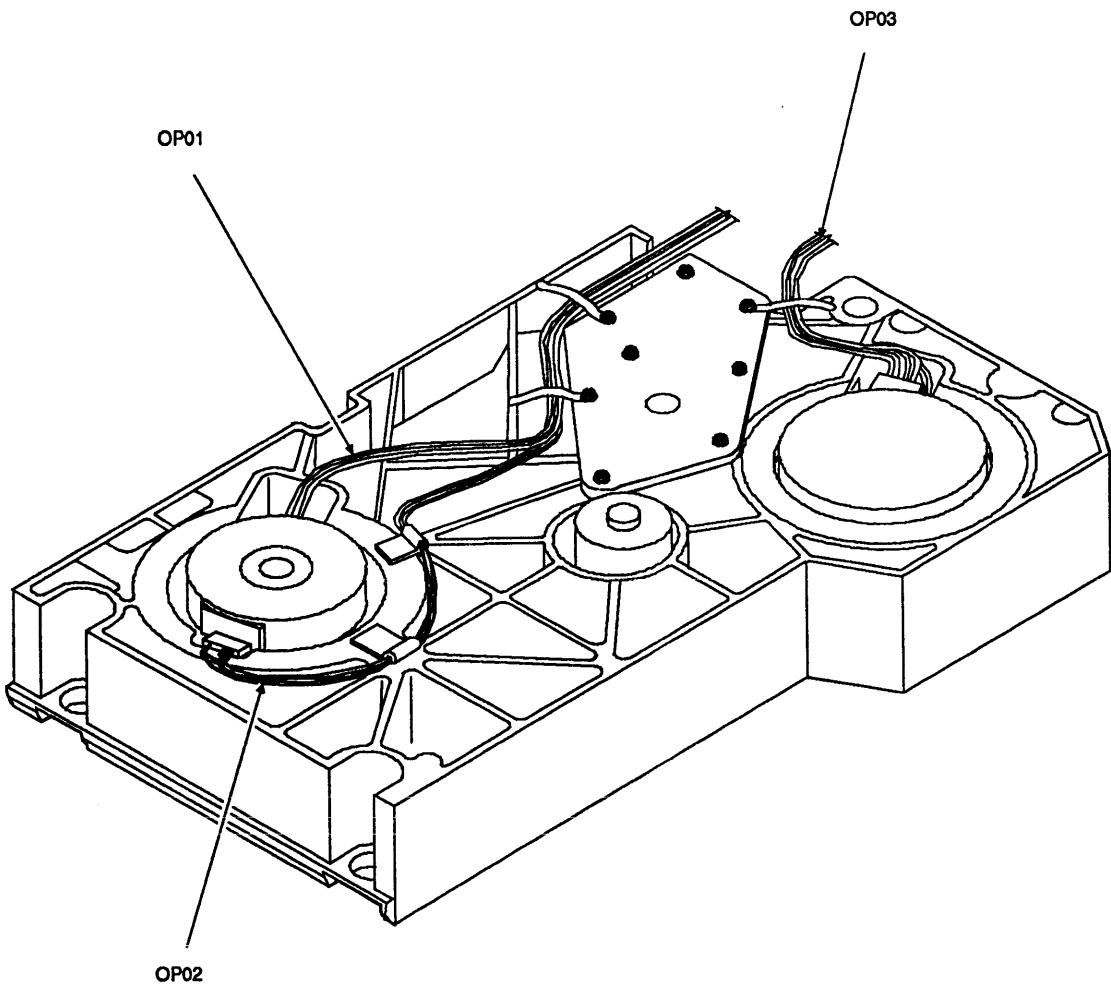


Figure 23.  
Supply Motor, Take-Up Motor and Tack/ST Cables

**4280 Assembly****Orderable Parts (non-FRU)**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP01	289534XX	CBL, SUPPLY MTR/SM	1
OP02	289530XX	CBL, TACH/ST	1
OP03	289532XX	CBL, TAKE UP MTR/SM	1

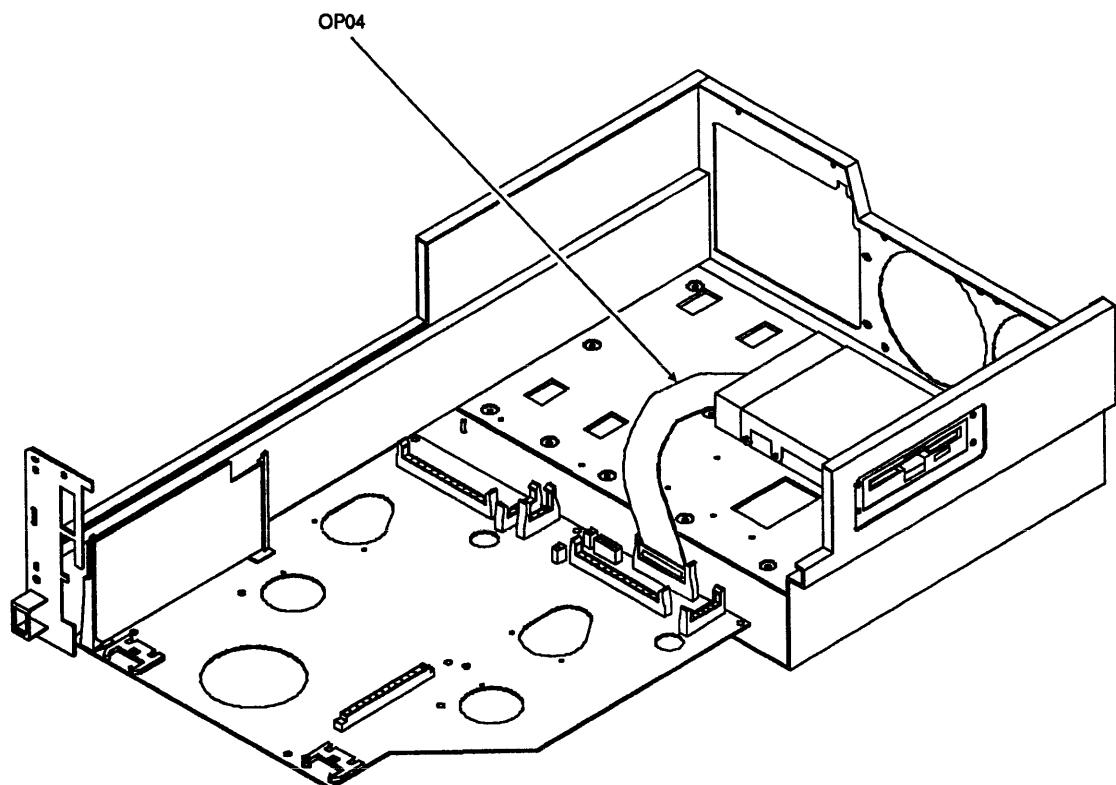


Figure 24.  
BT/Floppy Cable

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**Orderable Parts (non-FRU), cont.**

<b><u>Fig Number</u></b>	<b><u>Part Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
OP04	289531XX	CBL, BT/FLOPPY	1

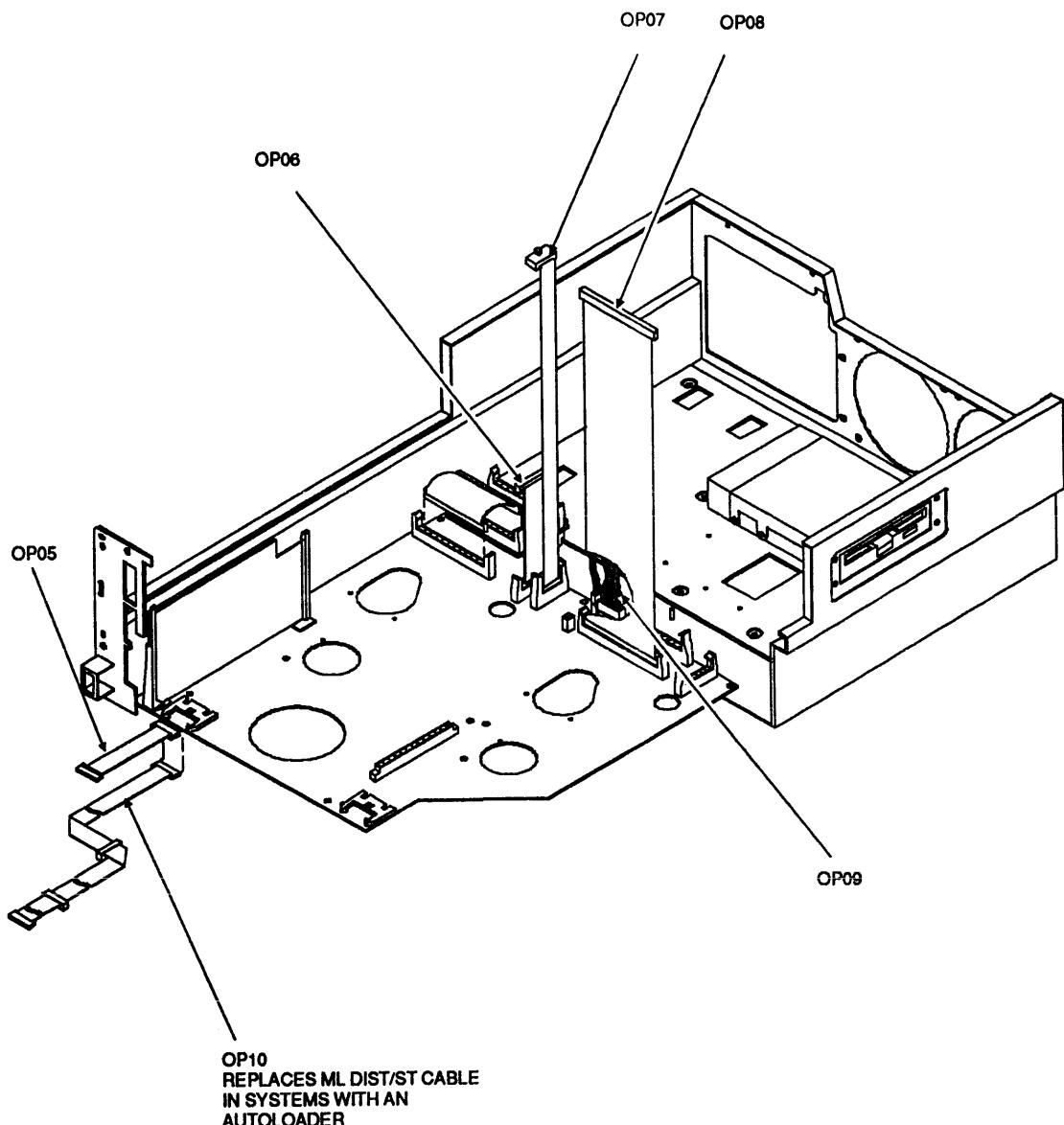


Figure 25.  
BT Cables

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP05	289540XX	CBL, ML DISP/BT	1
OP06	289536XX	CBL, ST/BT	1
OP07	289539XX	CBL, LOGIC PI/BT	1
OP08	289535XX	CBL, SB/SBI/RI/BT	1
OP09	289533XX	CBL, PWR PI/BT	1
OP10	289541XX	CBL, AC/BT	1

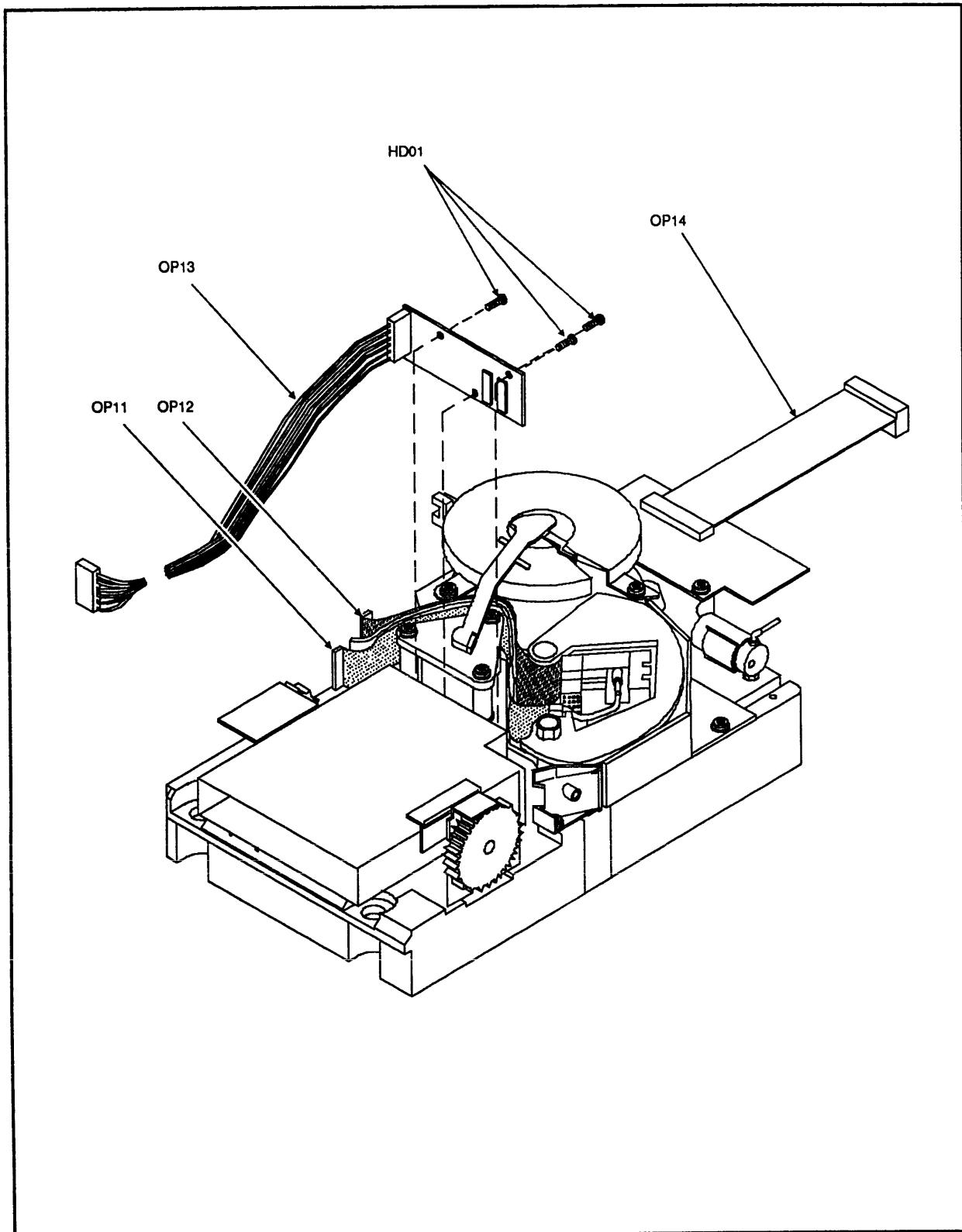


Figure 26.  
Read/Write Flex Circuits, ML/Display and SM/ST Cable

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<b>Fig Number</b>	<b>Part Number</b>	<b>Description</b>	<b>Qty</b>
OP11	290981XX	FLEX CIRCUIT WRITE ASSY	1
OP12	290980XX	FLEX CIRCUIT READ ASSY	1
OP13	289542XX	CBL, ML/DISP	1
OP14	289538XX	CBL, SM/ST	1

**Attaching Hardware**

<b>Fig Number</b>	<b>Description</b>	<b>Qty</b>
HD01	SCREW, THRFM, PHT, 4-20X3/8	3

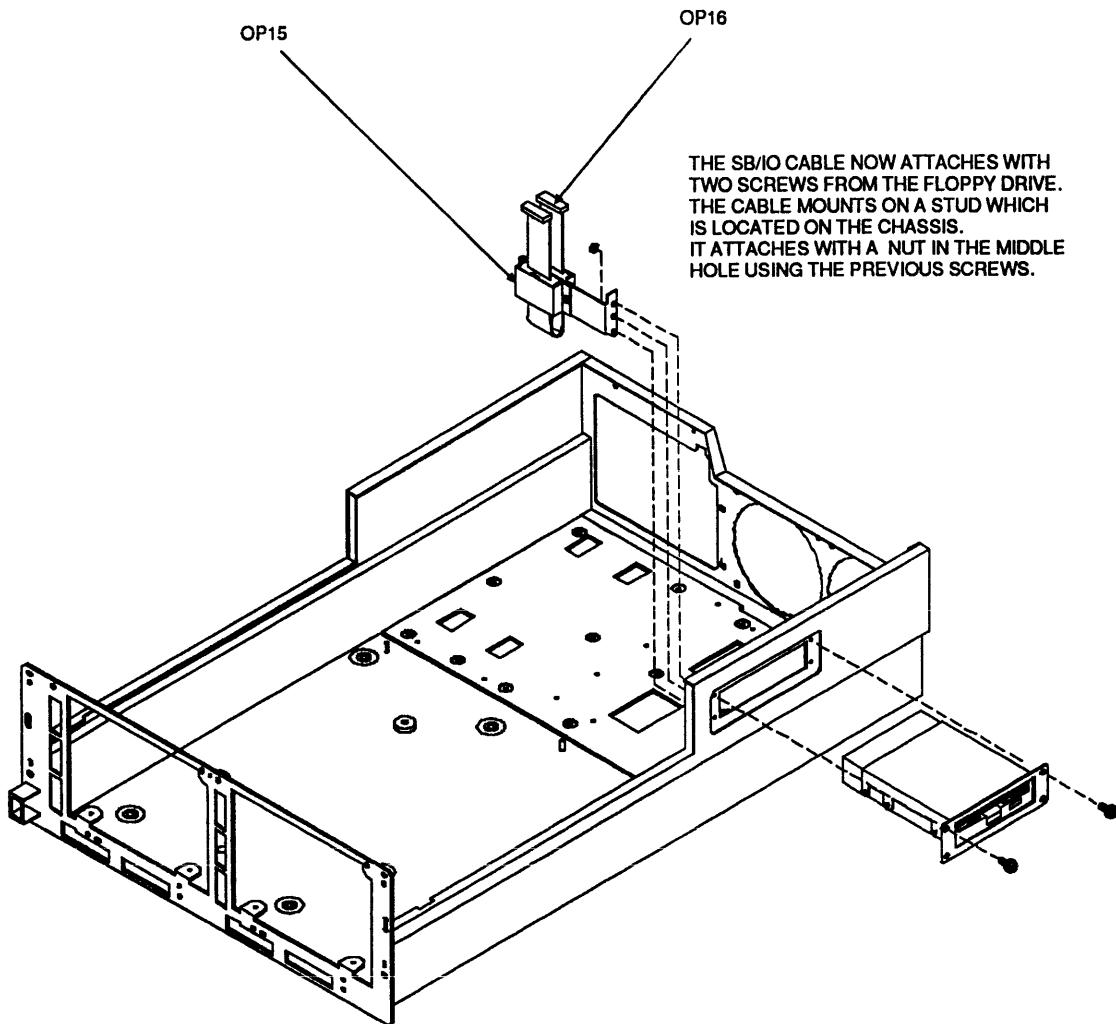


Figure 27.  
SB/I/O Cable and Ferrite/Cable Assembly

**4280 Assembly**

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**Orderable Parts (non-FRU), cont.**

<b><u>Fig Number</u></b>	<b><u>Part Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
OP15 .....	288605XX .....	S370 FERRITE/CBL, ASSY .....	1 .....
OP16 .....	289543XX .....	CBL, SB/ I/O .....	1 .....

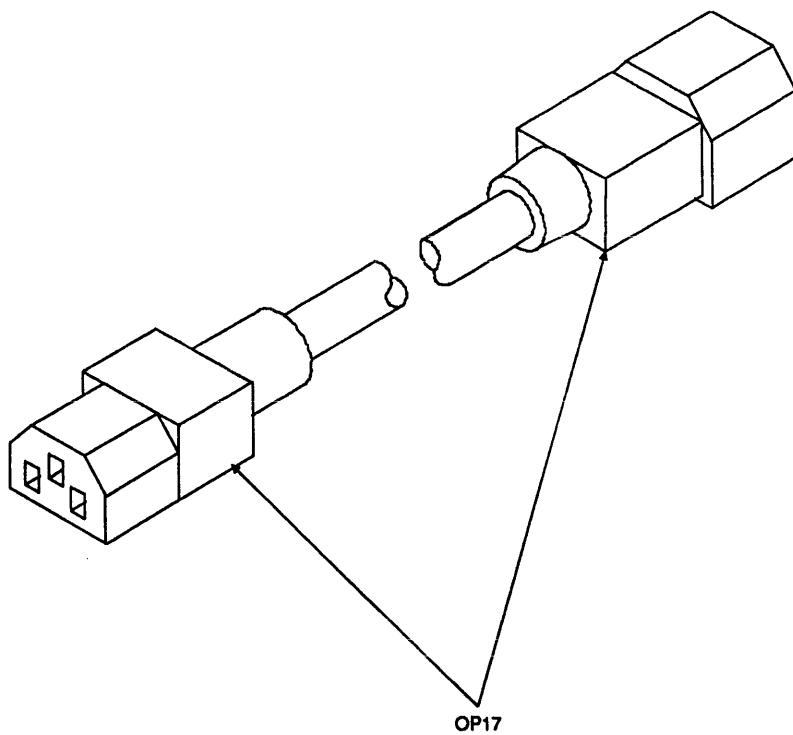


Figure 28.  
Power Cable

**4280 Assembly**

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**Orderable Parts (non-FRU), cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP17	24055633	POWER CABLE, AS400	1
OR			
	24055630	POWER CABLE, NORTH AMERICA, R/A	1
OR			
	24055632	POWER CABLE, INTERNATIONAL, R/A	1

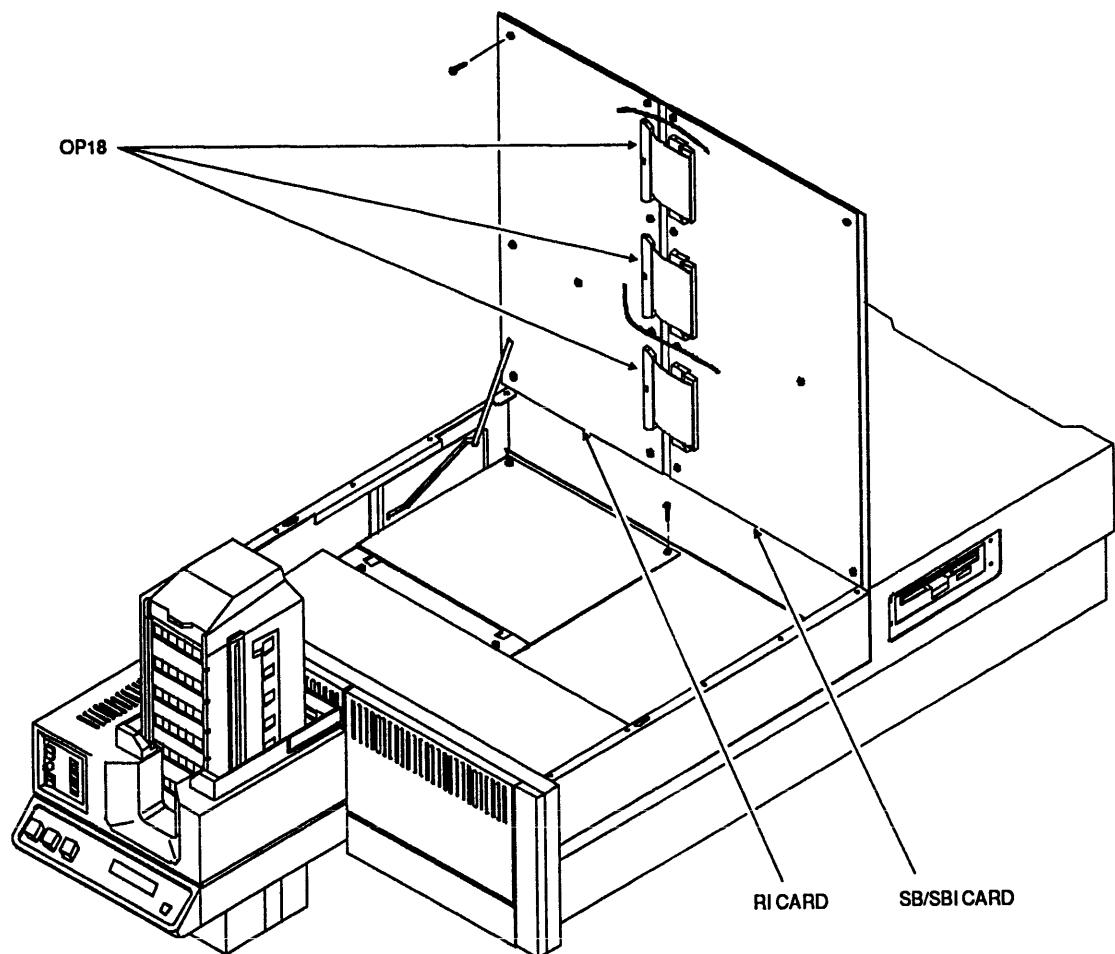


Figure 29.  
RI/SB/SBI Cables

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP18	289537XX	CBL, RI/SB/SBI	3

