

ILLUSTRATED PARTS BREAKDOWN

H744 REGULATOR

HOW TO USE THE IPB

GENERAL

This IPB is compiled following the organization and nomenclature of the engineering drawing structure.

MAJOR ASSEMBLY LOCATOR

The Major Assembly Locator (first illustration) is an index that provides a description and a figure reference for all illustrations used in this manual.

INDENTED PARTS LIST

This manual identifies each assembly being broken down (figure reference callout), and all parts of that assembly. Further breakdown of an assembly is shown by an asterisk (*) preceding the item callouts in the Description Column. The number of asterisks preceding an item is used to denote the subordination of that item with respect to the Major Assembly. A single asterisk preceding an item description indicates that the item is part of the major assembly being illustrated. Items that are subordinate to single asterisks items, are denoted by two asterisks (**) and immediately follow the related single asterisk item. Additional asterisks are used, as required, to denote further subordination. This system of part identification, provides a means for the user to identify the next higher assembly item and make alternate selections for parts when the required replacement part or assembly is not immediately available.

COLUMN CALLOUT DESCRIPTION

Figure & Item – Indicates the figure number and item number of each part.

Description – Lists the name of the part and pertinent specifications (when required). Asterisks preceding the description denote the subordination of the part to the next higher assembly.

DEC Part No. – Lists the DEC part ordering number. A blank in this column indicates a DEC part number was not assigned at the time of publication.

ECO Cut-In – The notation at the top of this column indicates the ECO level of the system (option), at which the IPB was initially prepared. Subsequent ECO level designations, that modify existing parts or add new parts to the device, are inserted in the ECO Cut-In column next to the part that is added or modified. A bracket ([]) preceding the item description is used to indicate the parts affected by ECO's.

Vendor Code/Part No. – Indicates vendor parts that are not stocked by DEC. Refer to the Field Service Spares Catalog (vendor part number to DEC part number) for the vendor code cross-reference.

Used On Code – Letters in this column correspond to the variation codes assigned in Figure 1. Parts with an Alpha notation(s) are used only in those option variations. A blank indicates that the part is used on all option variations.

Ref Fig No. – A cross reference between illustrations. For each Major Assembly, the number in this column denotes the figure of the next higher assembly. For all subassemblies, the number in this column denotes the figure showing additional detailed breakdown.

SYMBOL USAGE

Hardware Designators – Alpha designators for screws (S), washers (W), nuts (N), and retaining rings (R) are inserted after the item number callouts on the illustration when stacked item numbers are used.

Attaching Hardware – The @ symbol is inserted before any part that is used as attaching hardware. Attaching hardware is denoted as those parts that are not an integral part of the referenced assembly.

(NFR) Not Field Repairable – The (NFR) symbol is inserted after any assembly that is not to be field dismantled.

Other Symbols – Any other symbols that are required for kits, accessories, etc., will be explained and appear as part of the item description.