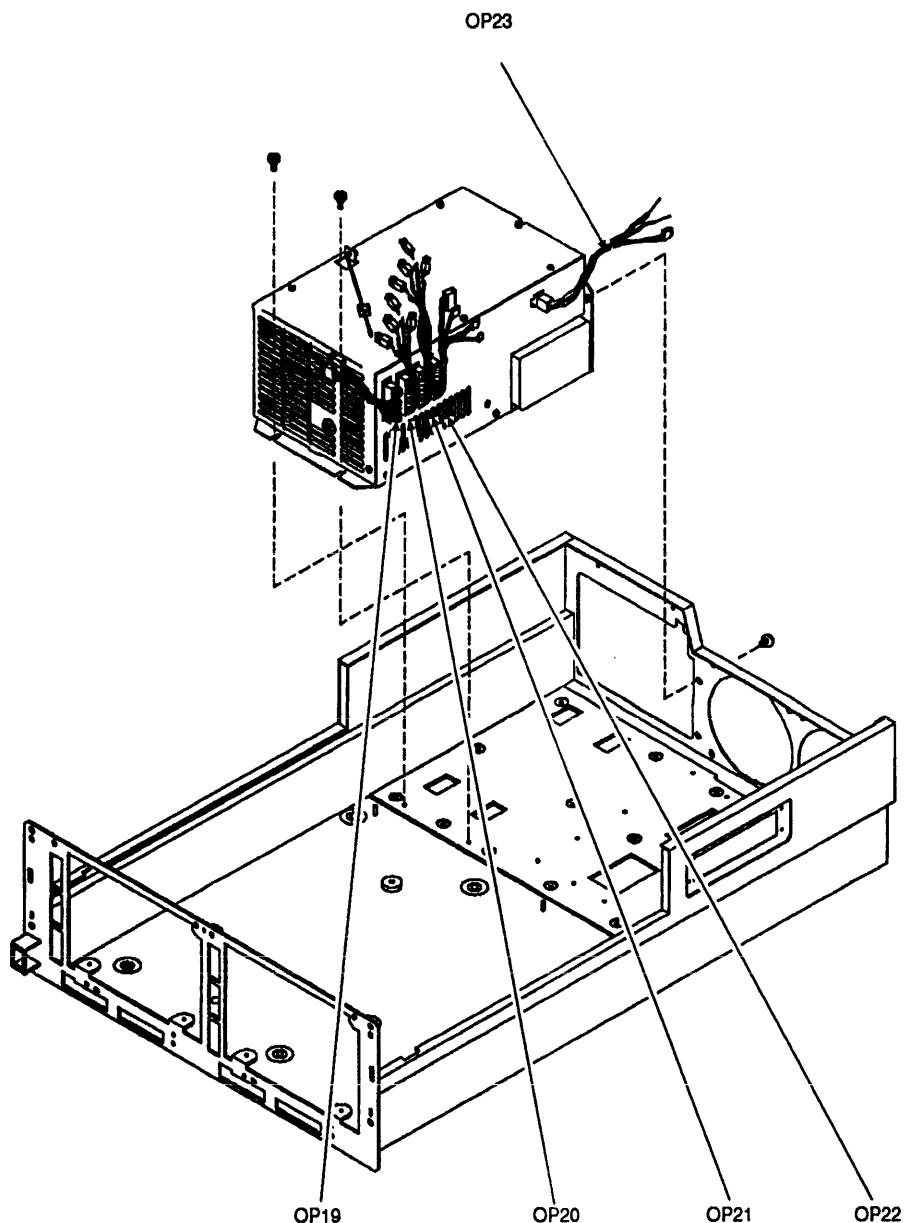


Figure 30.  
DC Cables

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP19	289544XX	CBL, DC P1	1
OP20	289545XX	CBL, DC P2	1
OP21	289546XX	CBL, DC P3	1
OP22	289547XX	CBL, DC P4	1
OP23	289548XX	CBL, DC P5	1

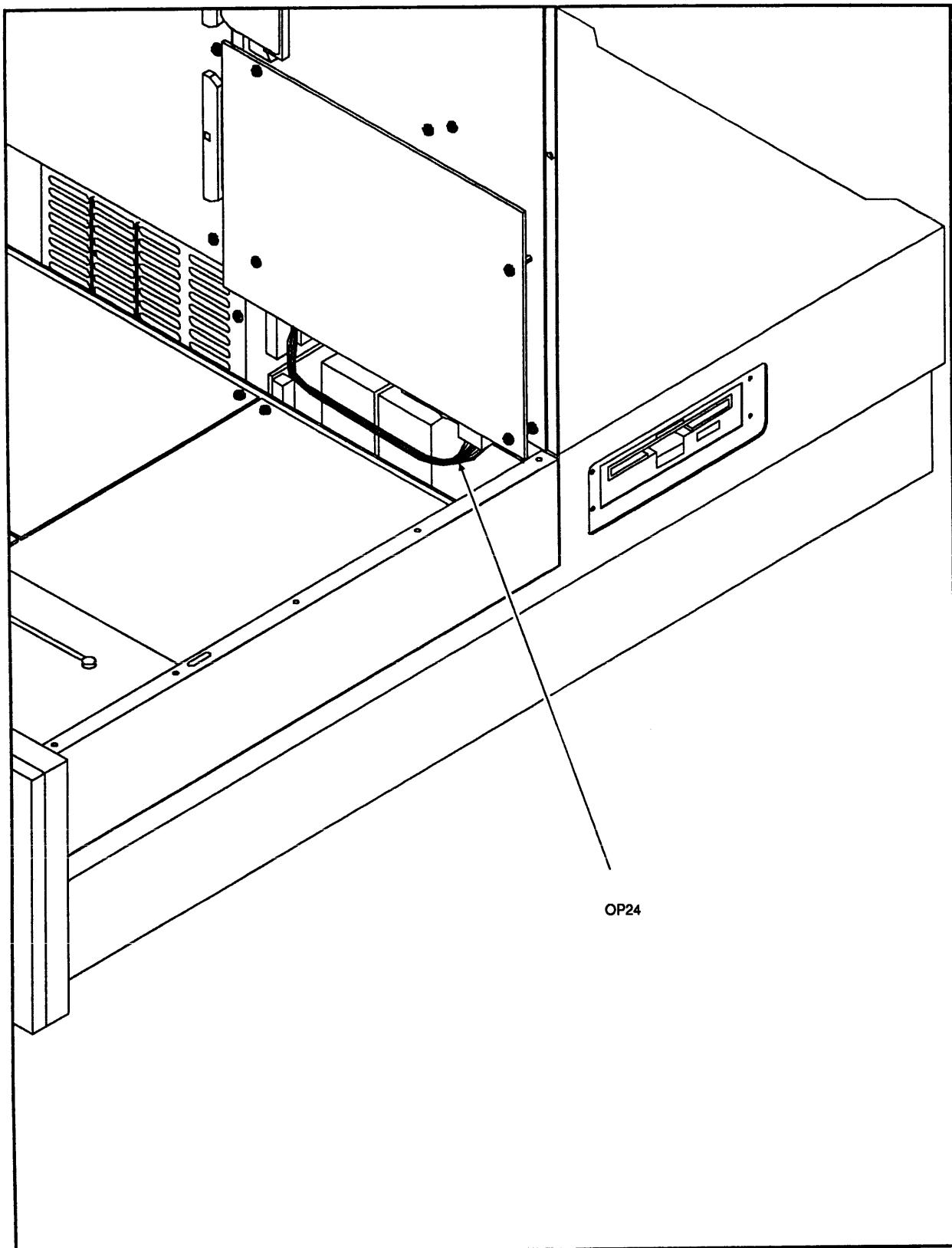


Figure 31.  
DCI Power Cable

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP24	289582XX	CBL, DCI PWR	1

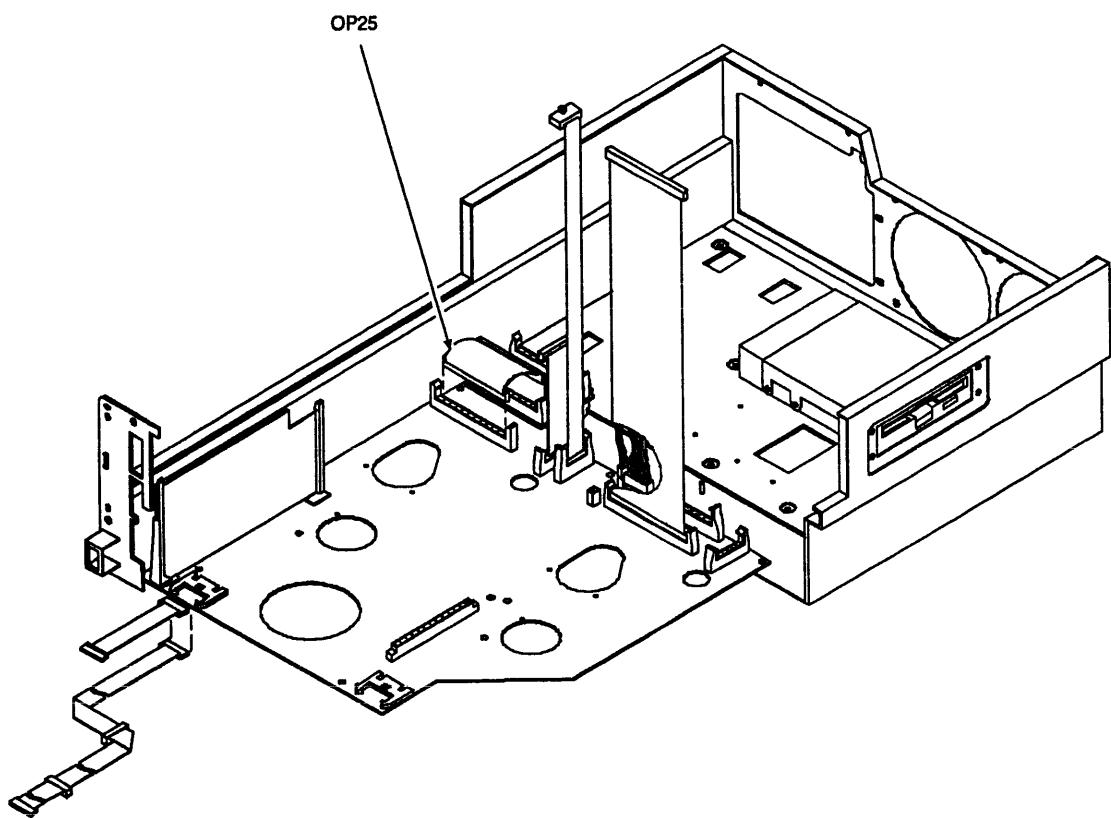


Figure 32.  
BT/RT Cable

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP25	289559XX	CBL, BT/RT	1

NOTE: BT/RT cable is used in earlier units in which RT card is present. In later units without RT card, RI cable plugs directly into BT card. If your unit does not have an RT card, order the SB/RI/BT cable in place of BT/RT cable.

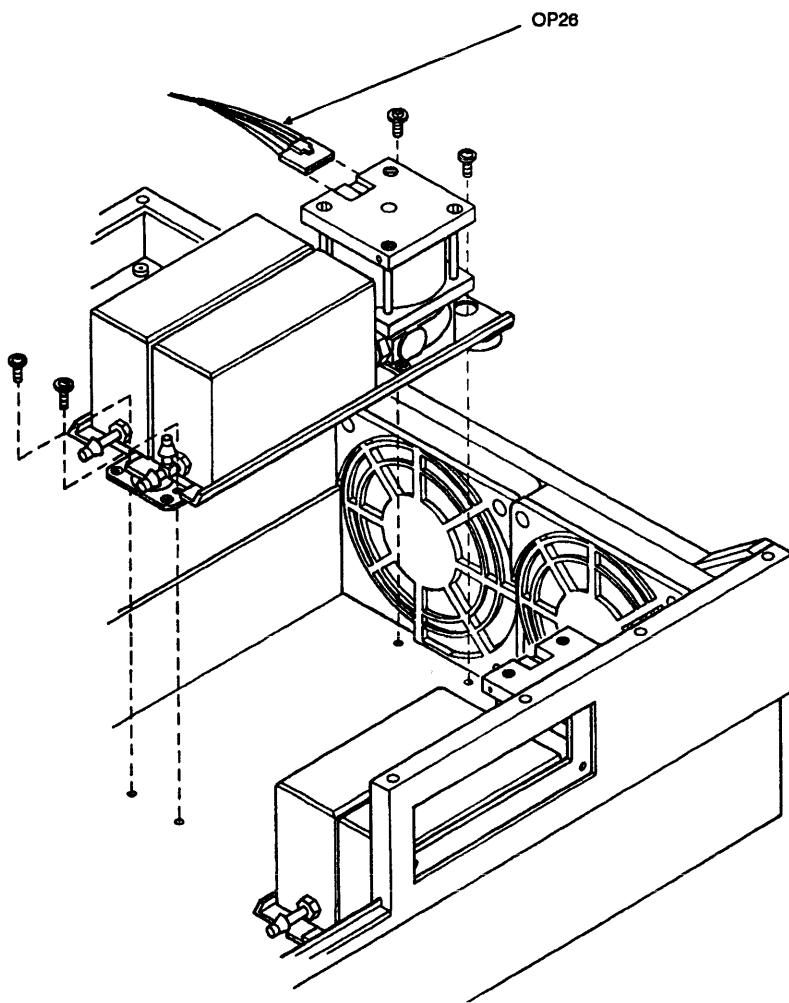


Figure 33.  
PI to Pump 1 Cable

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**Orderable Parts (non-FRU), cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP26	289556XX	CBL, PI/PUMP 1	1

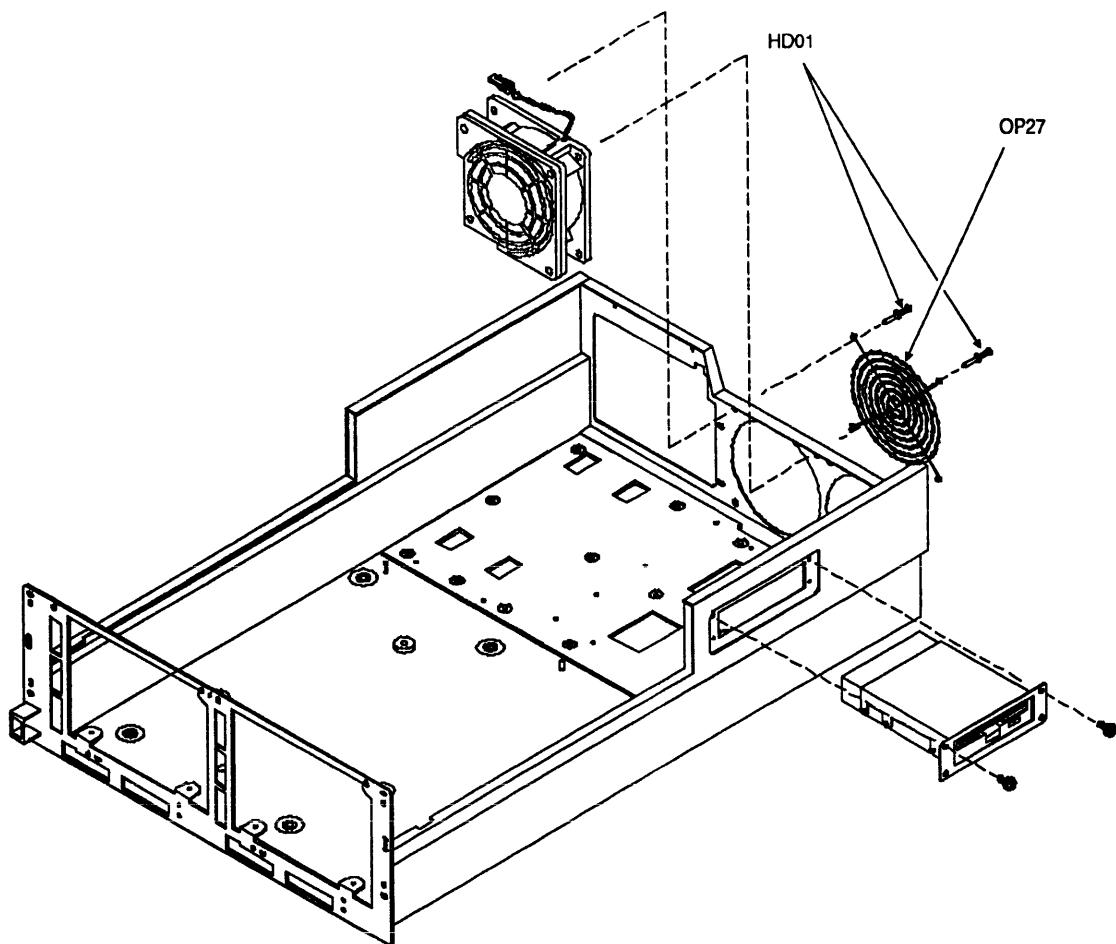


Figure 34.  
Finger Guard

**4280 Assembly**

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**Orderable Parts (non-FRU), cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP27	24017456	FINGER GUARD, FAN, 4.69 INCH	2

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, M5-0.8X12MM, S	8

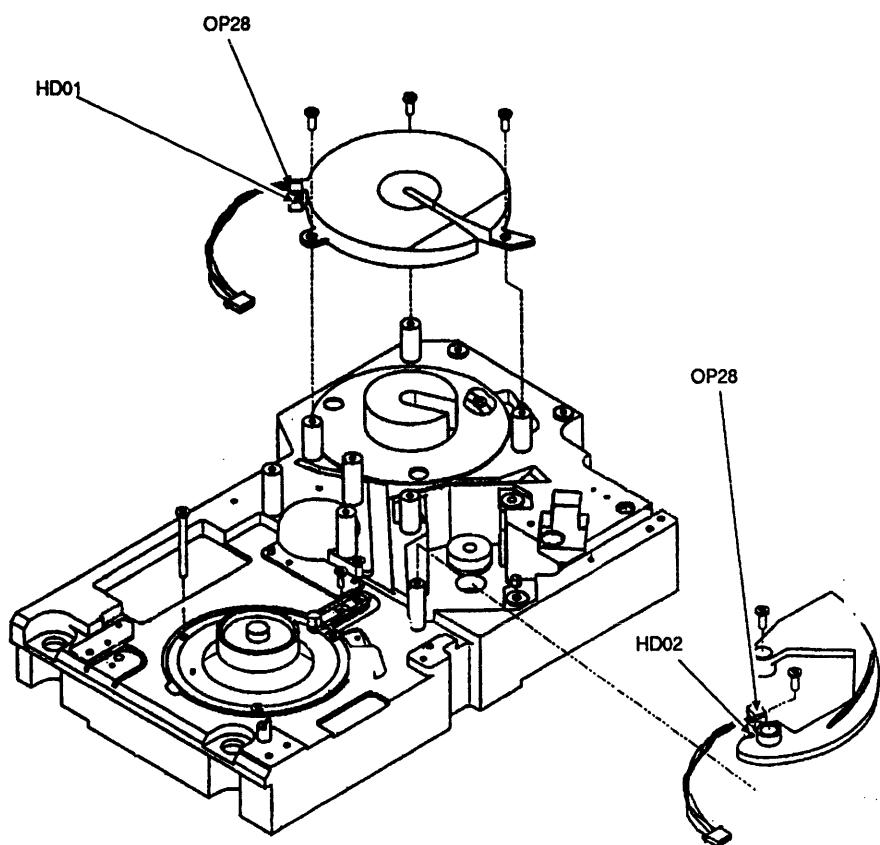


Figure 35.  
Sensors

**4280 Assembly**

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**Orderable Parts (non-FRU), cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP28	288555XX	THRD ARM SENSOR ASSY	2

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 4-40X3/8, ZINC	1
HD02	SCREW, PHT, SEMS, 4-40X1/4, ZINC	1

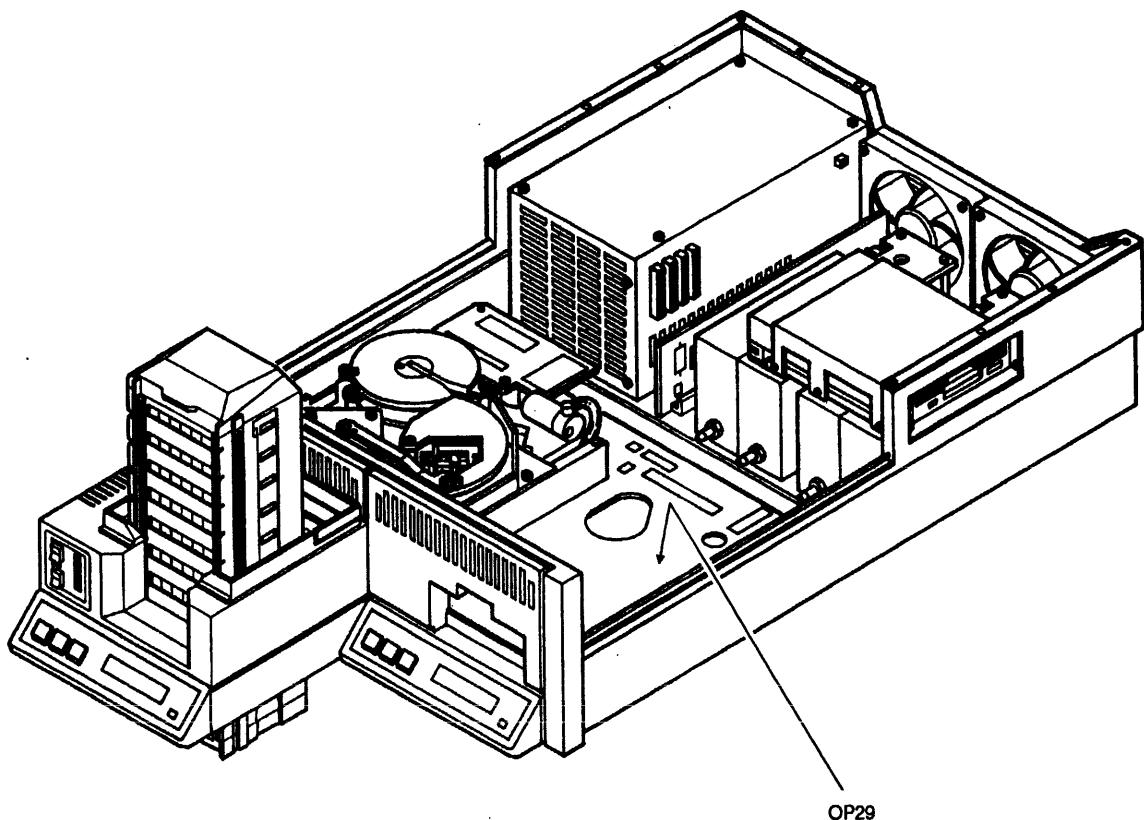


Figure 36.  
BT Card

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**4280 Assembly**

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**Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP29	29309XXX	CKT CD BT ASSY	1

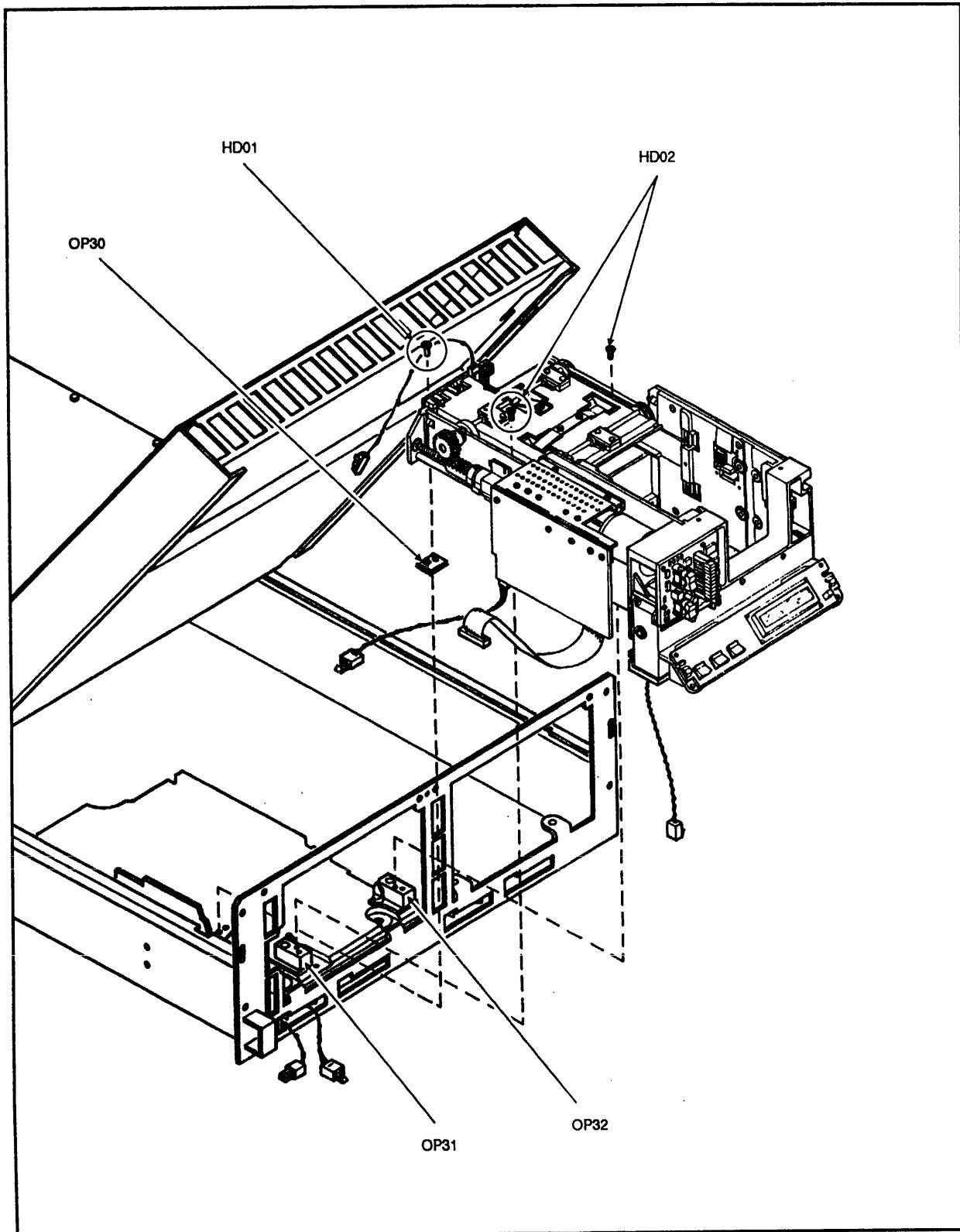


Figure 37.  
Adapter Blocks Assembly and Rear Spacer

**4280 Assembly**

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**Orderable Parts (non-FRU), cont.**

<b><u>Fig Number</u></b>	<b><u>Part Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
OP30	287634XX	SPACER, REAR	1
OP31	288575XX	LH ADAPTER BLOCK ASSY	1
OP32	288574XX	RH ADAPTER BLOCK ASSY	1

**Attaching Hardware**

<b><u>Fig Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
HD01	SCREW, BHS, 6-32X3/8, BO	1
HD02	SCREW, FHS, 6-32X5/16, AS	2

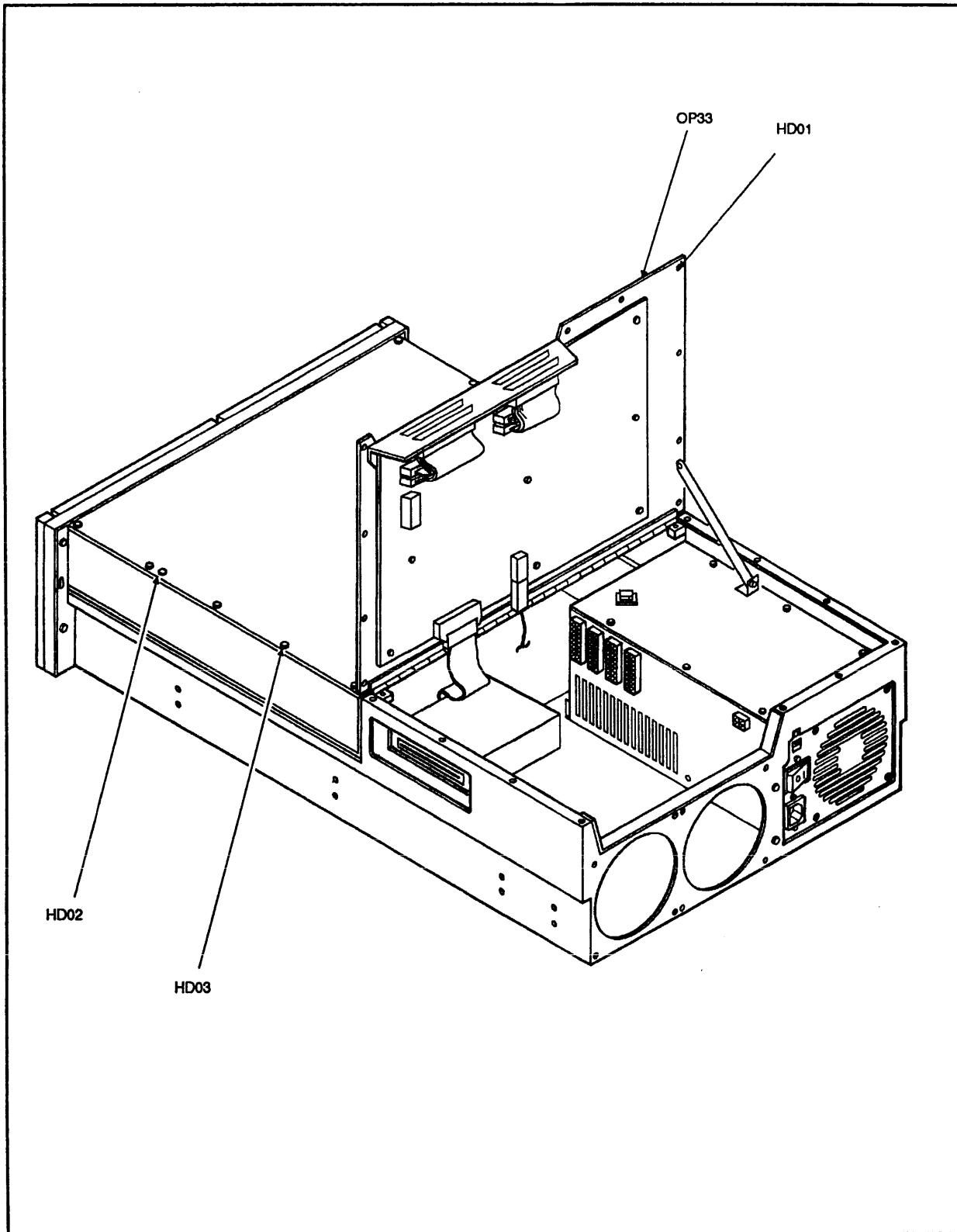


Figure 38.  
Hinged Top Cover

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP33	287582XX	HINGED TOP COVER	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 6-32X3/8, Z	12
HD02	SCREW, PHT, SEMS, 6-32X1-5/8, Z	2
HD03	SCREW, PHT, SEMS, 6-32X3/8, Z	10

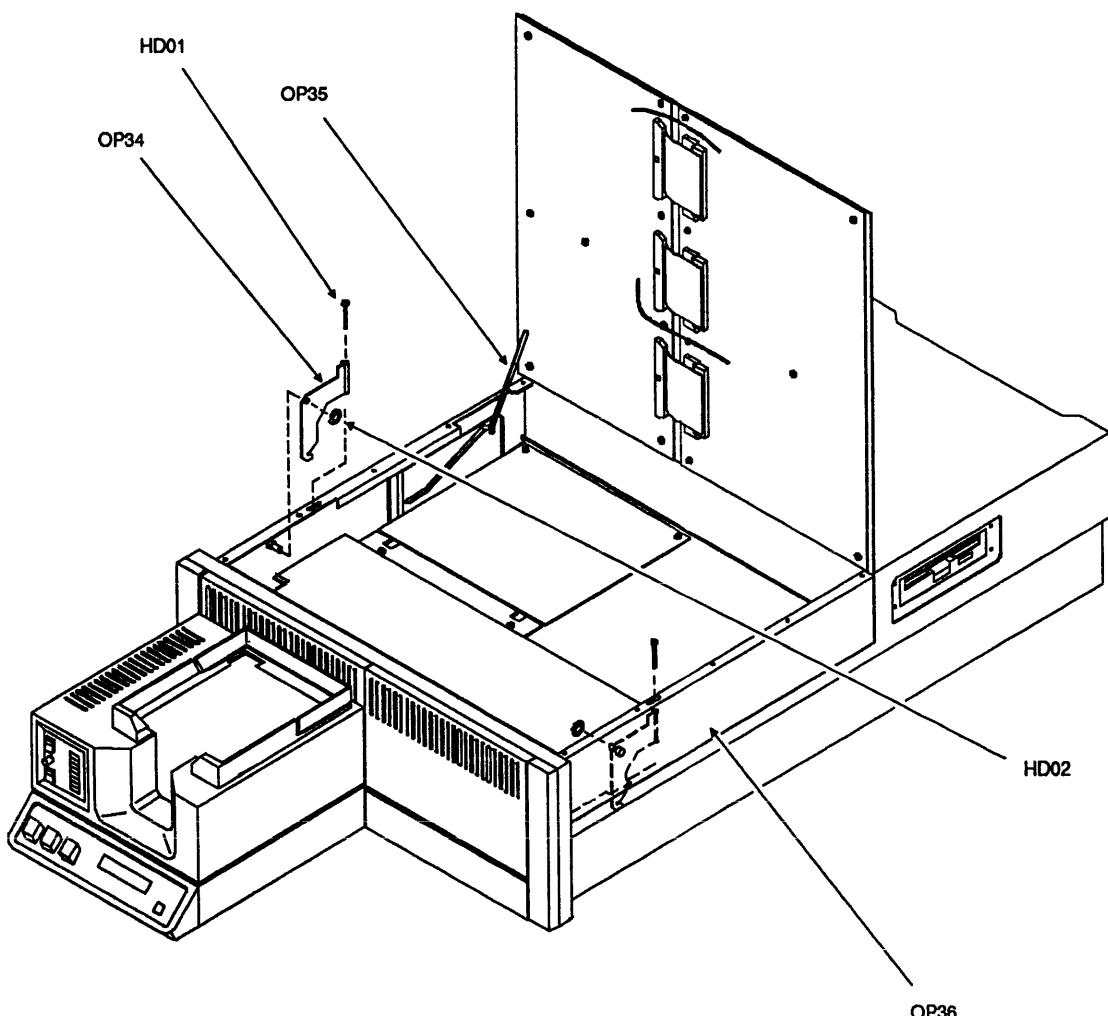


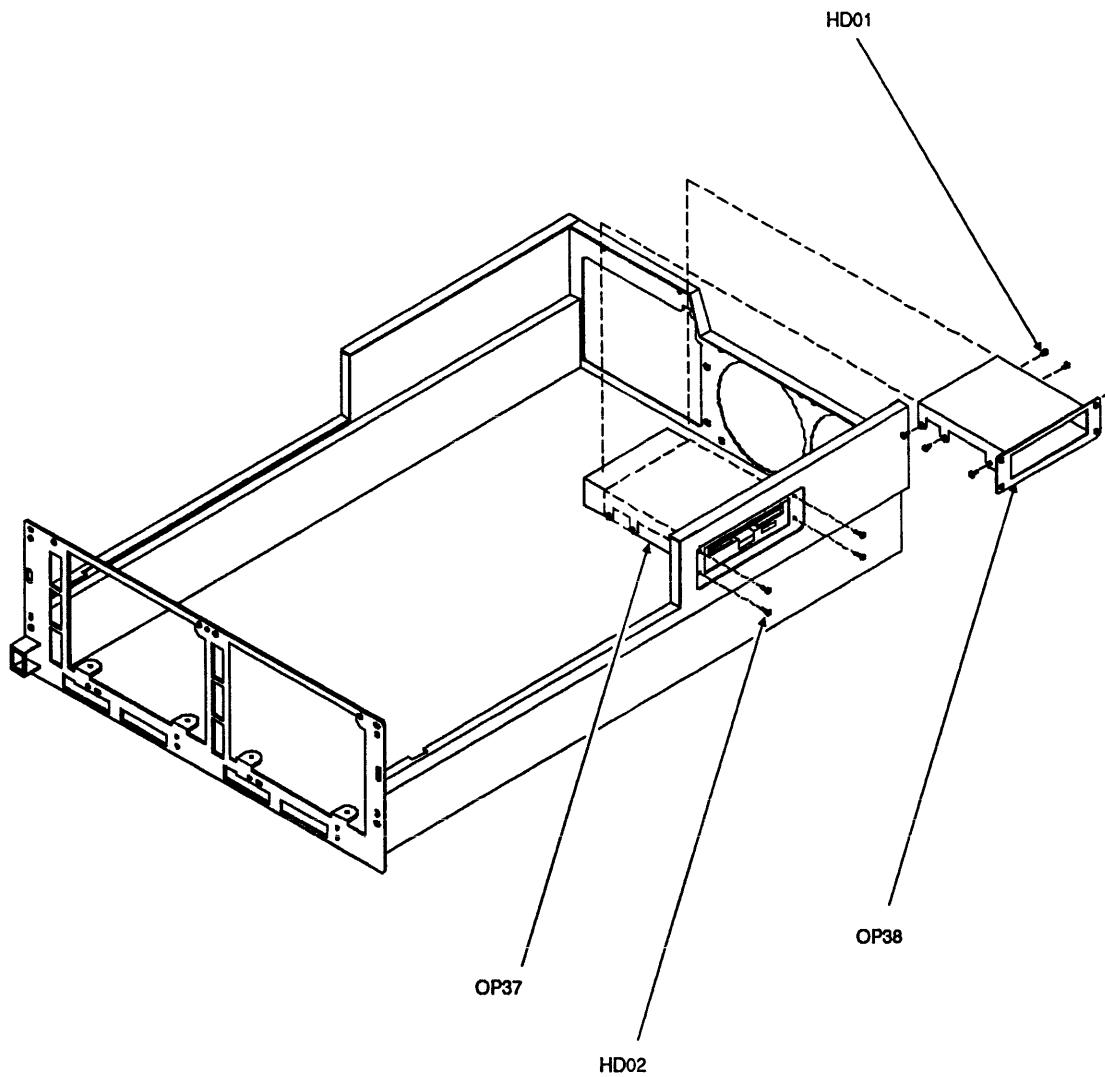
Figure 39.  
Cover Latch, Cover Partition and Support Bar

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP34	287532XX	LATCH, COVER	2
OP35	287664XX	SUPPORT BAR, TOP	1
OP36	287583XX	CVR, PARTITION	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
HD01		SCREW, PHT, SEMS, 6-32X1-5/8, ZINC	2
HD02	24020106	RING RET, R-C P/O-EXT, .184	2



**Figure 40.**  
3.5 Inch Floppy Drive and Mounting Bracket

**4280 Assembly**

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**Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP37	24022043	DRIVE, FLOPPY, 3.5 INCH	1
OP38	287532XX	BRACKET, MOUNTING, FLOPPY DR	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, MET, M3X6, ZINC	6
HD02	SCREW, PHT, SEMS, 6-32X3/8, ZINC	4

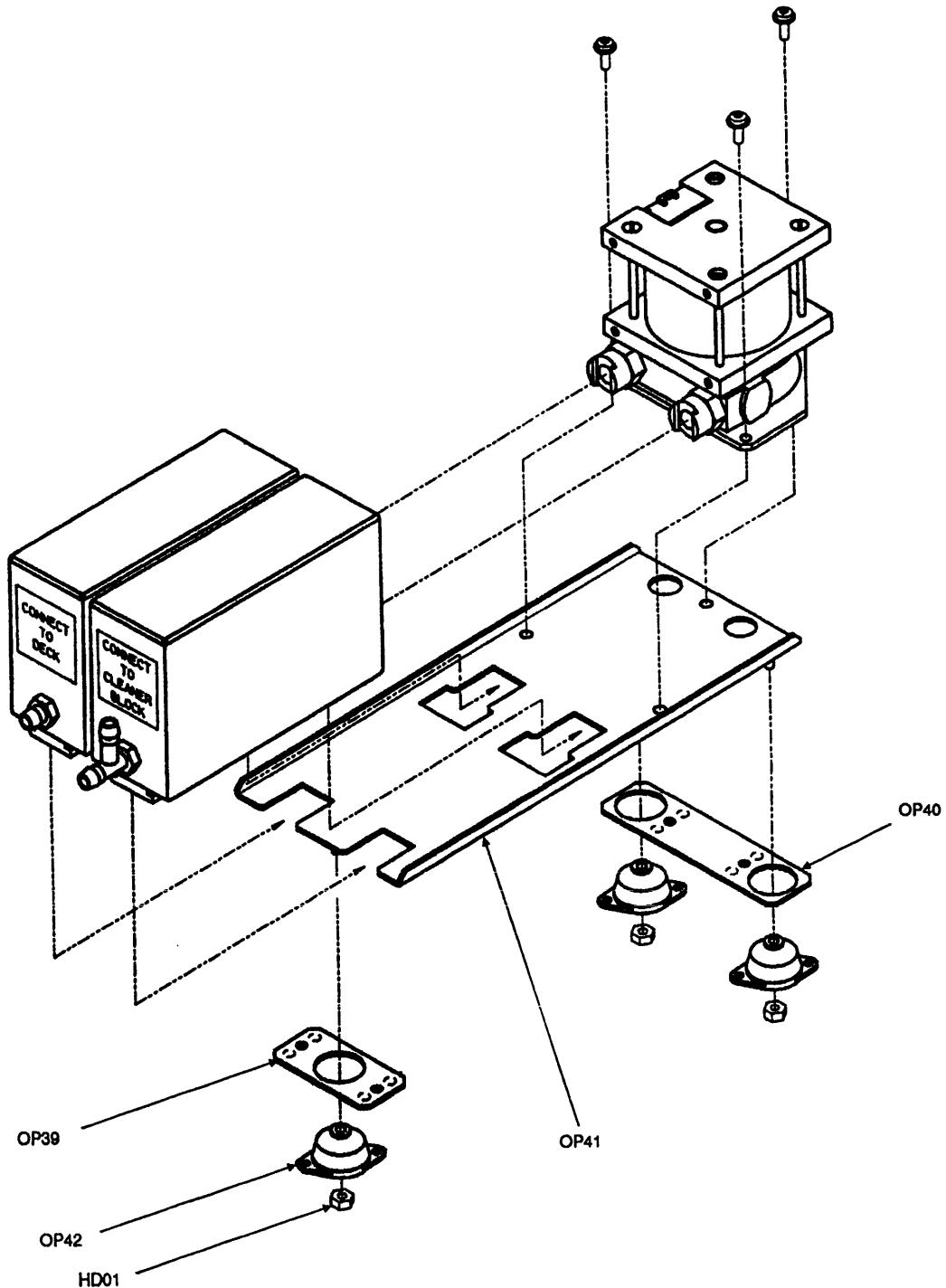


Figure 41.  
Baseplate and Pump Brackets

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP39	287575XX	BRACKET, FRONT PUMP MOUNTING	1
OP40	287576XX	BRACKET, REAR PUMP MOUNTING	1
OP41	287677XX	BASEPLATE, PNEUMATICS	1
OP42	24022056	ISOLATOR, SHOCK	3

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	NUT, KEPS, STD, 6-32, S	3

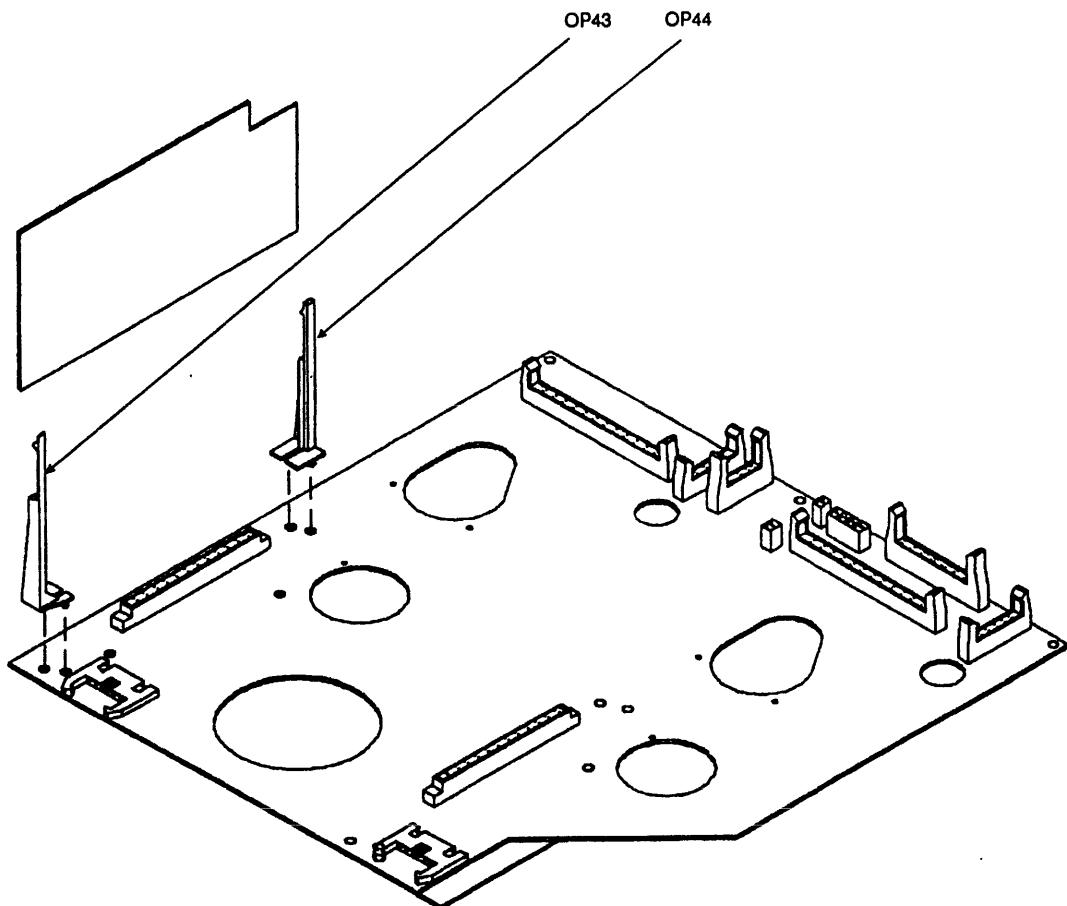


Figure 42.  
BT/HI Retainers

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP43	287675XX	RETAINER, FRONT, HI	1
OP44	287674XX	RETAINER, BACK, HI	1

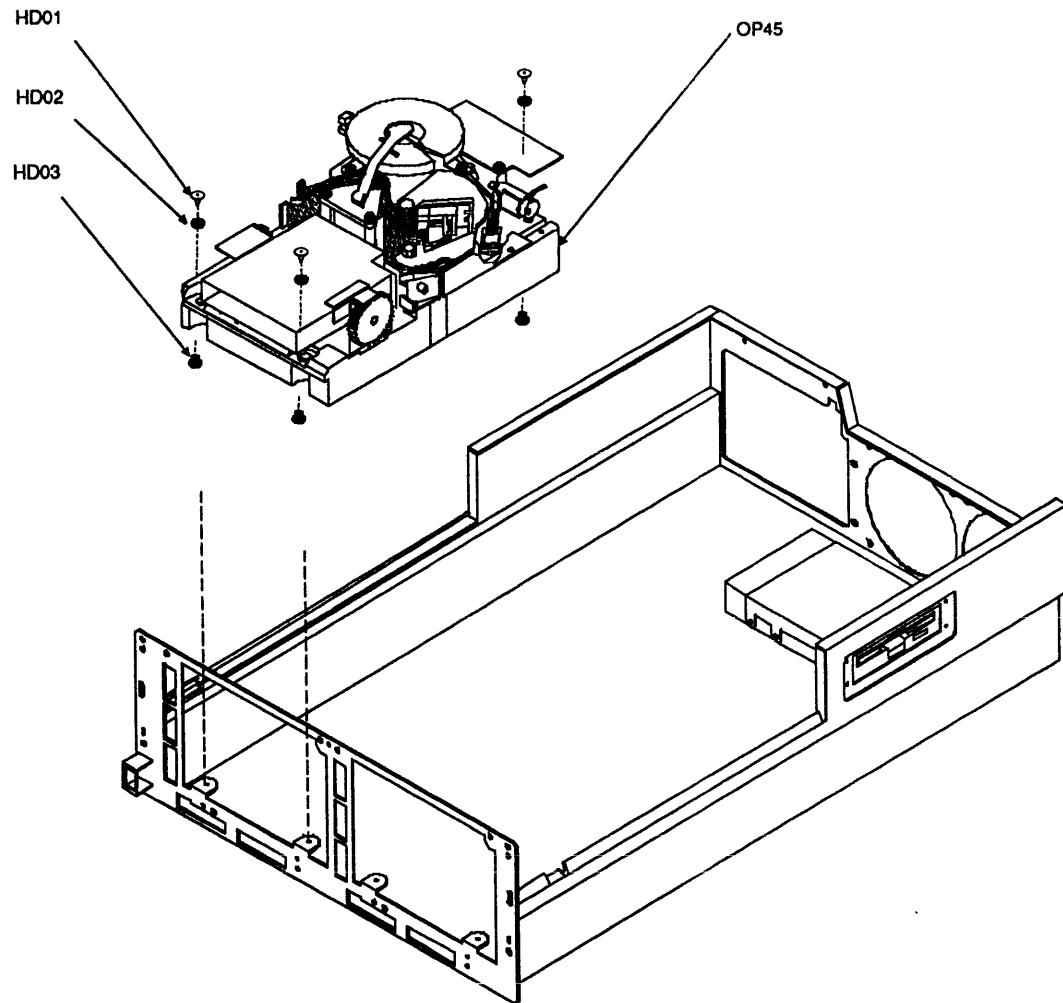


Figure 43.  
Deckplate Assembly

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP45	288587XX	DECKPLATE ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
HD01	287663XX	SCREW, ISOLATOR	3
HD02	24020856	RING, ISOLATOR	3
HD03	24020853	BUSHING, ISOLATOR	3

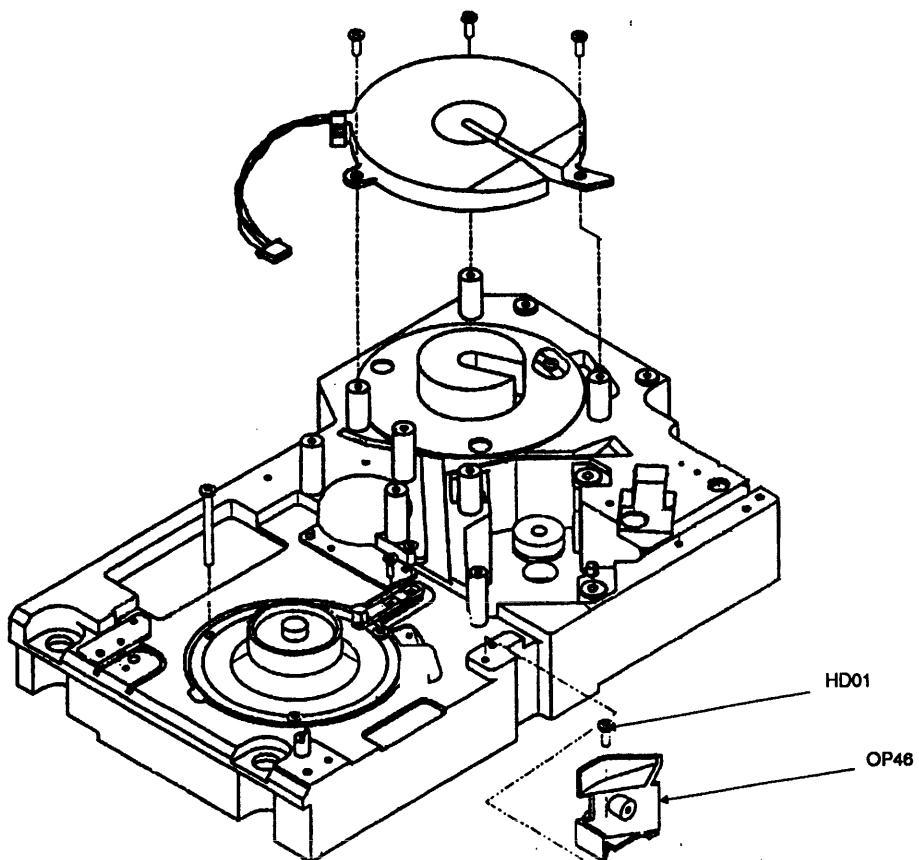


Figure 44.  
Leader Block Guide

**4280 Assembly**

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**Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP46	250590XX	LEADER BLOCK GUIDE	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCR, PHT, SEMS, 6-32X3/8, Z	1

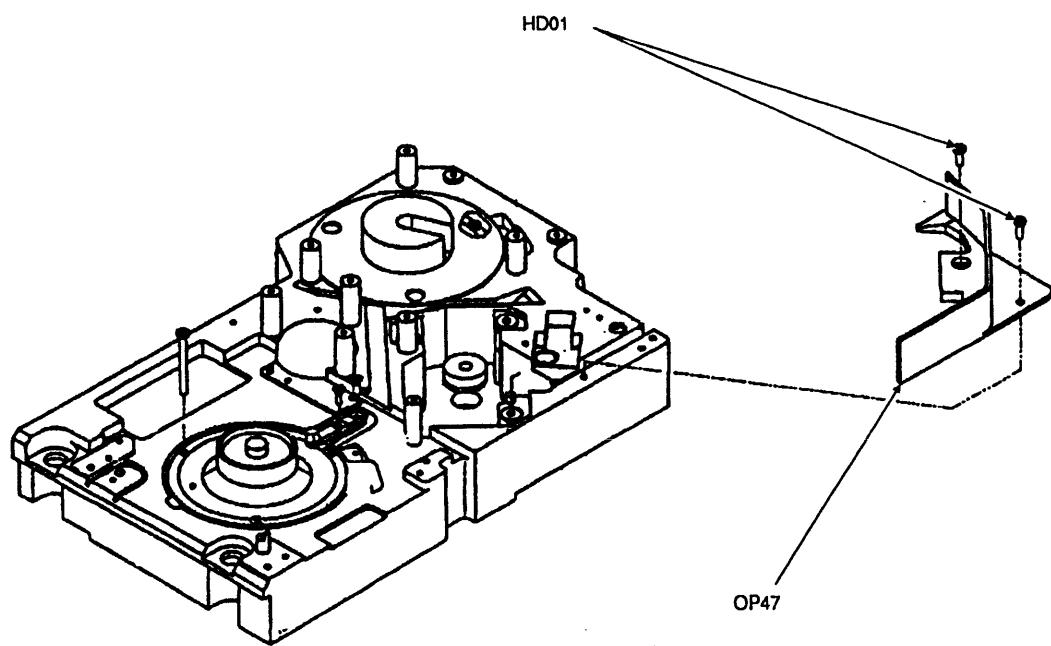


Figure 45.  
Plate Tape Path

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP47	287533XX	PLATE TAPE PATH	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 6-32X3/8, ZINC	2

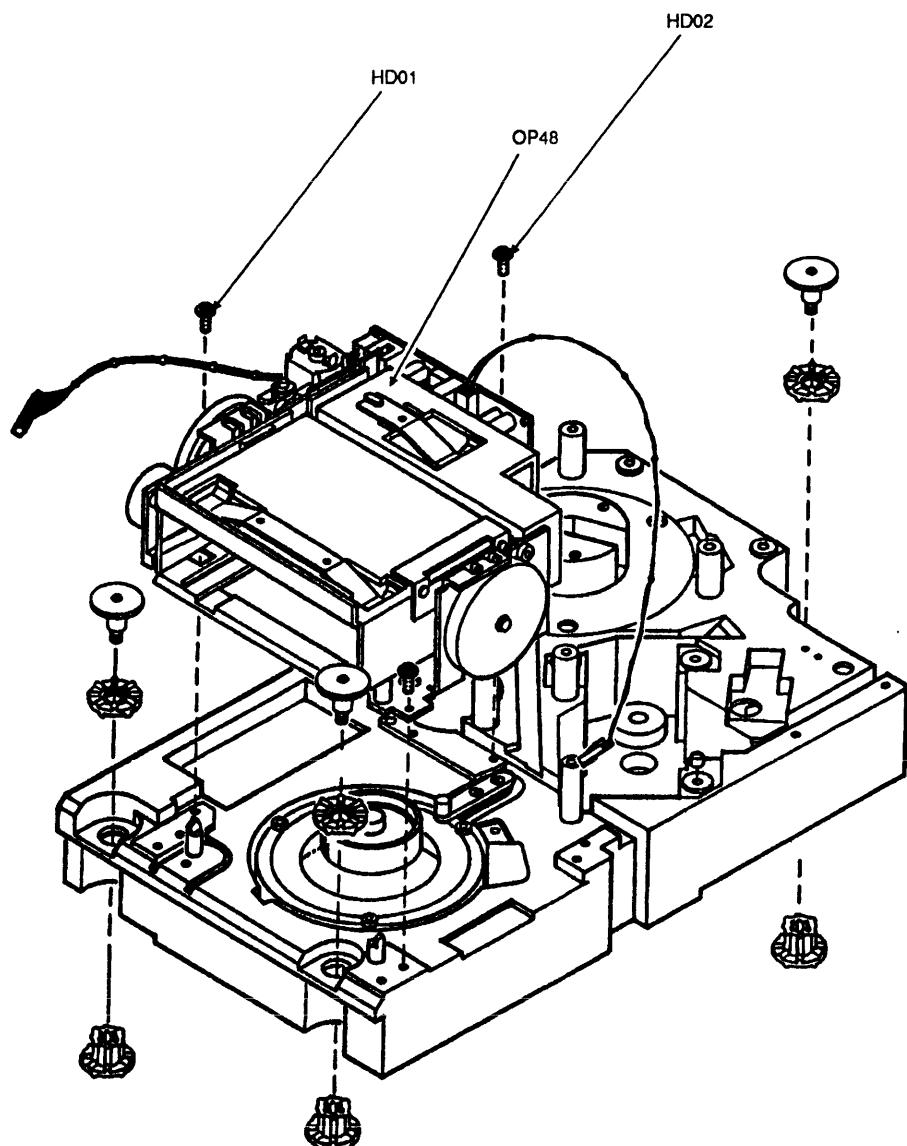


Figure 46.  
Carrier Assembly

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP48	288561XX	CARRIER, ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 6-32X7/8, Z	2
HD02	FSTNR, EXP,K SCR-LOC, N	1

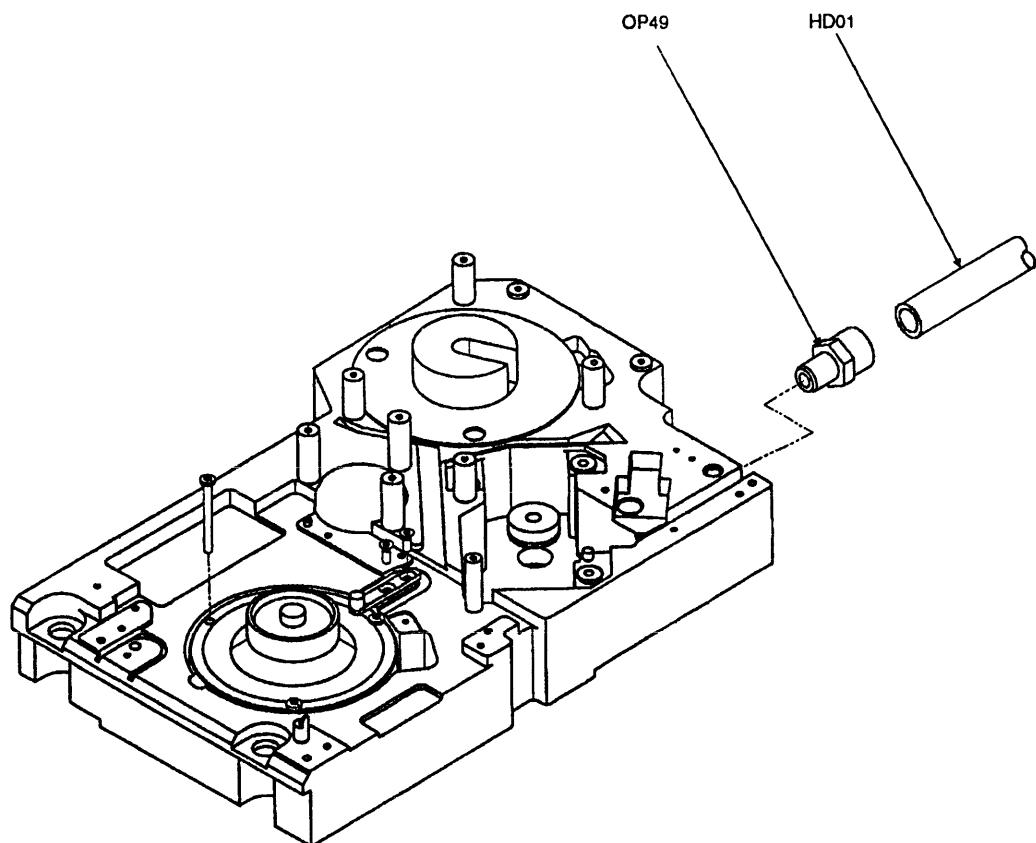


Figure 47.  
Pneumatics Fitting

**4280 Assembly**

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**Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP49	24019175	FITTING, QK, 3/8 OD X 1/4 NPT	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	TUBING, 1/4 X 3/8 OD	1

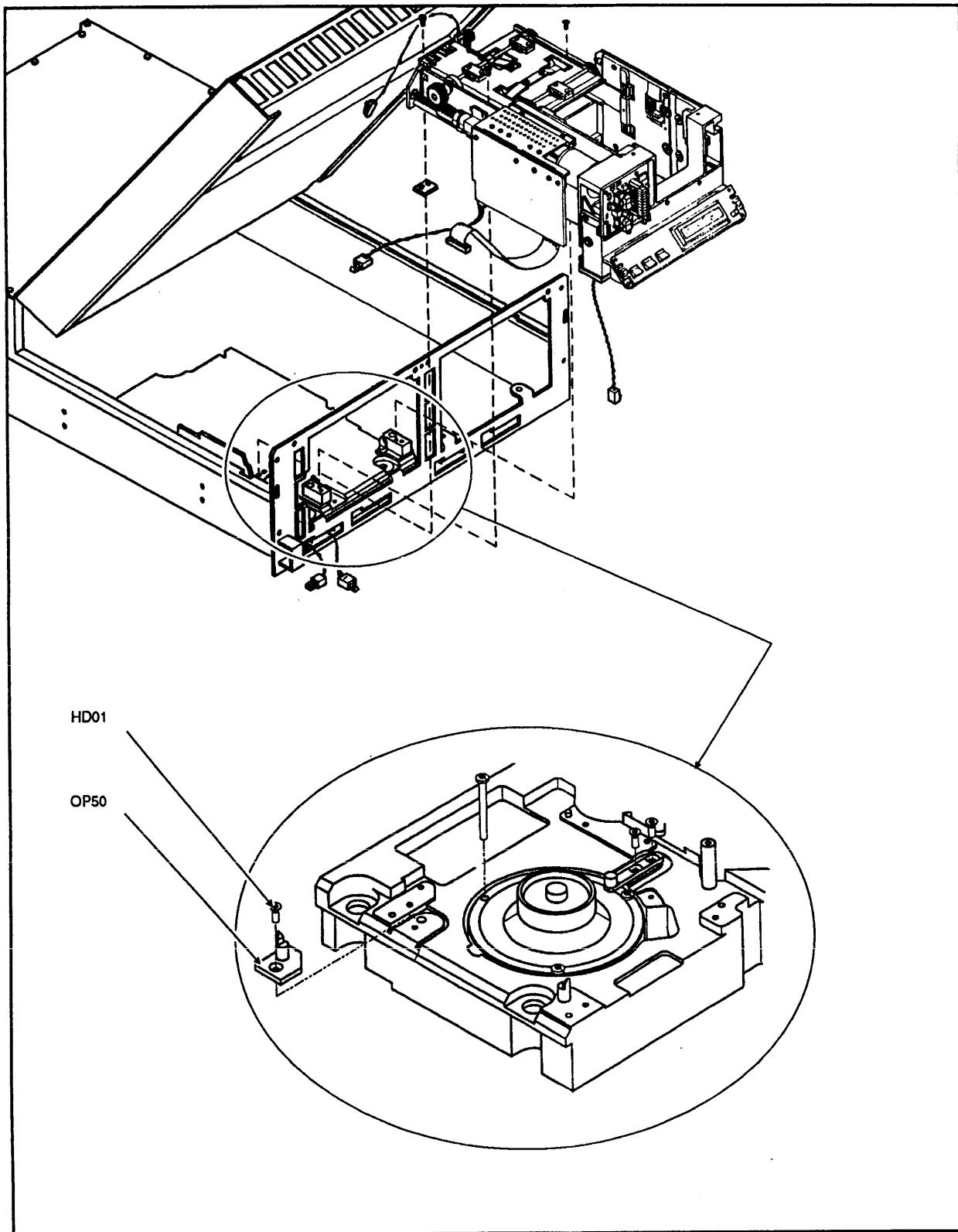


Figure 48.  
ACL Locating Pin

**4280 Assembly**

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**Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP50	277919XX	AL LOCATING PIN ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, FHS, 6-32X3/8, BO	1

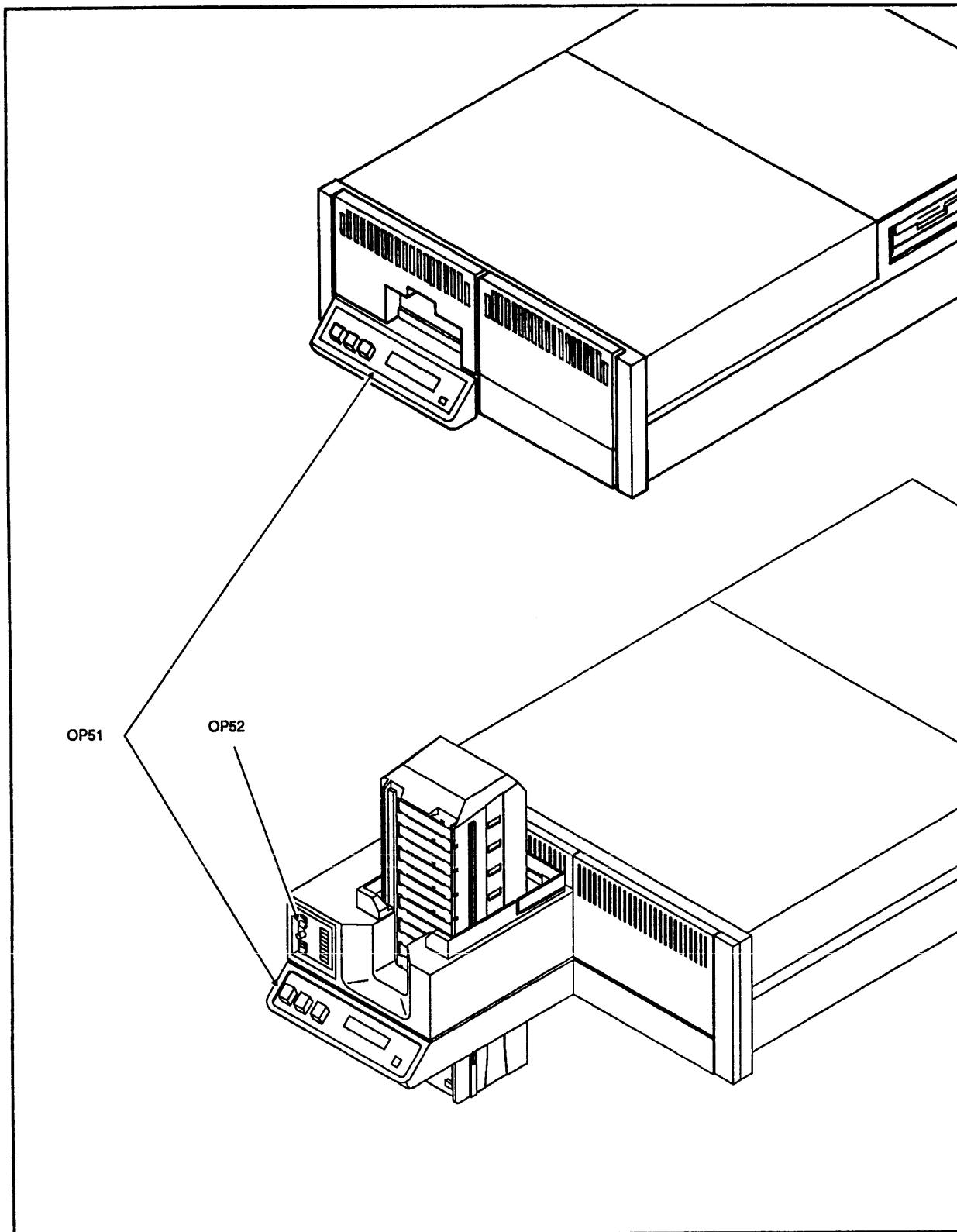


Figure 49.  
Overlay Display

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP51	287578XX	OVERLAY DISPLAY	1
OP52	276961XX	OVERLAY, AUTOLOADER	1

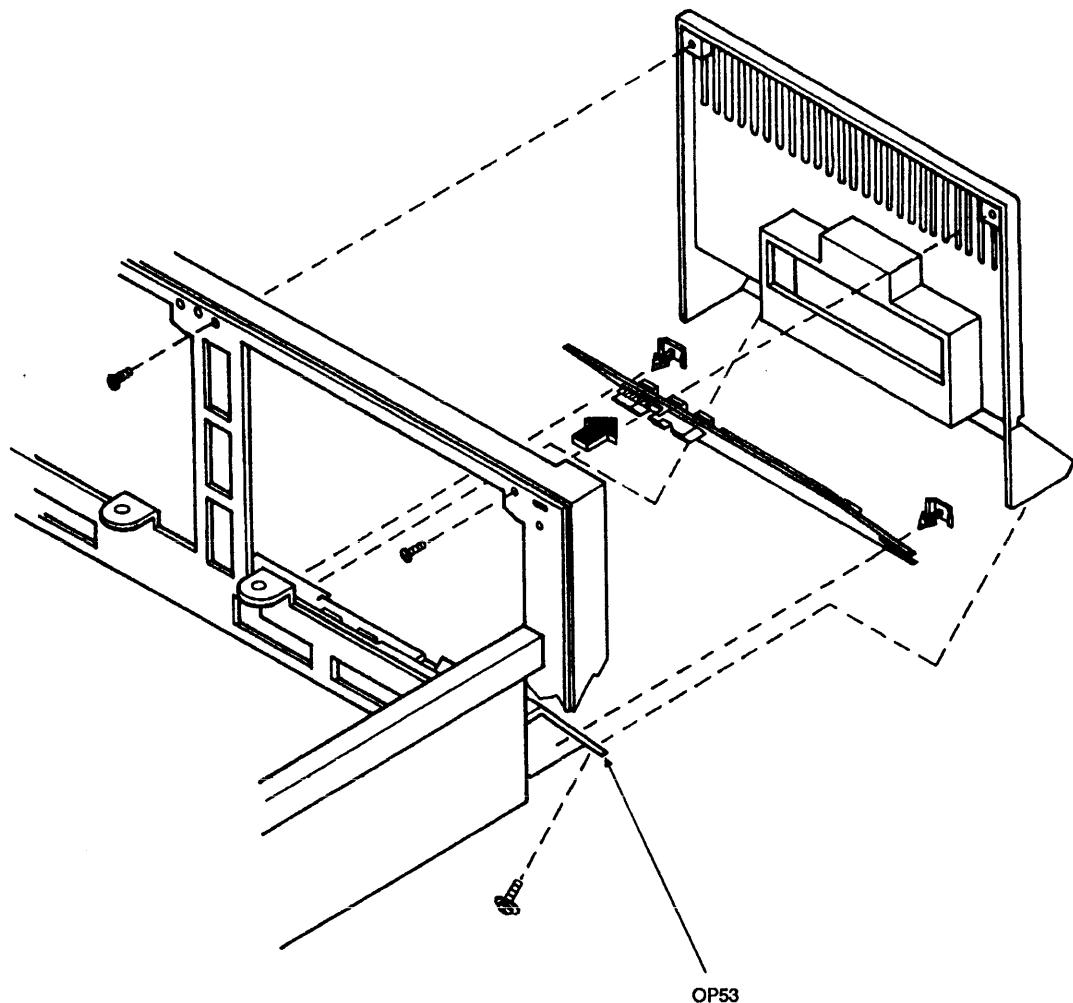


Figure 50.  
Display Bracket

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP53 .....	288547XX .....	DISPLAY BRACKET .....	1 .....

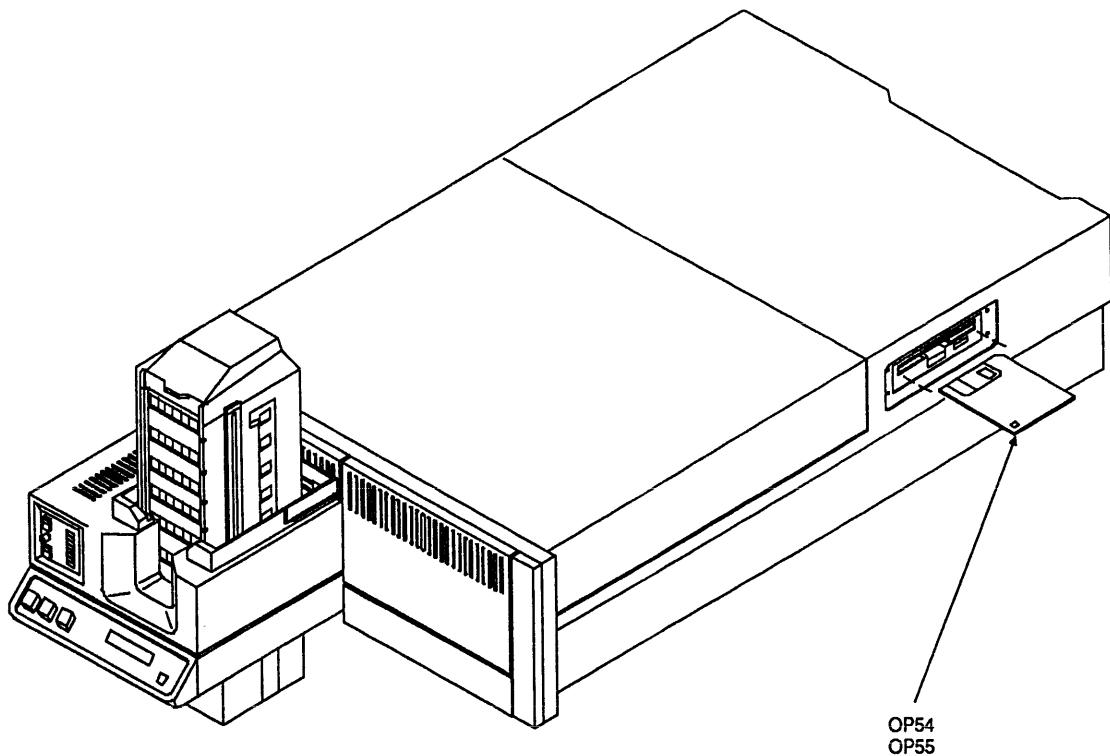


Figure 51.  
Floppy Disk

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP54	287300XX	FLOPPY, SCSI	1
OR			
OP55	287306XX	FLOPPY, STK	1

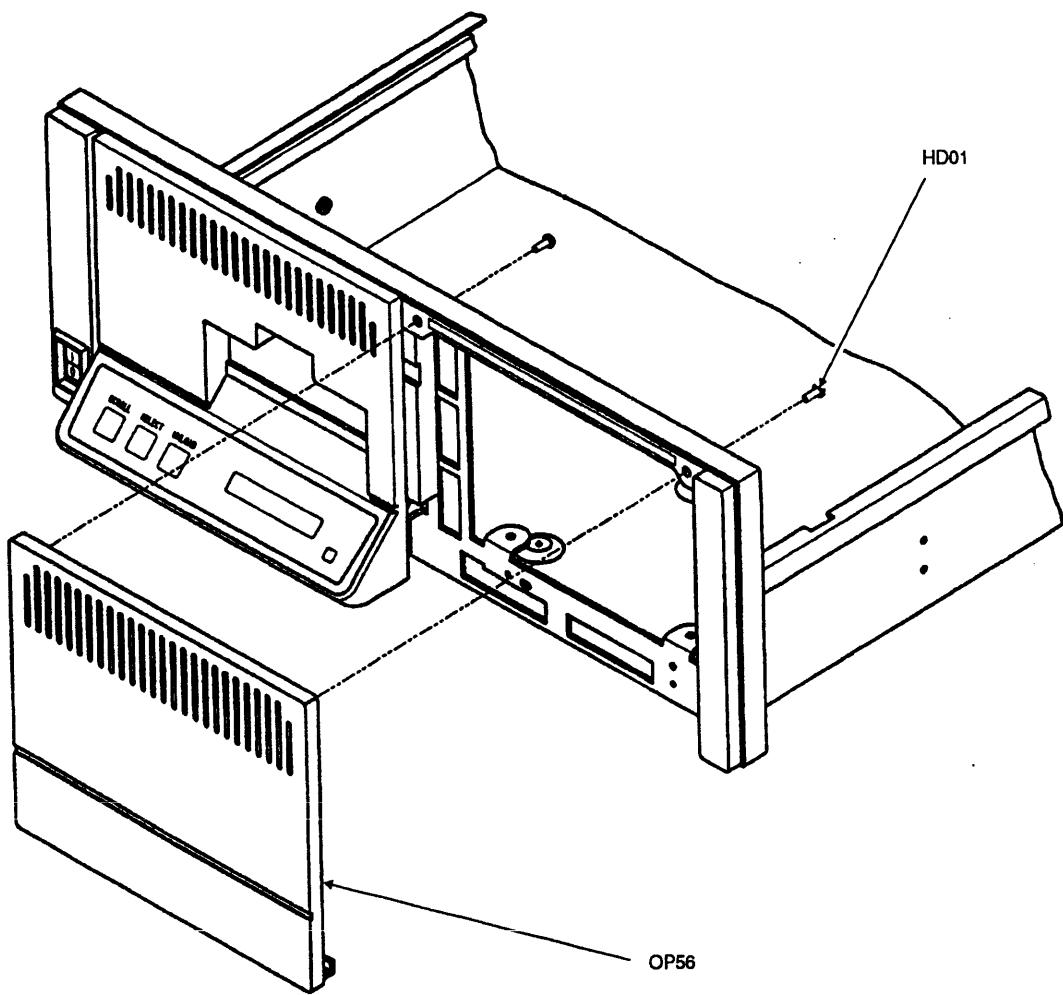


Figure 52.  
Blank Front Panel

**4280 Assembly**

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**Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP56	288596XX	PANEL, FRT, BLANK	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, MACH, TXPH, 6-32X7/8, Z	2

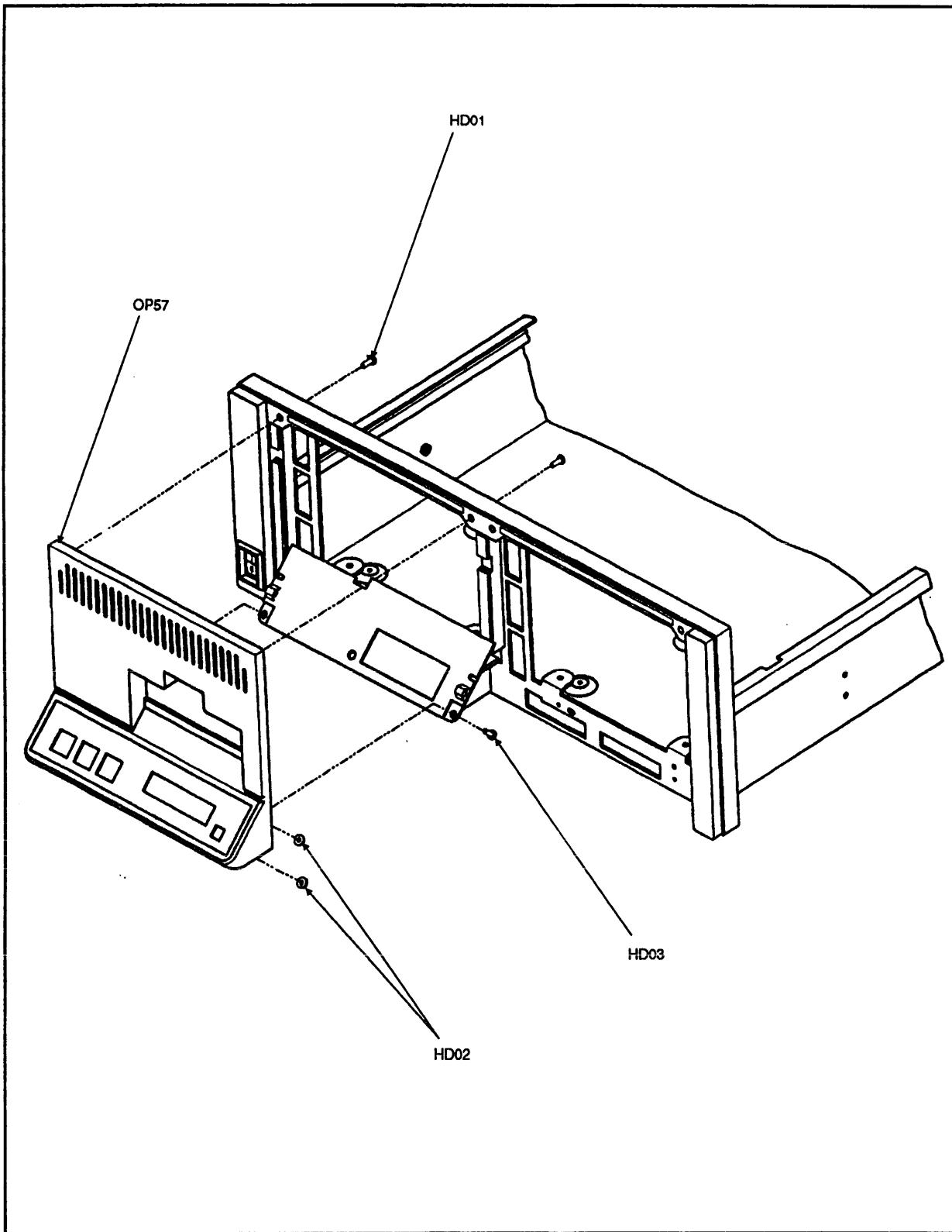


Figure 53.  
Manual Loader Front Panel

**4280 Assembly**Orderable Parts (non-FRU), cont.

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP57	288595XX	PANEL, FRT, ML, PRL	1

Attaching Hardware

<u>Fig Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
HD01		SCREW, MACH, TXPH, 6-32X7/8, Z	2
HD02	24019653	RING, O, .114X.070	3
HD03		SCREW, PHT, SEMS, 6-32X3/8, Z	2

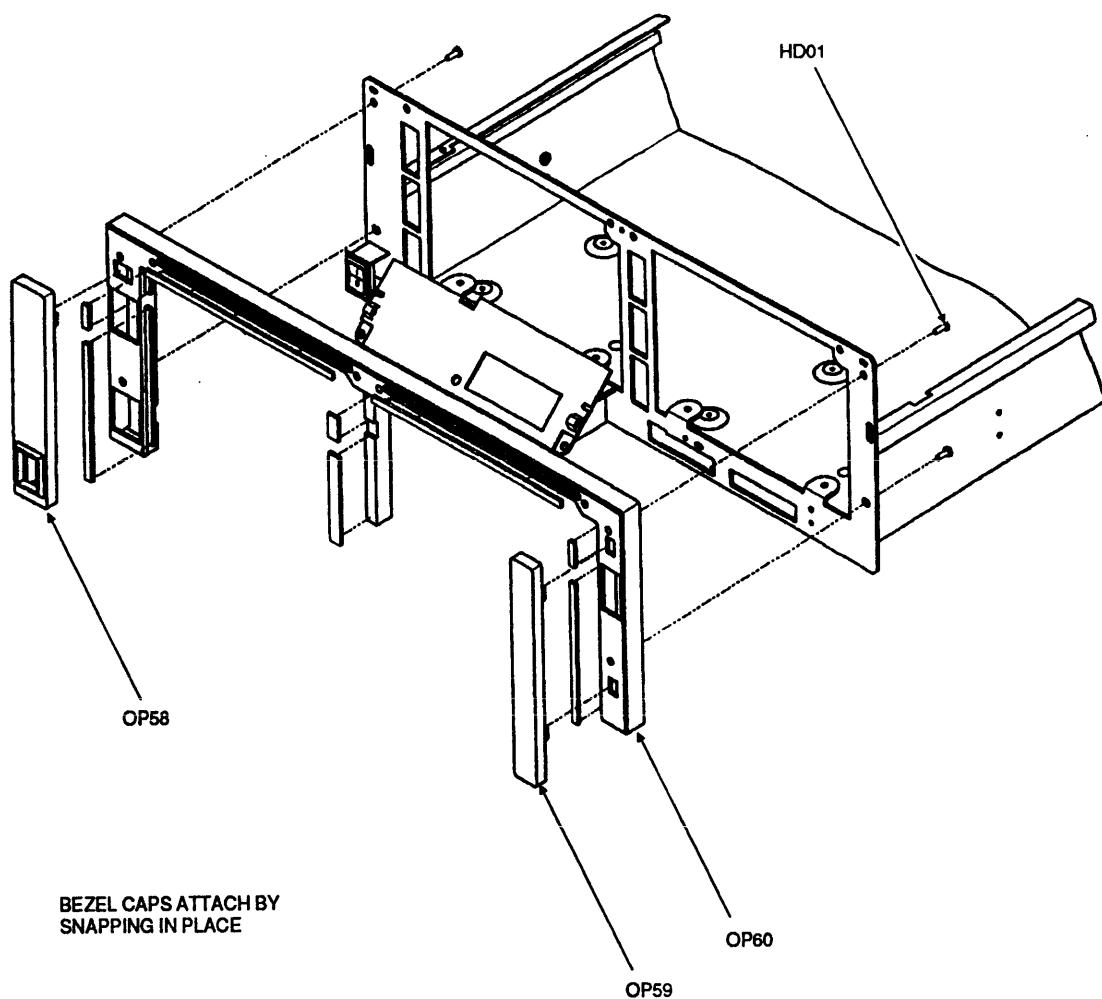


Figure 54.  
Bezel Caps and Front Panel

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP58	28859901	BEZEL CAP, LEFT	1
OP59	28859802	BEZEL CAP, RIGHT	1
OP60	288597XX	FRONT PANEL, PRL	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 6-32X3/8, Z	4

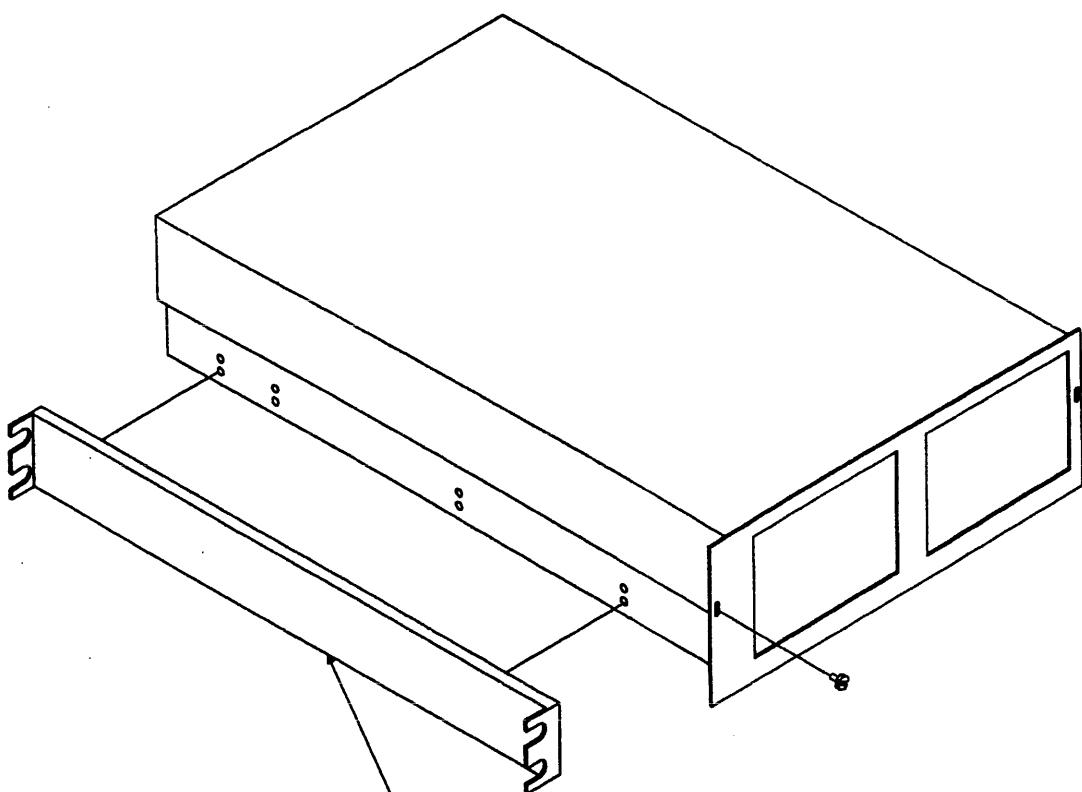
OP61  
OP62MOUNTING HARDWARE  
COMES WITH SLIDE RAIL

Figure 55.  
Slide Rails: Jonathan and Grant

**4280 Assembly**

---

**Orderable Parts (non-FRU), cont.**

<b>Fig. Number</b>	<b>Part Number</b>	<b>Description</b>	<b>Qty</b>
OP61	24019956	SLIDE RAIL, JONATHAN	1
OP62	24019955	SLIDE RAIL, GRANT	1

Each slide rail ordered comes with two individual rails (one for each side of the unit) and all attaching hardware.

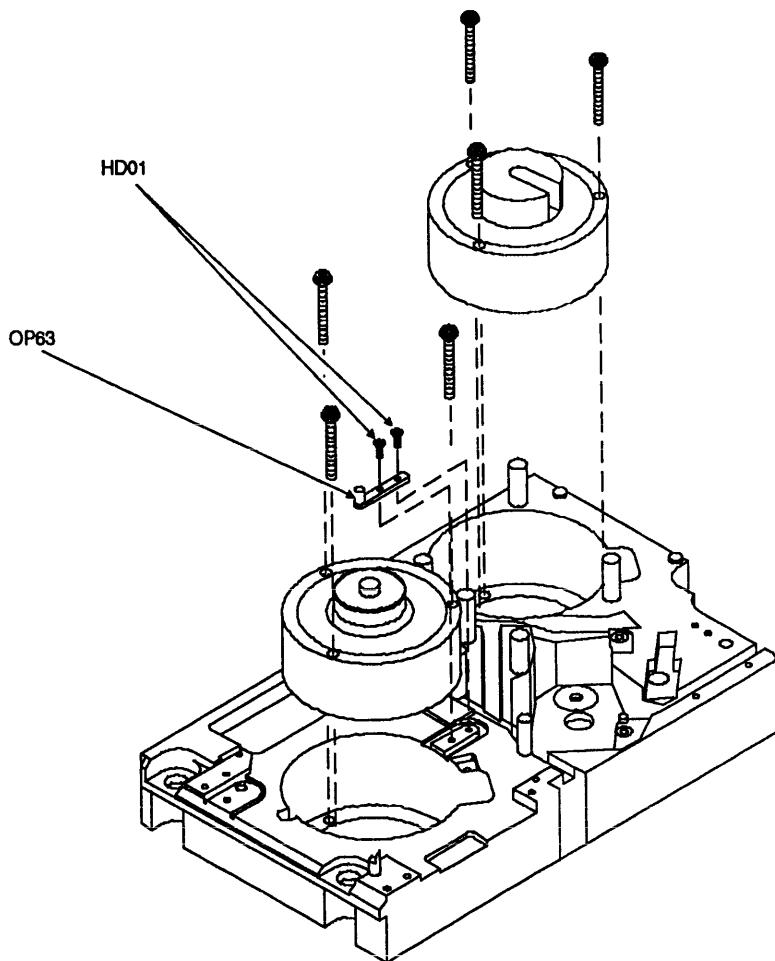


Figure 56.  
Cartridge Pin

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP63	287566XX	PIN, CARTRIDGE	2

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, FLATHEAD, 6-32X3/8, BO	2

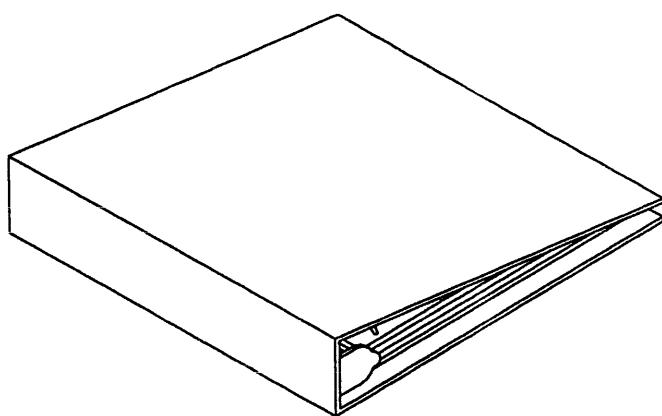


Figure 57.  
Documentation Set

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
.....	287406XX	4280 INSTALLATION MANUAL	1
.....	287408XX	4280 ILLUSTRATED PARTS CATALOG	1
.....	287405XX	4280 MAINTENANCE MANUAL	1
.....	287407XX	4280 OPERATOR'S GUIDE MANUAL	1

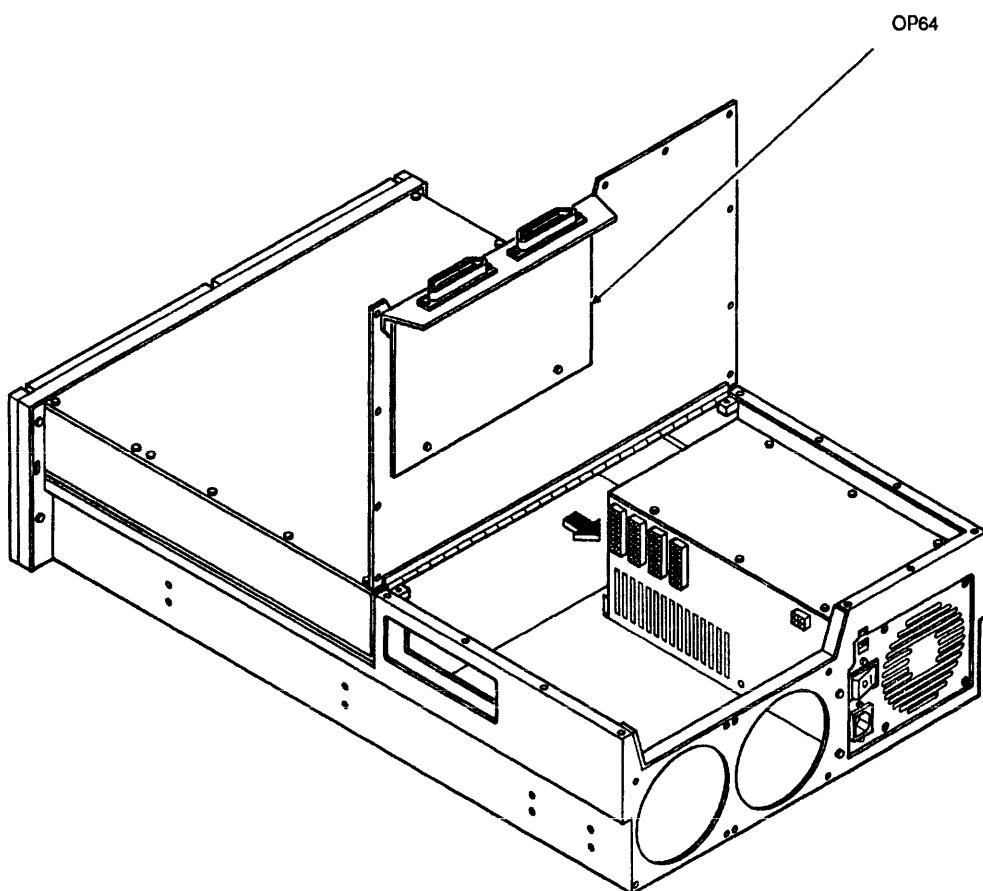


Figure 58.  
SCSI or STK I/F Assembly

**4280 Assembly**

---

**Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP64	286910XX	SCSI I/F, ASSY	1
OR	286909XX	STK STD I/F, ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 6-32X1/4, Z	4
HD02	SCREW, PHT, SEMS, 6-32X3/8, Z	2

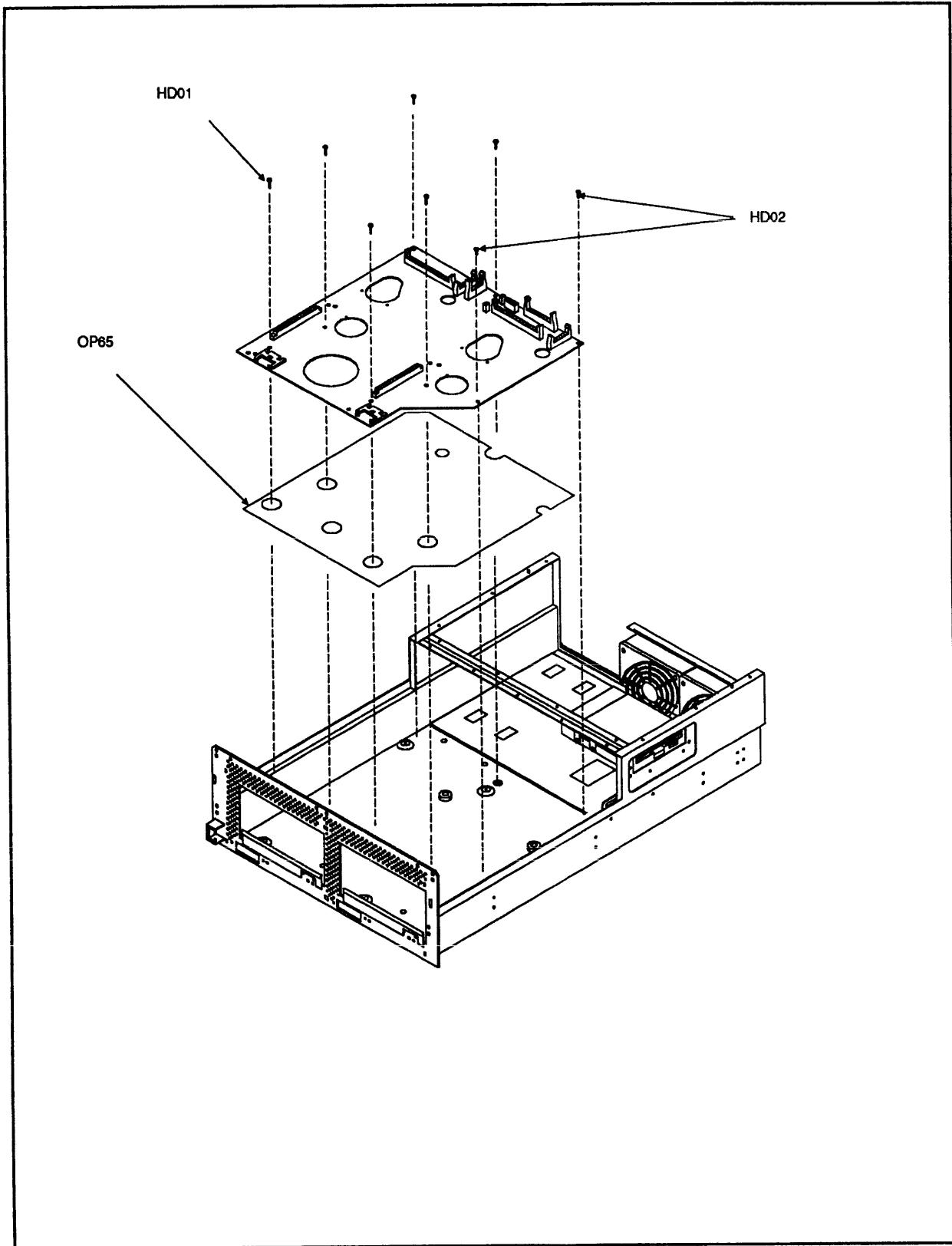


Figure 59.  
BT/Chassis Insulator

**4280 Assembly****Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP65	287629XX	INSULATOR, BT/CHASSIS	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 6-32X3/8, ZINC	6
HD02	SCREW, PHT, SEMS, 6-32X1/4, ZINC	2

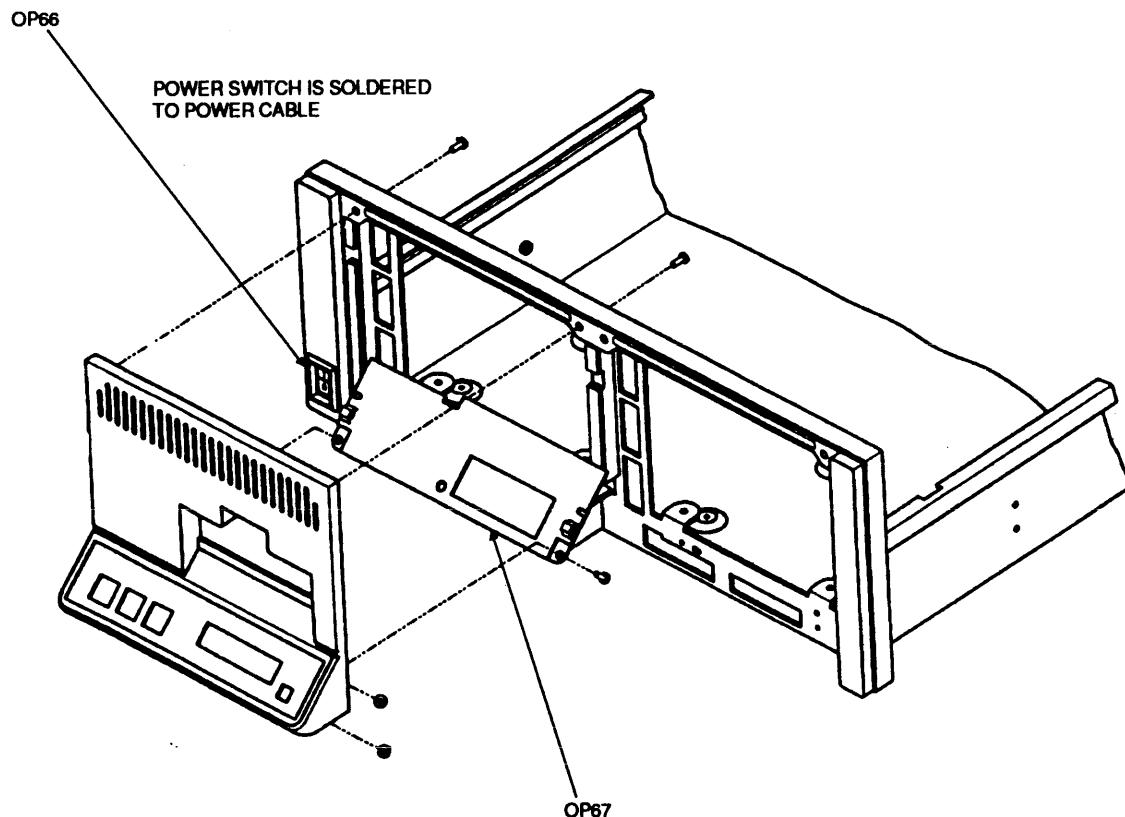


Figure 60.  
Power Switch and Display Assembly

**4280 Assembly**

---

**Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP66	287659XX	BEZEL, FRT, PWR SWITCH	1
OP67	288559XX	DISPLAY, ASSY	1

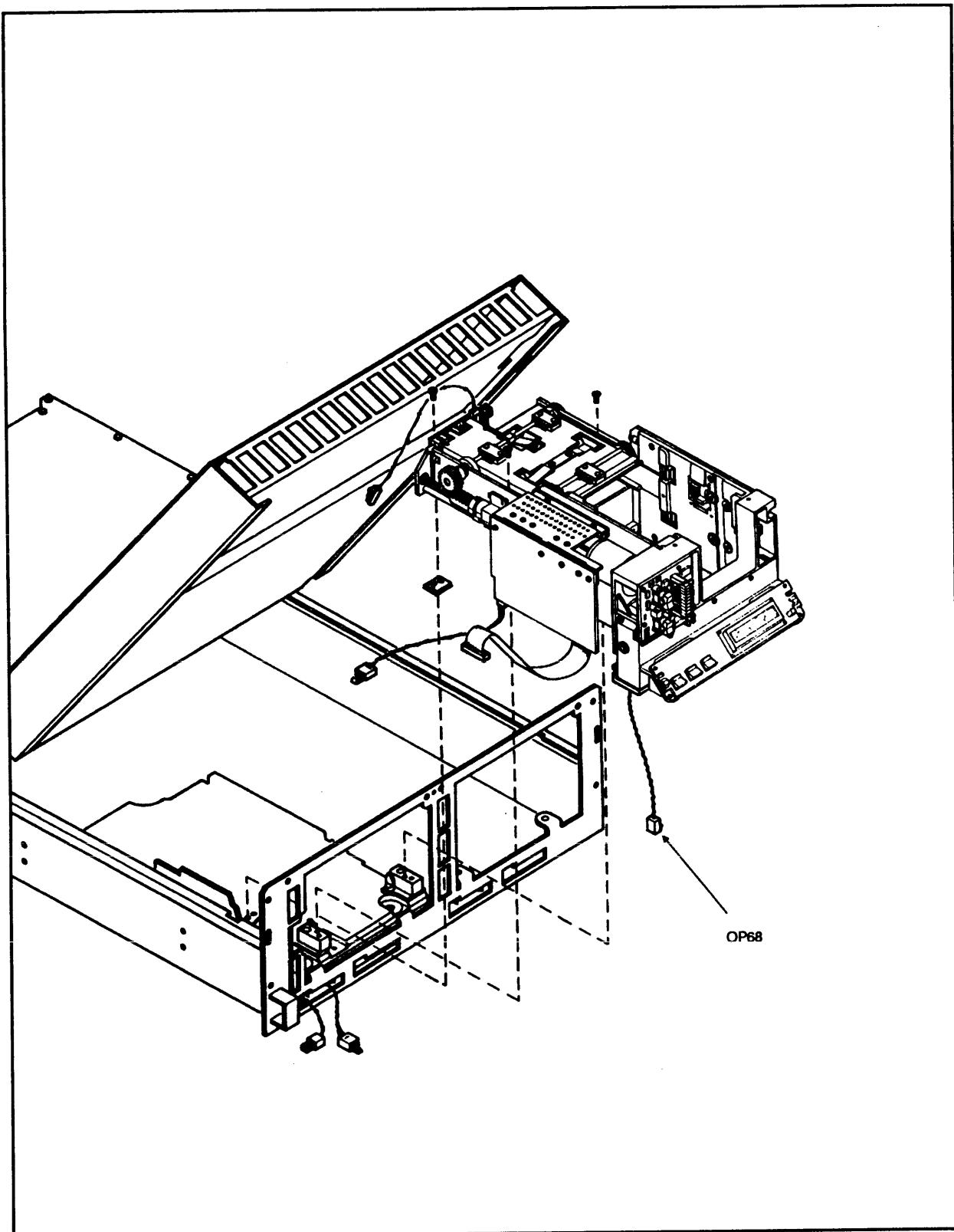


Figure 61.  
Display Extension Cable

28740801

4280 Cartridge Tape Subsystem  
ILLUSTRATED PARTS CATALOG

**StorageTek**

**4280 Assembly**

---

**Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP68	289563XX	CBL, DISPLAY EXTENSION	1

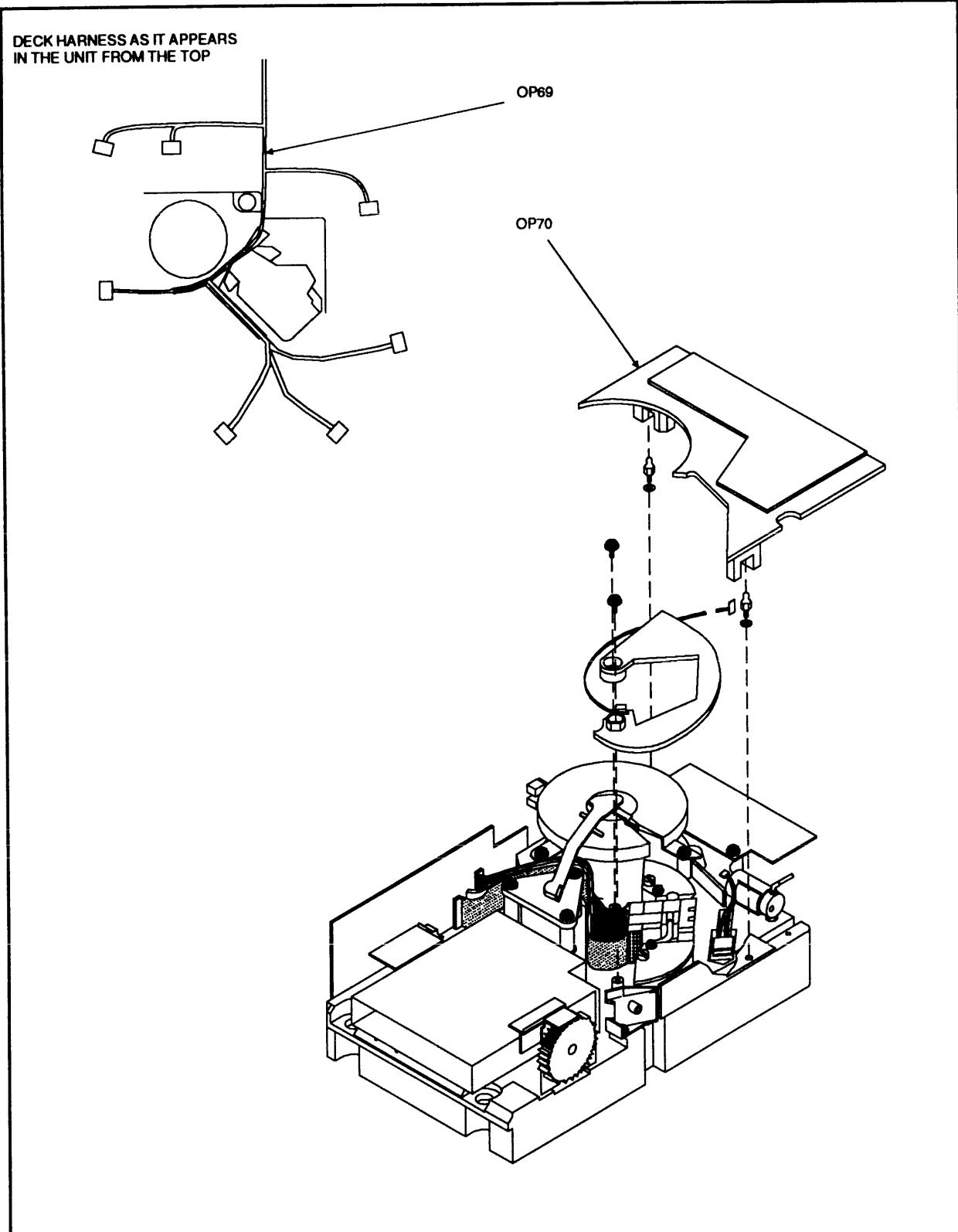


Figure 62.  
Deck Harness and Deck Cover

**4280 Assembly**

---

**Orderable Parts (non-FRU), cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
OP69	289569XX	CBL, SM/ST/DECK (DECK HARNESS)	1
OP70	288611XX	DECK COVER	1

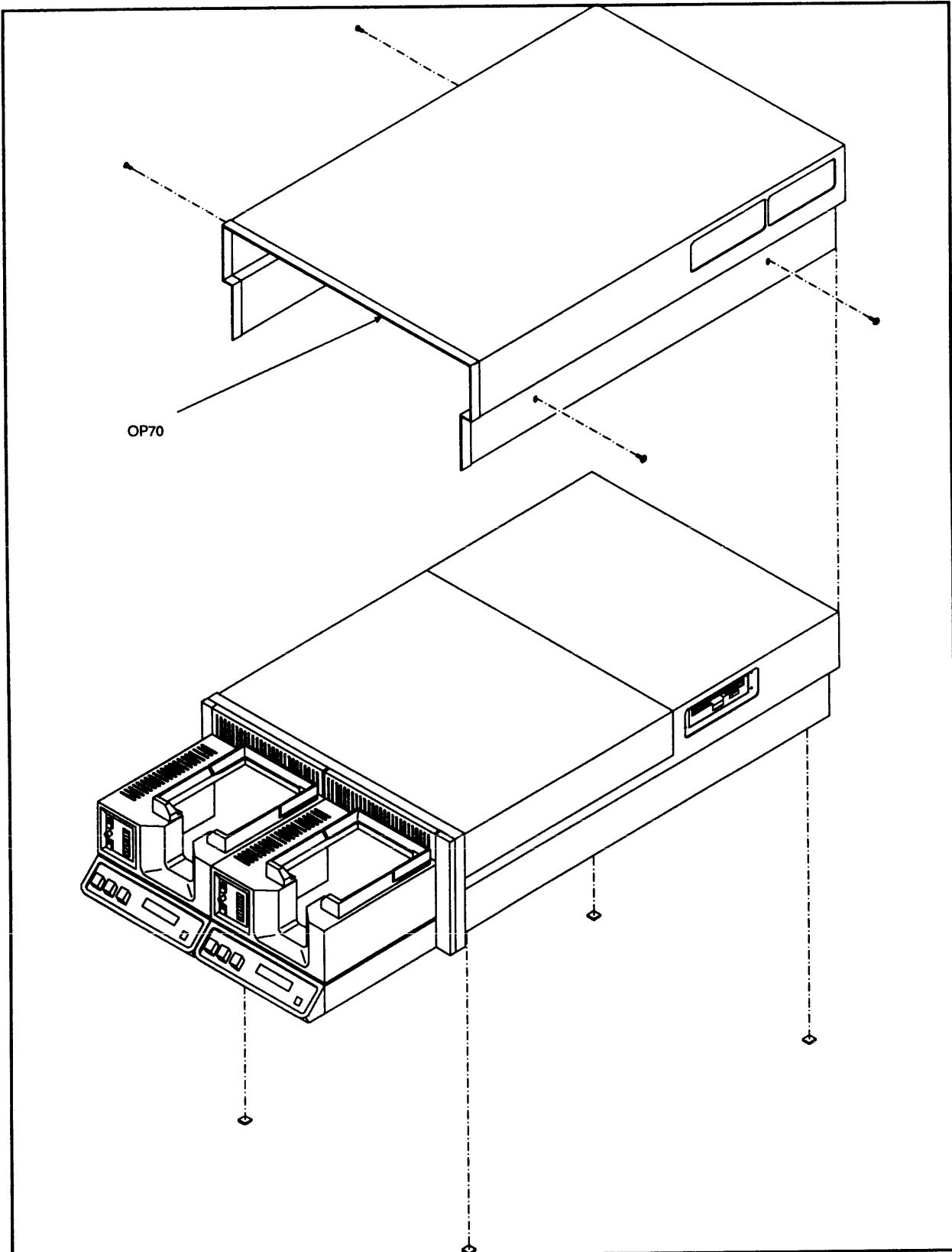


Figure 63. 4280 Orderable Parts  
Table Top Cover

28740801

4280 Cartridge Tape Subsystem  
ILLUSTRATED PARTS CATALOG

**StorageTek**

## **4280 Assembly**

---

### **Orderable Parts (non-FRU), cont.**

<b><u>Fig. Number</u></b>	<b><u>Part Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
OP70	288656XX	Cover, Table Top	1

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## **Automatic Cartridge Loader (ACL)**

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The Automatic Cartridge Loader (ACL) assembly consists of the ACL and all associated hardware and electronic components.

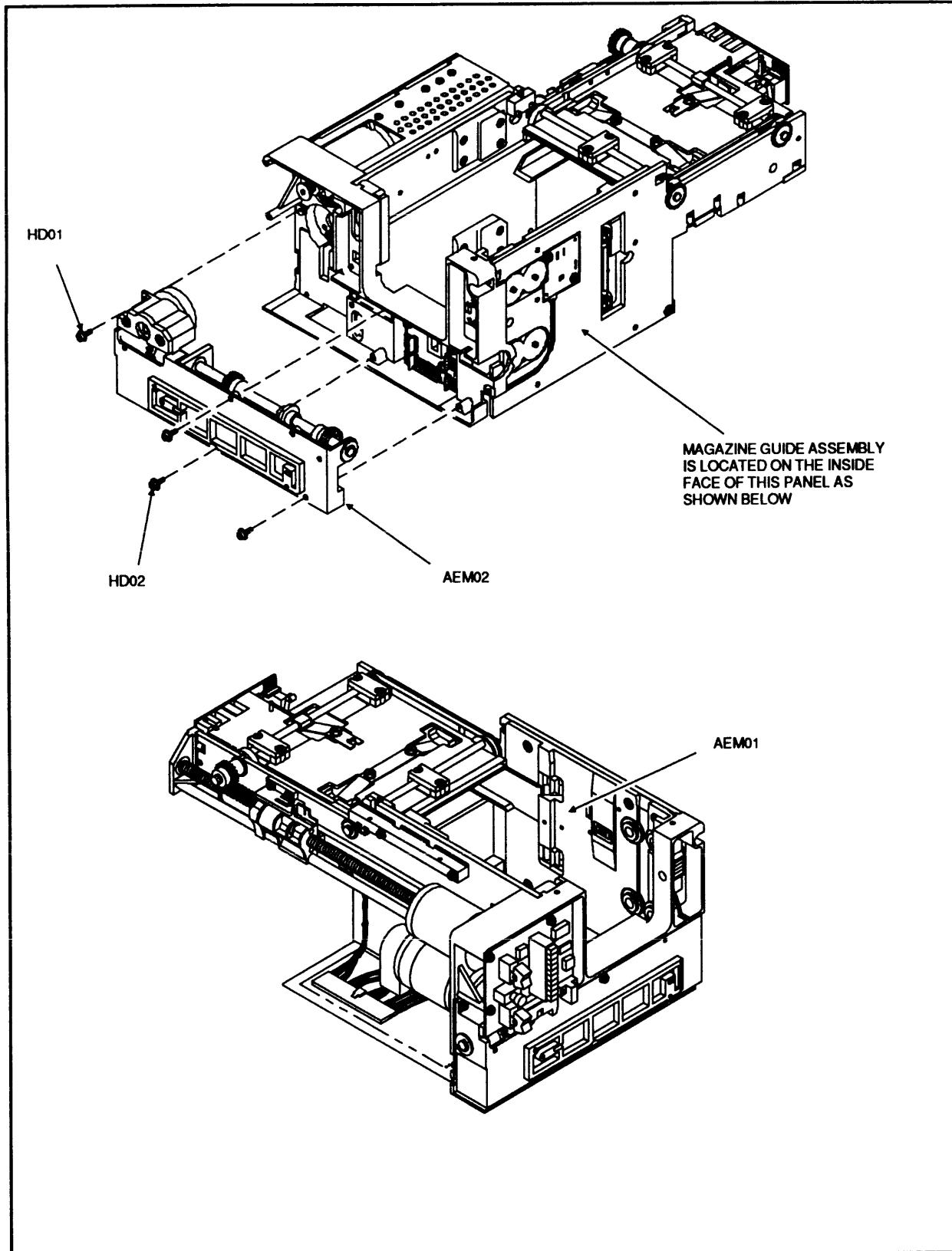


Figure 64. ACL Group  
Vertical Transmission and Magazine Guide Assemblies

**ACL Assembly****Electro / Mechanical**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
AEM01	277910XX	MAGAZINE GUIDE ASSY	1
AEM02	277904XX	VERT. TRANSMISSION ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, 6-32X1/4, Z	1
HD02	SCREW, PHT, 6-32X1/2, Z	3

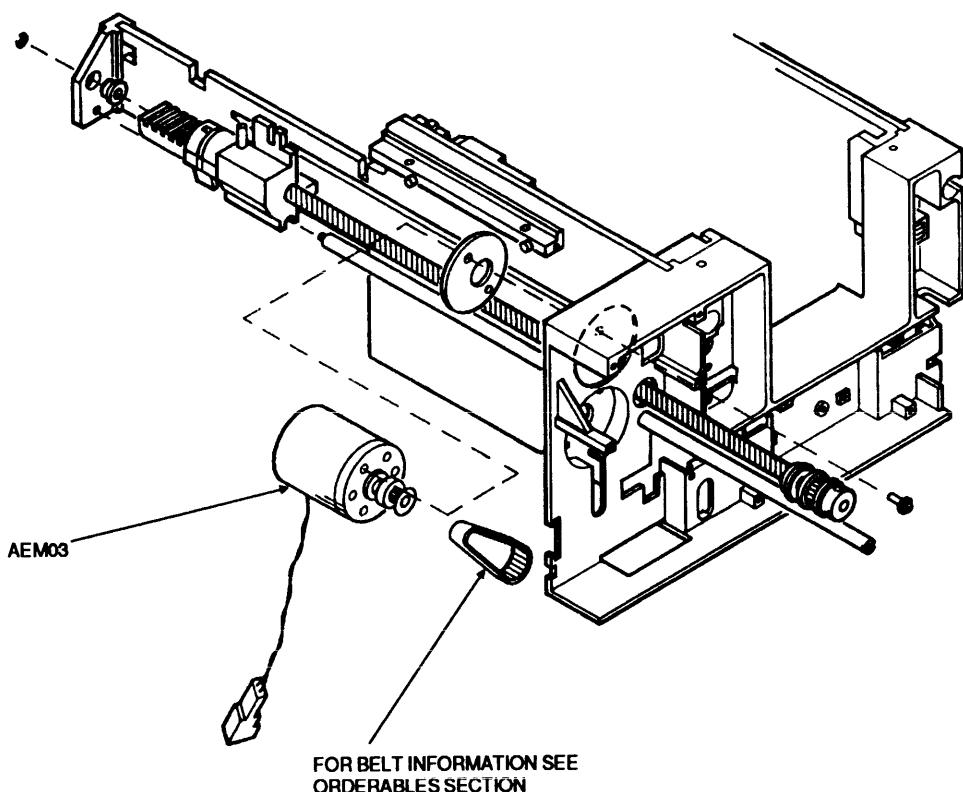


Figure 65. ACL Group  
Lead Screw Drive Motor

**ACL Assembly****Electro / Mechanical, cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
AEM03	277905XX	LEAD SCREW DRIVE MTR ASSY	1

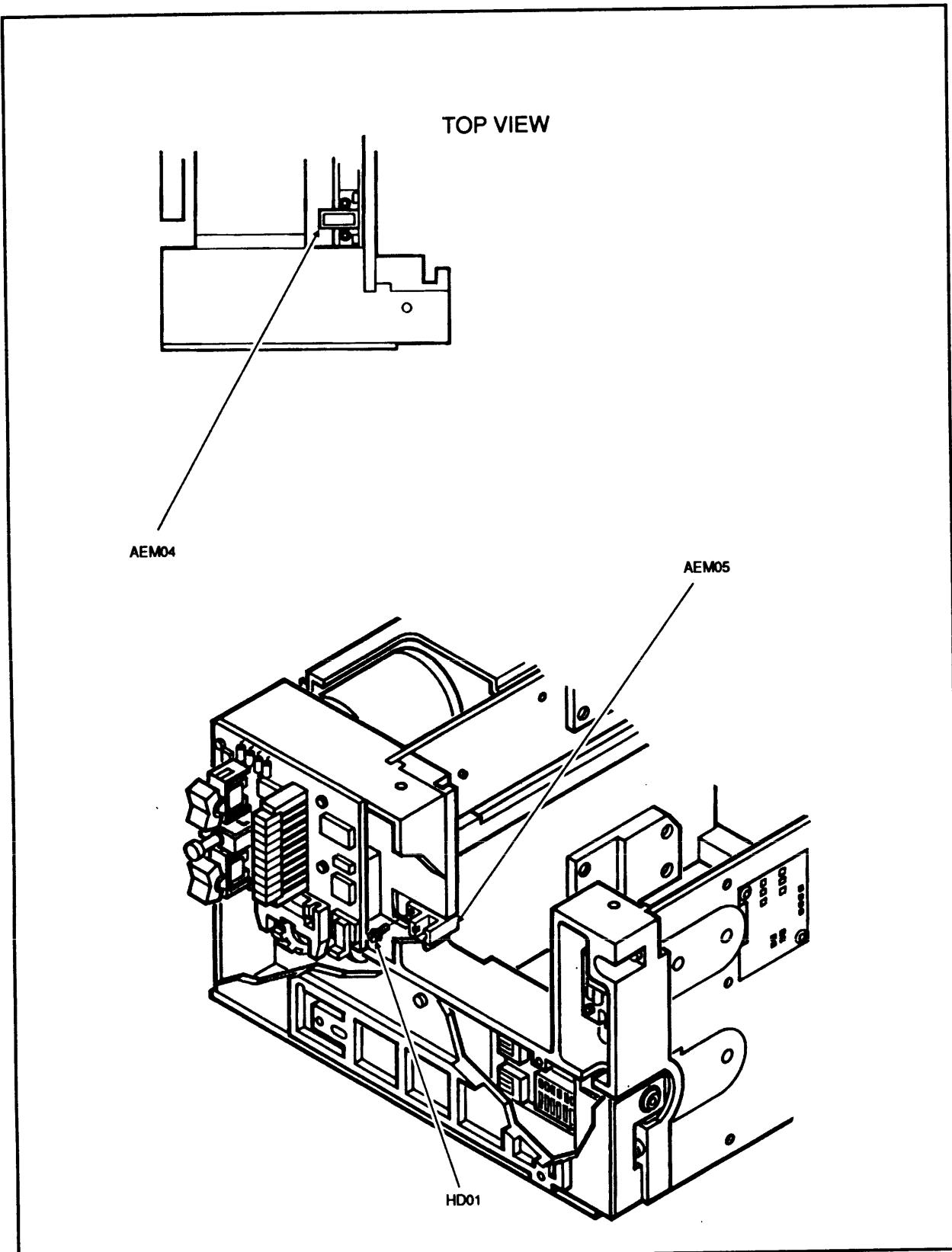


Figure 66. ACL Group  
Horizontal Mag. Sensor and Mag. Index Sensor

**ACL Assembly**

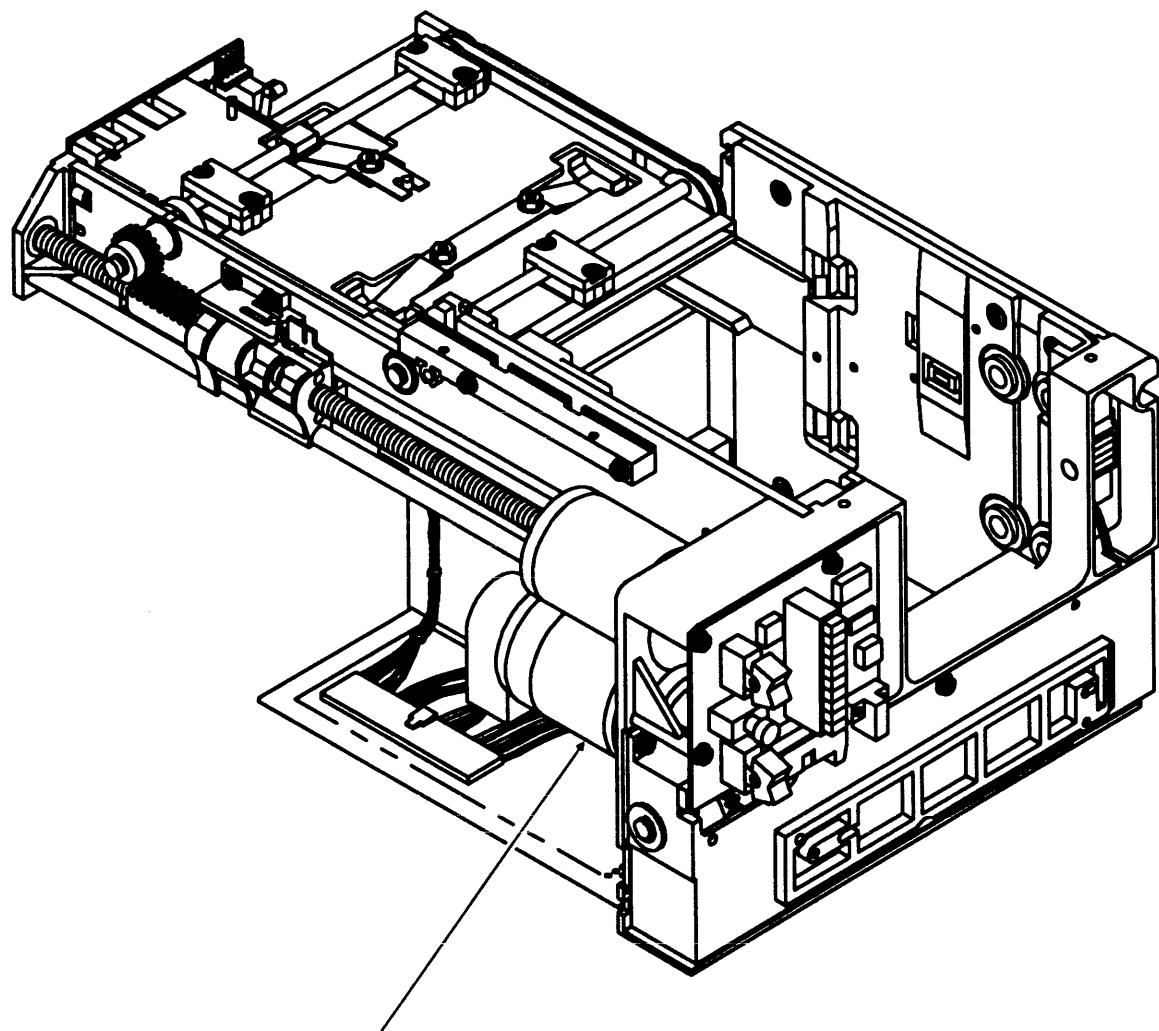
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**Electro / Mechanical, cont.**

<b><u>Fig. Number</u></b>	<b><u>Part Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
AEM04	277916XX	HORIZONTAL MAG SENSOR ASSY.	1
AEM05	277917XX	MAG INDEX SENSOR ASSY.	1

**Attaching Hardware**

<b><u>Fig Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
HD01	SCREW, PHT, 4-40X3/8, Z	1



AEM06  
VERTICAL DRIVE MOTOR ATTACHES WITH  
TWO SCREWS (HD01 ON NEXT PAGE)

Figure 67. ACL Group  
Vertical Drive Motor

**ACL Assembly****Electro / Mechanical, cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
AEM06	277906XX	VERTICAL DRIVE MOTOR ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 6-32X3/8, Z	2

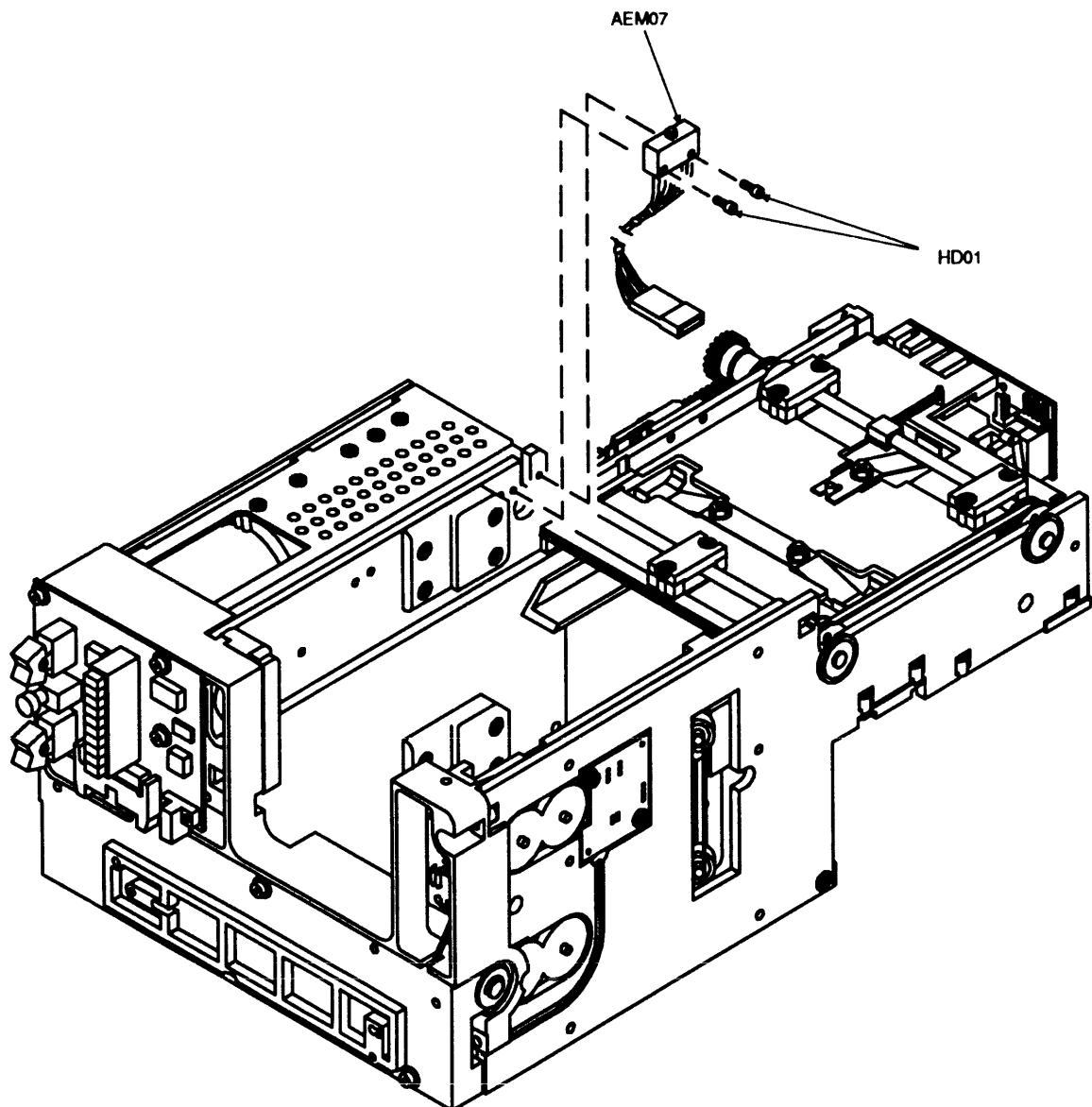


Figure 68. ACL Group  
Motor Shut Off Switch

**ACL Assembly**

---

**Electro / Mechanical, cont.**

<b><u>Fig. Number</u></b>	<b><u>Part Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
AEM07	278906XX	MOTOR SHUT OFF SWITCH (comes with cable)	1

**Attaching Hardware**

<b><u>Fig Number</u></b>	<b><u>Description</u></b>	<b><u>Qty</u></b>
HD01	SCREW, SKT HD CAP, 2-56X3/8	2

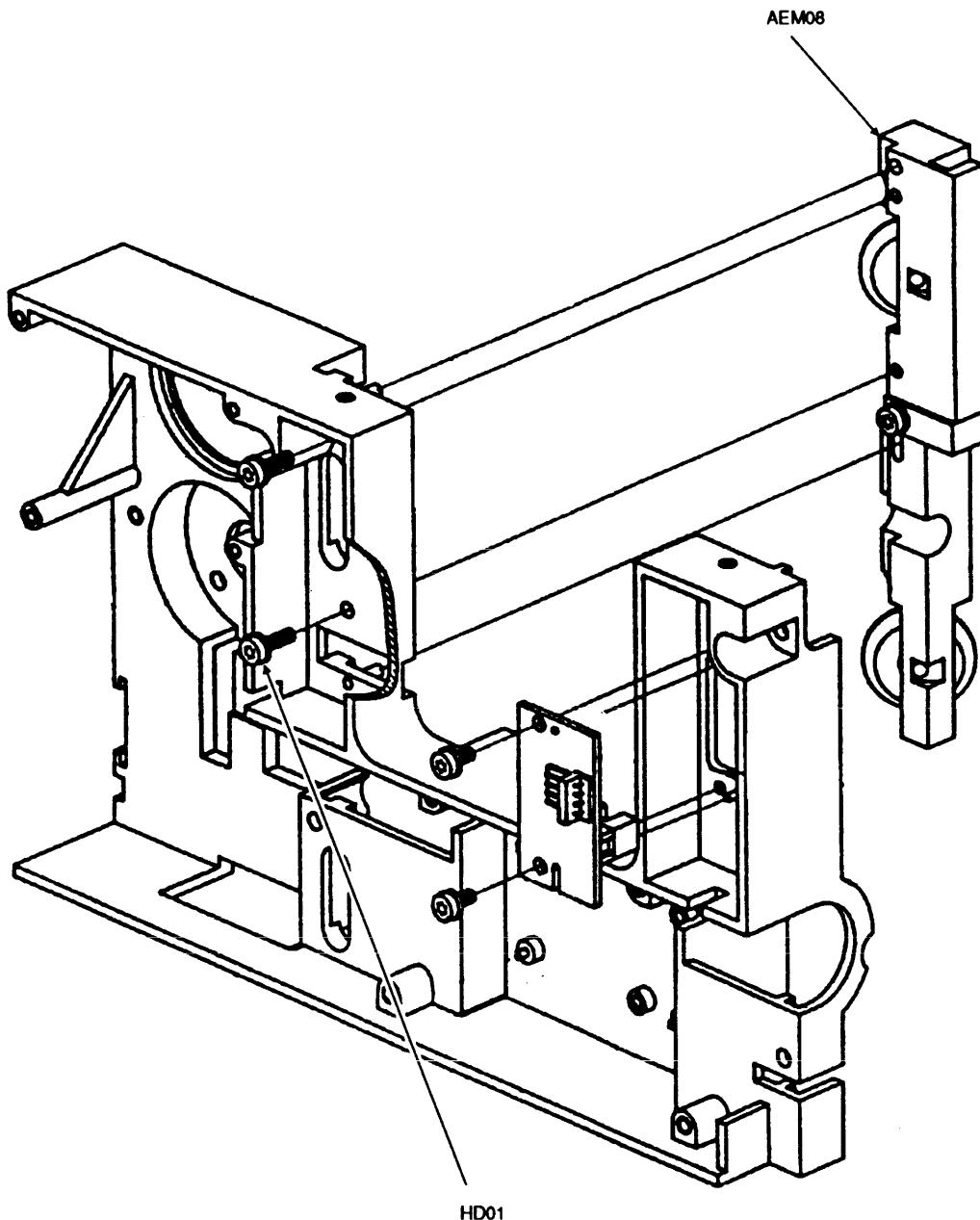


Figure 69. ACL Group  
Roller Guide Block Assembly

**ACL Assembly****Electro / Mechanical, cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
AEM08	277907XX	ROLLER GUIDE BLOCK ASSY	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 4-40X3/8, Z	2

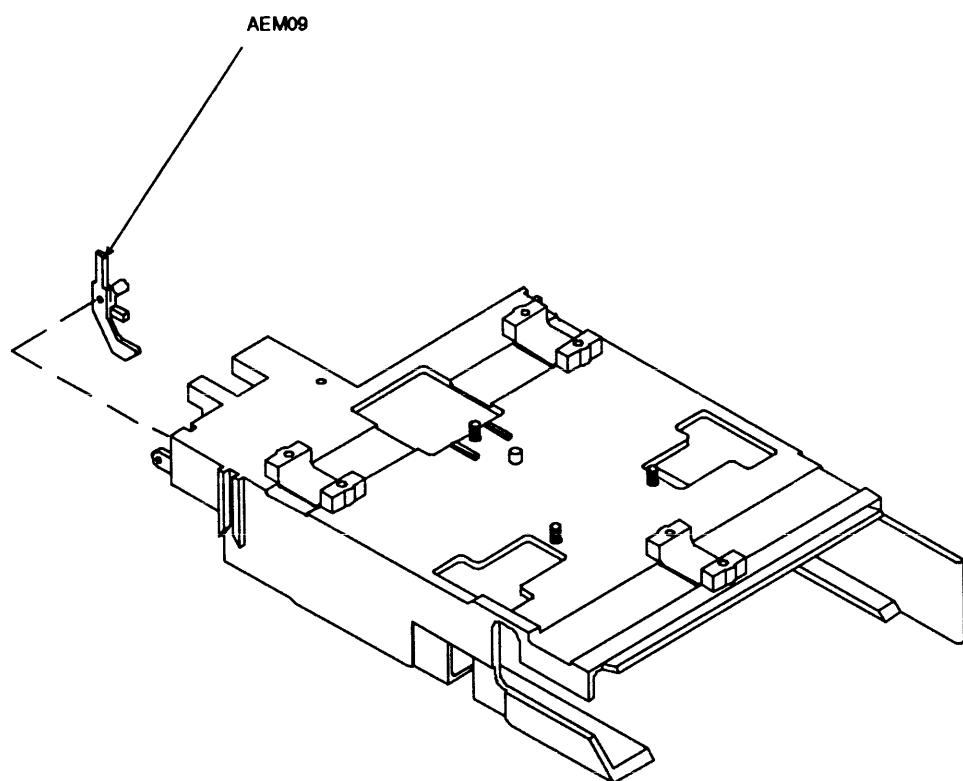


Figure 70. ACL Group  
Cleaning Cart Sensor/Flag

**ACL Assembly****Electro / Mechanical, cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
AEM09	276950XX	CLEANING CART SENSOR/FLAG	1

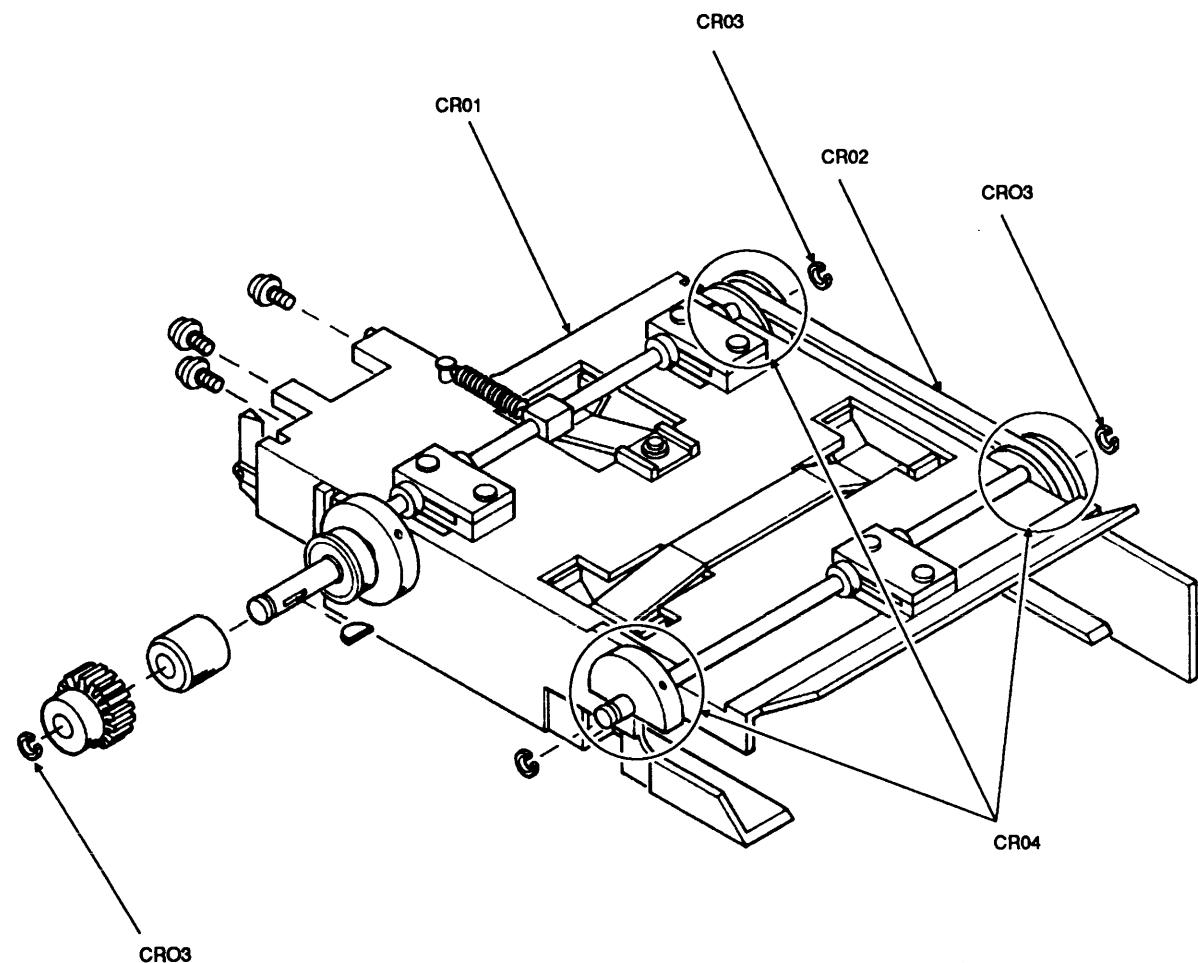


Figure 71. ACL Group  
Carrier FRU Kit

**ACL Assembly****Carrier FRU Kit**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
	12746	F/K CARRIER FRU KIT	1

Carrier FRU Kit contains the following:

CR01	CARRIER, ASSY	1
CR02	BELT, TIMING, .080P,48TX,187	1
CR03	RING, RET, EXT, .250	4
CR04	BEARING, BALL, 1/4IDX1/2OD	3

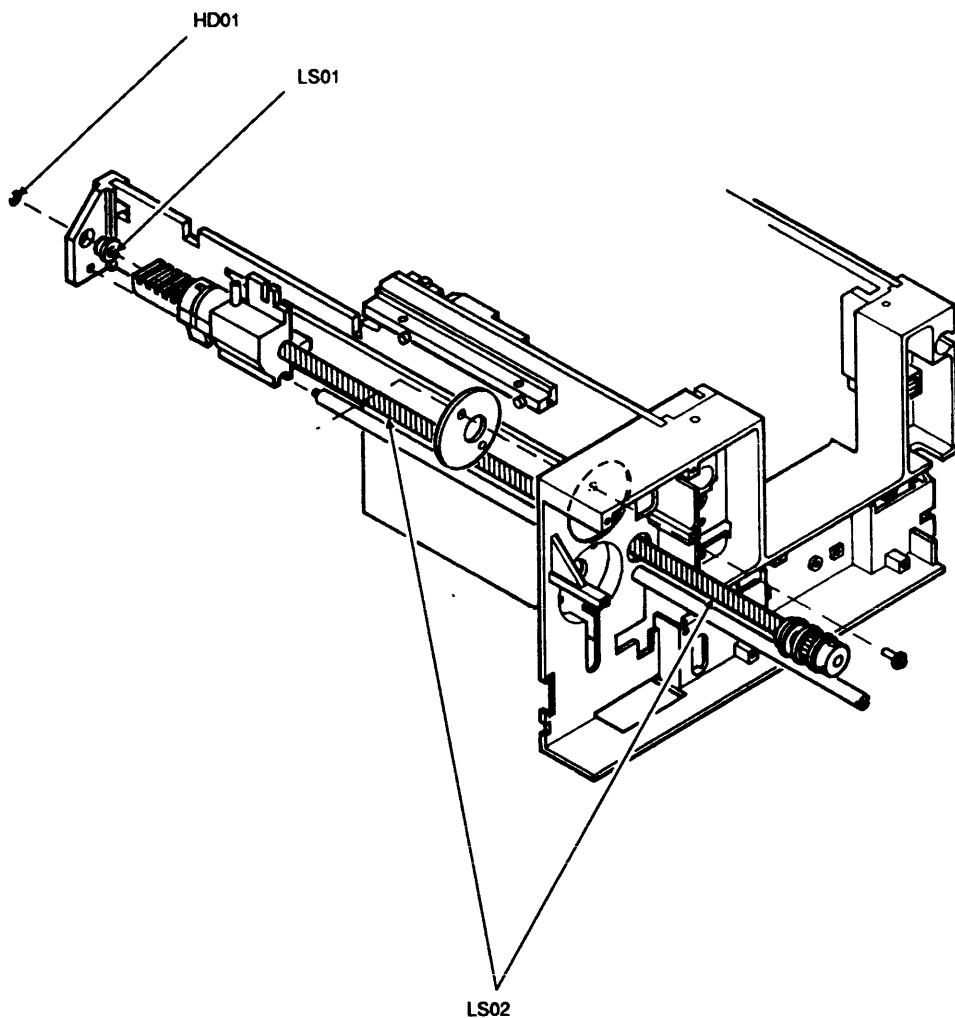


Figure 72. ACL Group  
Lead Screw FRU Kit

**ACL Assembly****Lead Screw FRU Kit**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
	12748	F/K LEAD SCREW FRU KIT	1

Lead Screw FRU Kit contains the following:

LS01	BEARING, BALL, 3/16IDx1/2OD	1
LS02	LEAD SCREW, ASSY. (Cont. next page)	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	RING, RETAINER, P/O - EXT, .188	1

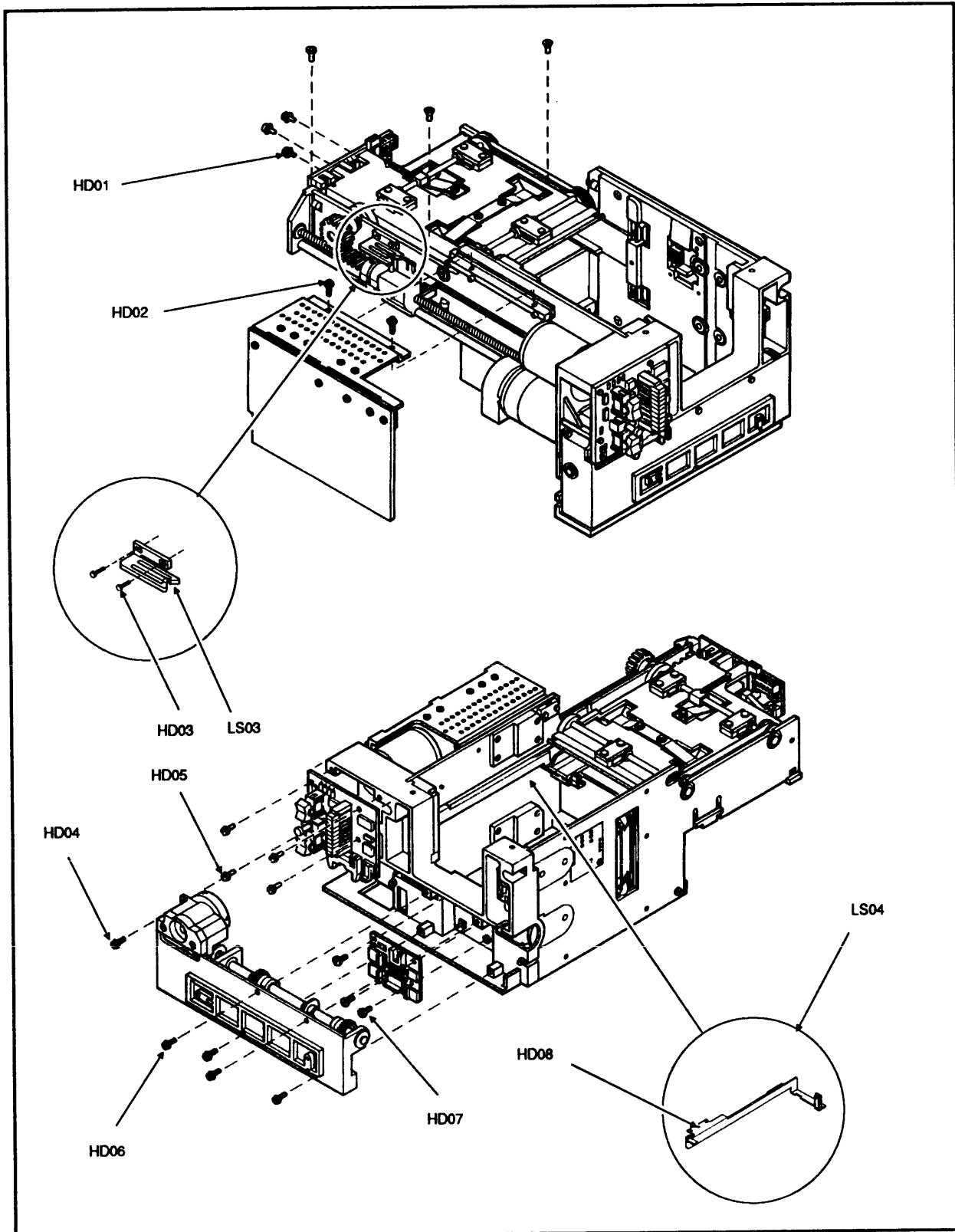


Figure 73. ACL Group  
Lead Screw FRU Kit, cont.

**ACL Assembly****Lead Screw FRU Kit, cont.**

<u>Fig. Number</u>	<u>Description</u>	<u>Qty</u>
LS03.....	RETAINER, CALIPER	1
LS04.....	CALIPER, ASSY.	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01.....	SCREW, THR FM, PHT, 4-20X1/4, S	
HD02.....	SCREW, PHT, SEMS, 4-40X3/8, Z	2
HD03.....	SCREW, PHT, SEMS, 4-40X3/8, Z	2
HD04.....	SCREW, PHT, 6-32X1/4, Z	1
HD05.....	SCREW, PHT, 4-40X3/8, Z	2
HD06.....	SCREW, PHT, 6-32X1/2, Z	3
HD07.....	SCREW, PHT, SEMS, 4-40X1/4, Z	3
HD08.....	SCREW, THRFM, PHT, 4-20X3/8	1

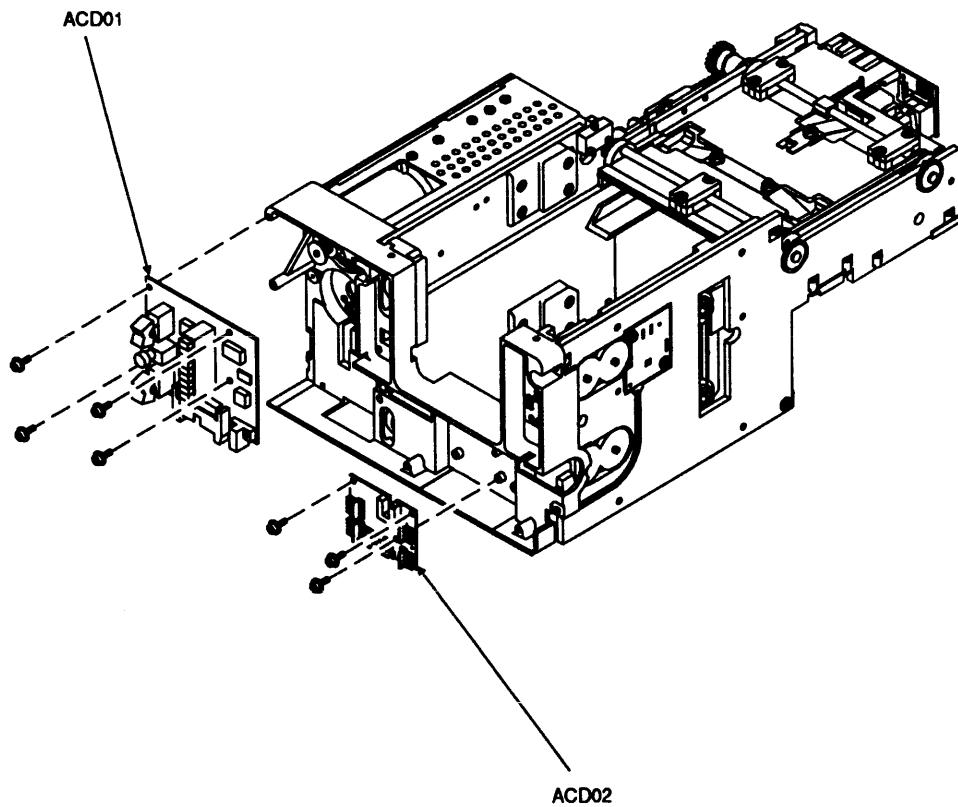


Figure 74. ACL Group  
AS and RS Cards

**ACL Assembly****Card Group**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
ACD01	28097XXX	CKT CD AS ASSY D/BUS	1
ACD02	28112XXX	CKT CD RS ASSY.	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, 4-40X3/8, Z	4
HD02	SCREW, PHT, SEMS, 4-40X1/4, Z	3

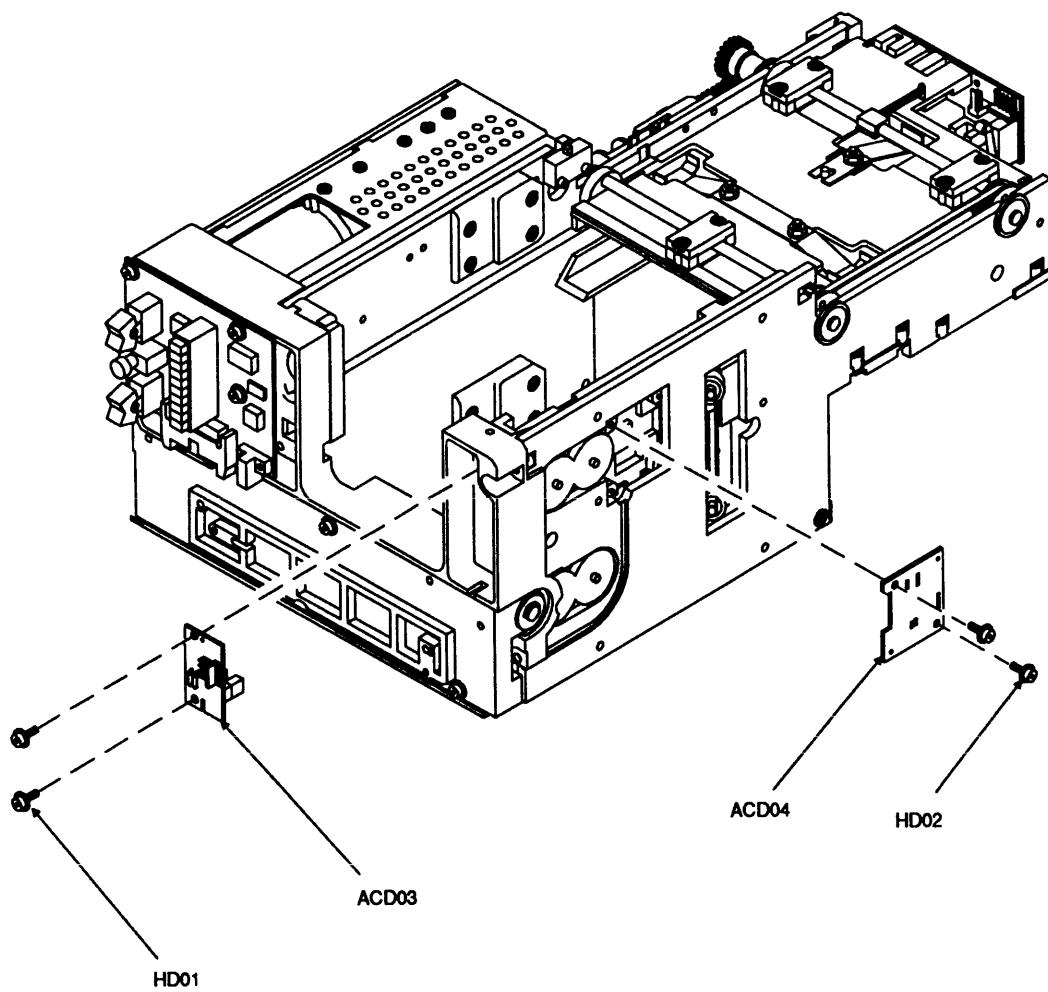


Figure 75. ACL Group  
SS and CS Card

**ACL Assembly****Card Group, cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
ACD03	28106XXX	CKT CD SS ASSY.	1
ACD04	28109XXX	CKT CD CS ASSY.	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 4-40X1/4, Z	2
HD02	SCREW, THR FM, PHT, 4-20X1/4, S	2

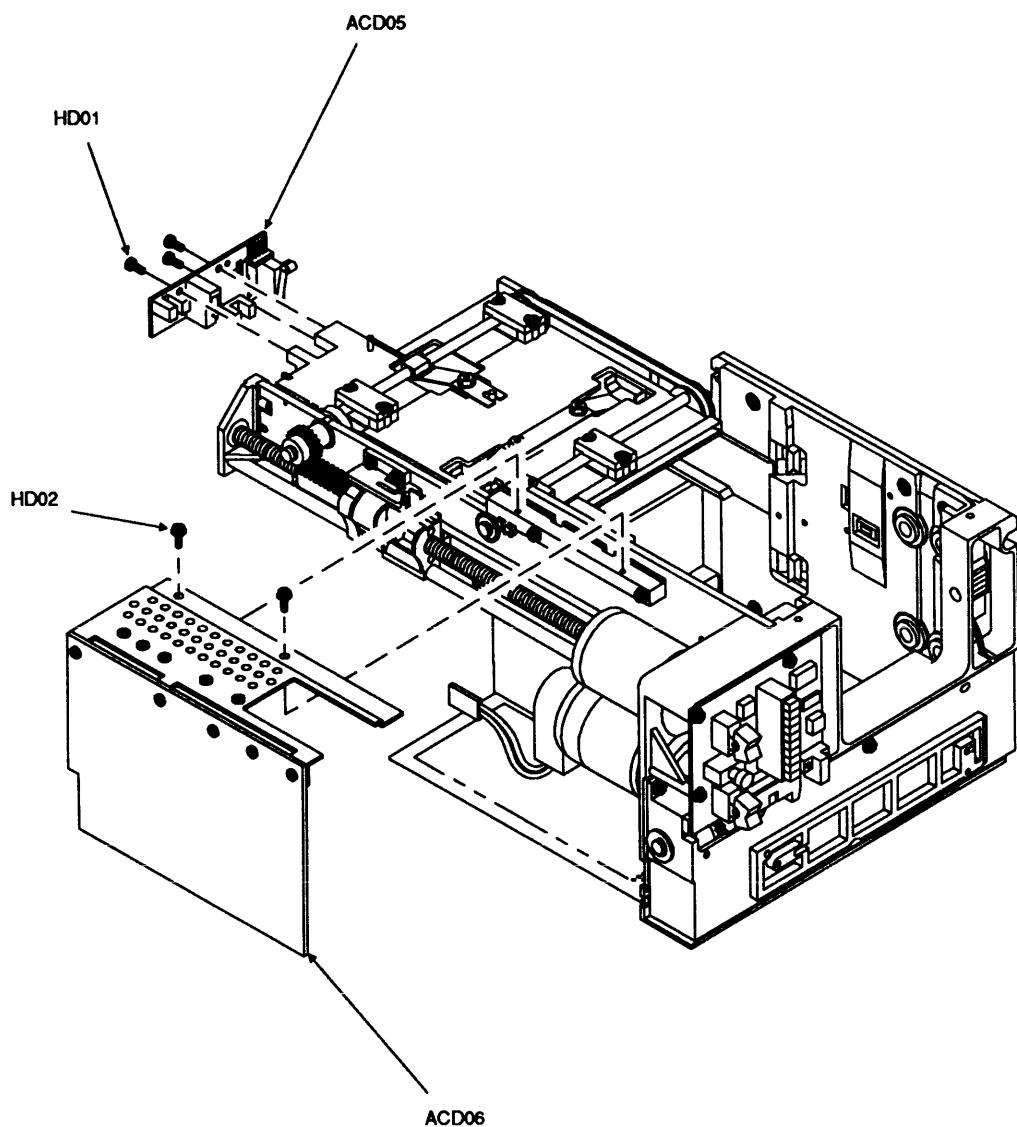


Figure 76. ACL Group  
AC and FS Cards

**ACL Assembly****Card Group, cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
ACD05	28103XXX	CKT CD FS ASSY.	1
ACD06	28091XXX	CKT CD AC ASSY. (D/BUS)	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PLASTITE, 4-40X3/8	3
HD02	SCREW, SEMS, 6-32X3/8	2

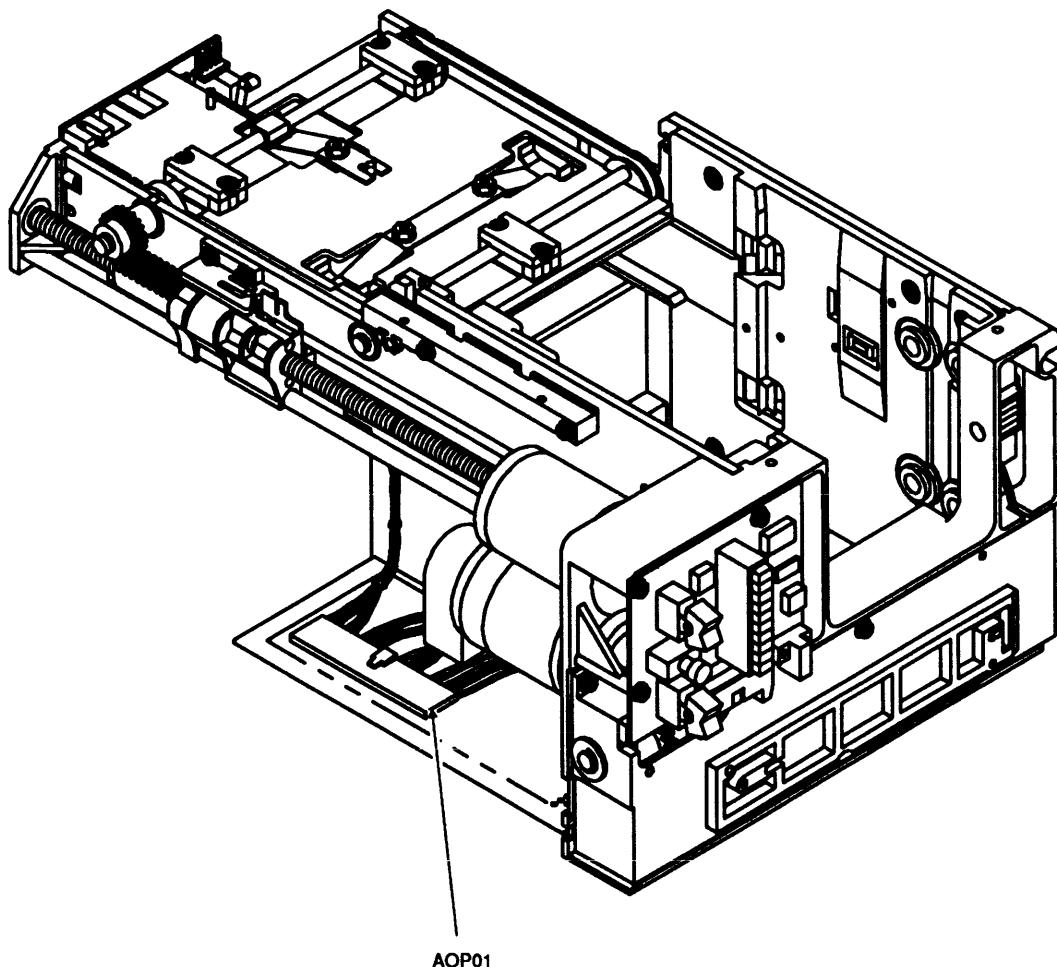


Figure 77. ACL Orderable Parts  
ACL Interconnect Cable

**ACL Assembly**

---

**Orderable Parts**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
AOP01	278902XX	CBL, ACL INTERCONNECT	1

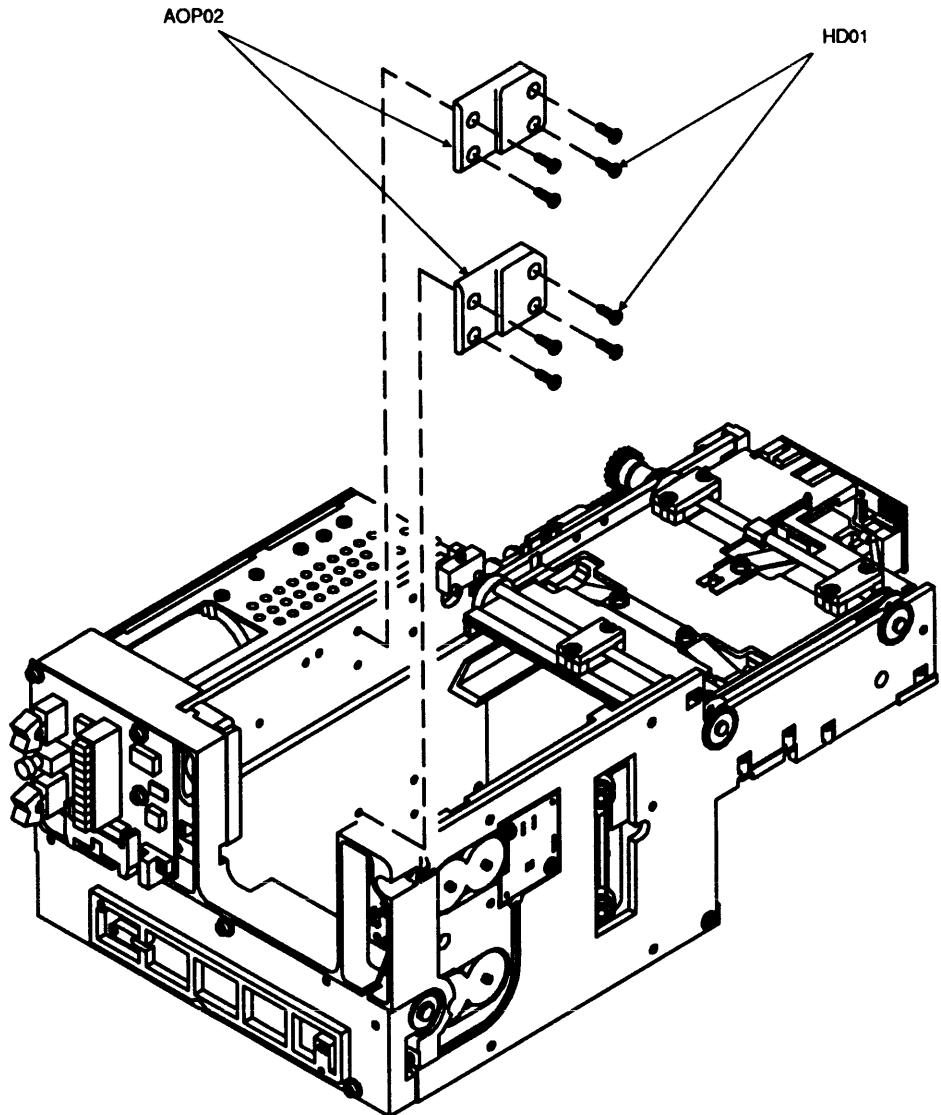


Figure 78. ACL Orderable Parts  
Magazine Skid Plate

**ACL Assembly****Orderable Parts**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
AOP02	276959XX	MAG. SKID PLATE	2

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, 6-32X1/4, Z	8

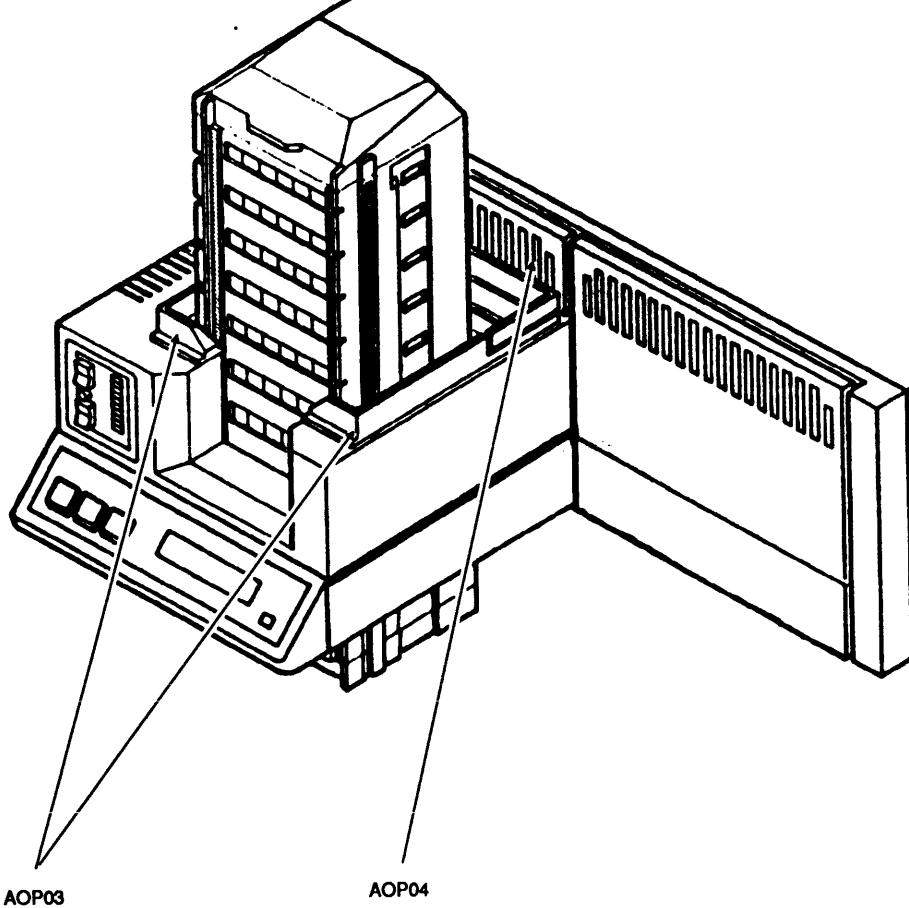


Figure 79. ACL Orderable Parts  
Magazine Guide Ring and Bezel Fill Plate

**ACL Assembly****Orderable Parts,cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
AOP03	277915XX	MAGAZINE GUIDE RING	1
AOP04	287631XX	BEZEL, FILL PLATE	1

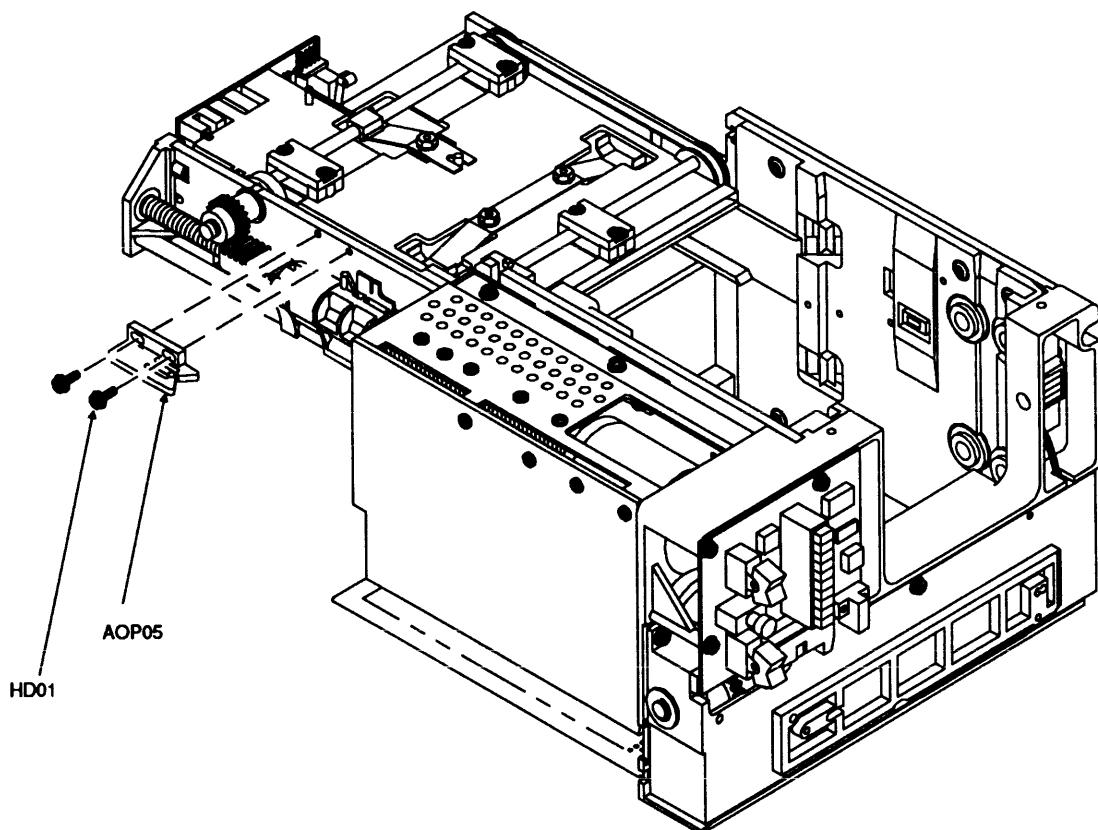


Figure 80. ACL Orderable Parts  
Caliper Retainer

**ACL Assembly****Orderable Parts,cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
AOP05	276986XX	CALIPER RETAINER	1

**Attaching Hardware**

<u>Fig Number</u>	<u>Description</u>	<u>Qty</u>
HD01	SCREW, PHT, SEMS, 4-40X3/8. Z	2

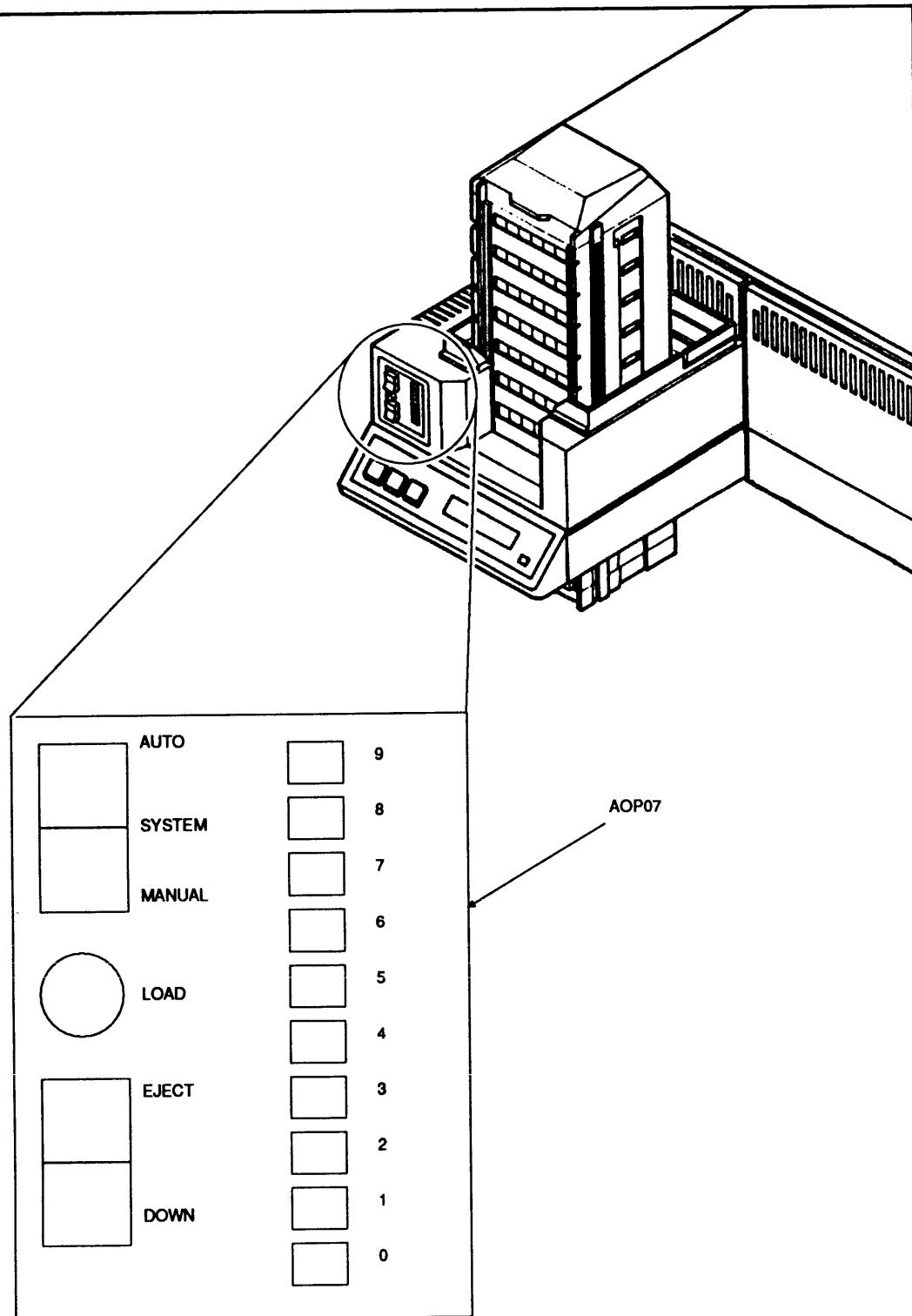


Figure 81. ACL Orderable Part  
Overlay Autoloader (ACL)

**ACL Assembly****Orderable Parts,cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
AOP07	276961XX	OVERLAY AUTOLOADER	1

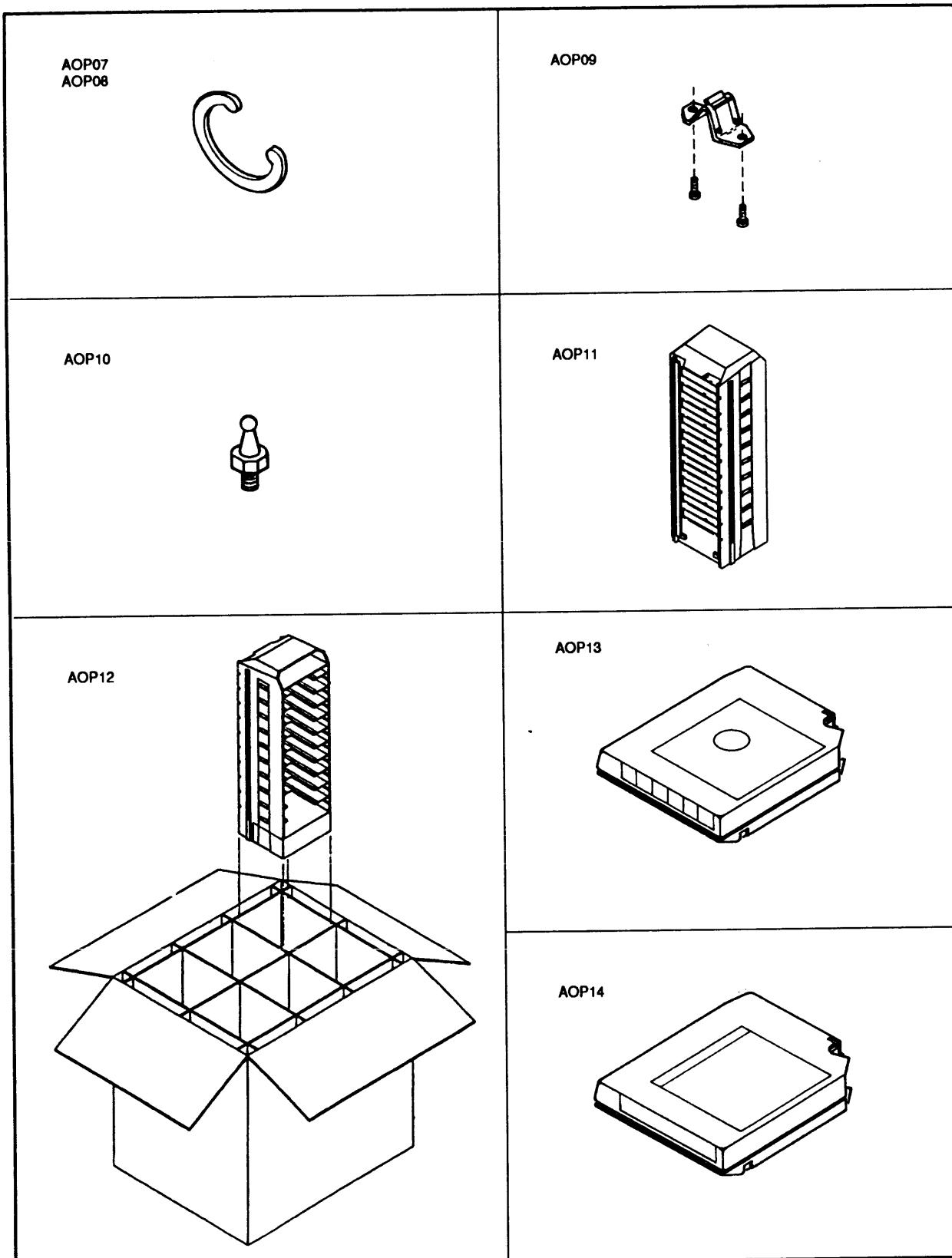


Figure 82. ACL Orderable Parts  
Other Orderables

**ACL Assembly****Orderable Parts,cont.**

<u>Fig. Number</u>	<u>Part Number</u>	<u>Description</u>	<u>Qty</u>
AOP07	24020104	RING, RETAINER P/O-EXT. .188	1
AOP08	24020101	RING, RETAINER P/O-EXT. .250	1
AOP09	24018012	FASTENER, .125 x .012T	1
AOP10	24022051	BALL STUD, .473 x .312	1
AOP11	277939XX	ACL MAGAZINE ASSY	1
AOP12	277928XX	ACL MAGAZINE (PACK OF 6)	1
AOP13	24024253	BLANK TAPE, MRX	1
AOP14	24024254	CLEANING TAPE, MRX	1



4280 Cartridge Tape Subsystem  
ILLUSTRATED PARTS CATALOG

28740801

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