REVISION HISTORY

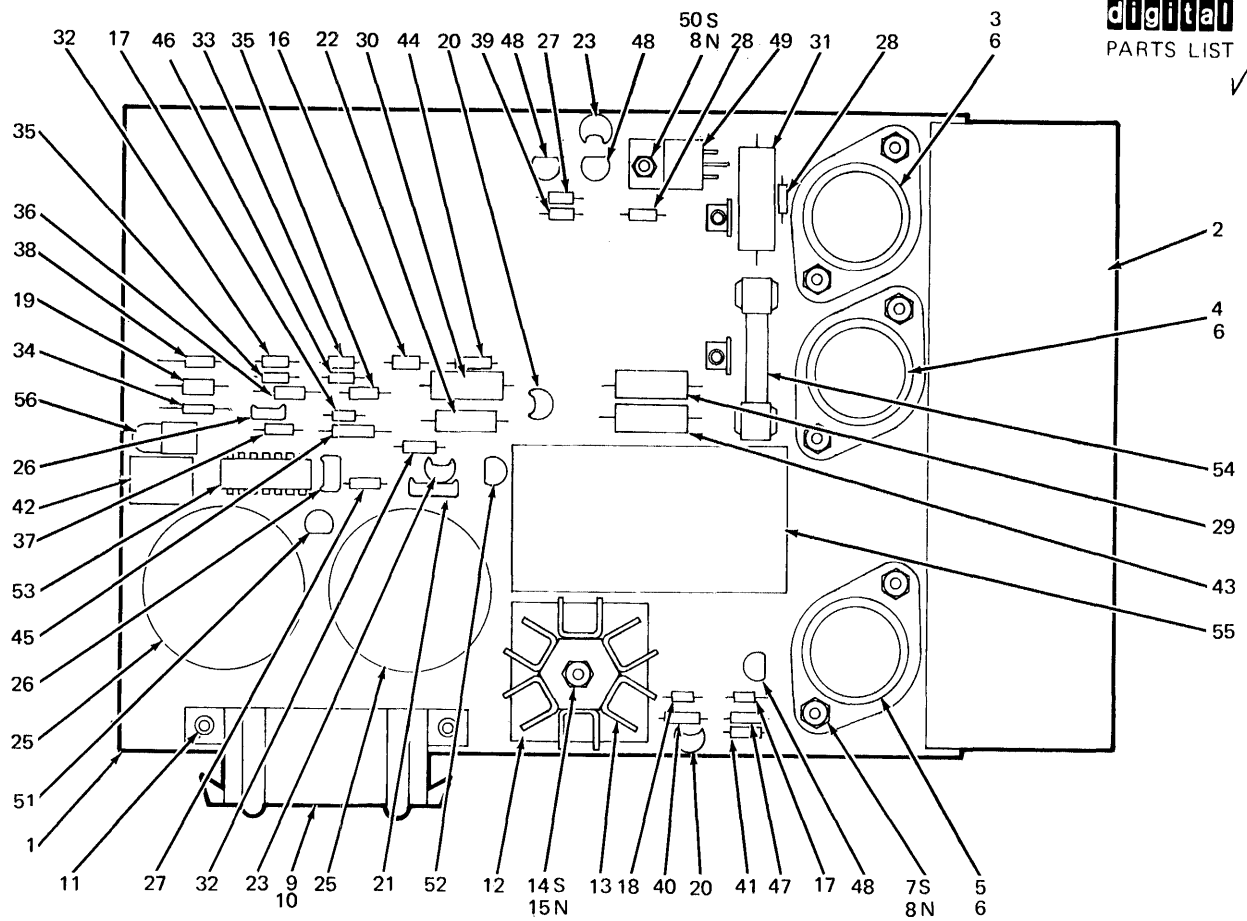
PRINTING	ECO LEVEL	DATE	PAGES AFFECTED
2nd Printing	H744 00004-0017A	10-13-76	This 2nd Printing EK-H744-IP-002 Supersedes 1st Printing DEC-H744-IPB-1 (NOTE THAT THE DOCUMENT NO. OF THIS IPB HAS CHANGED)

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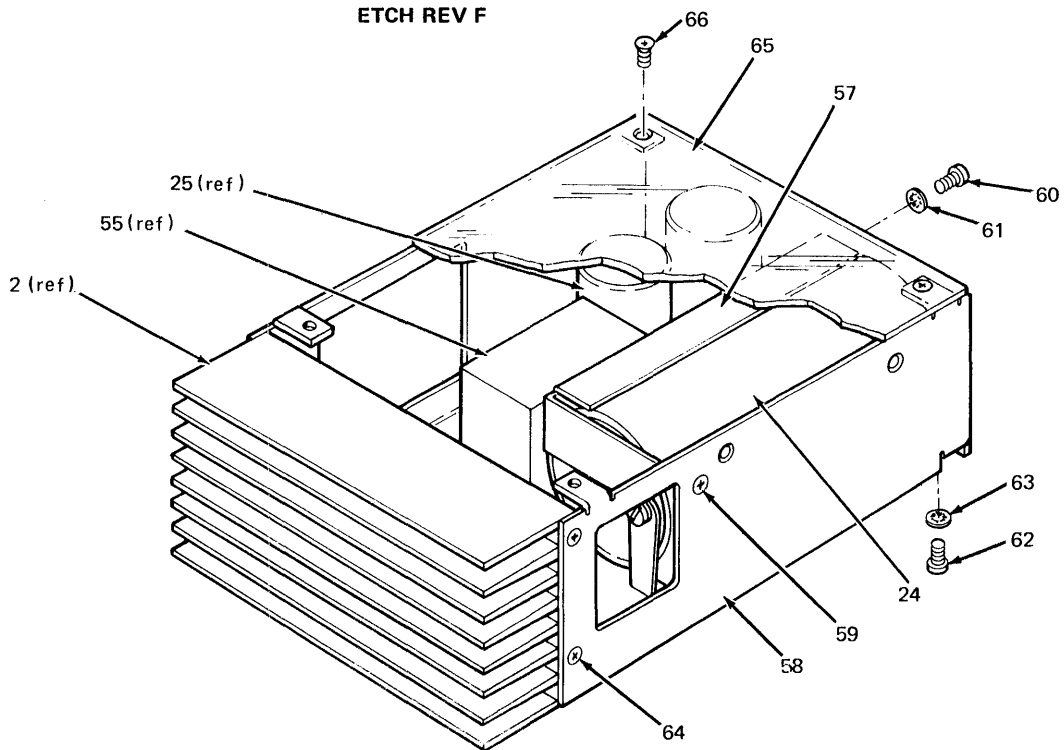
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ETCH REV F

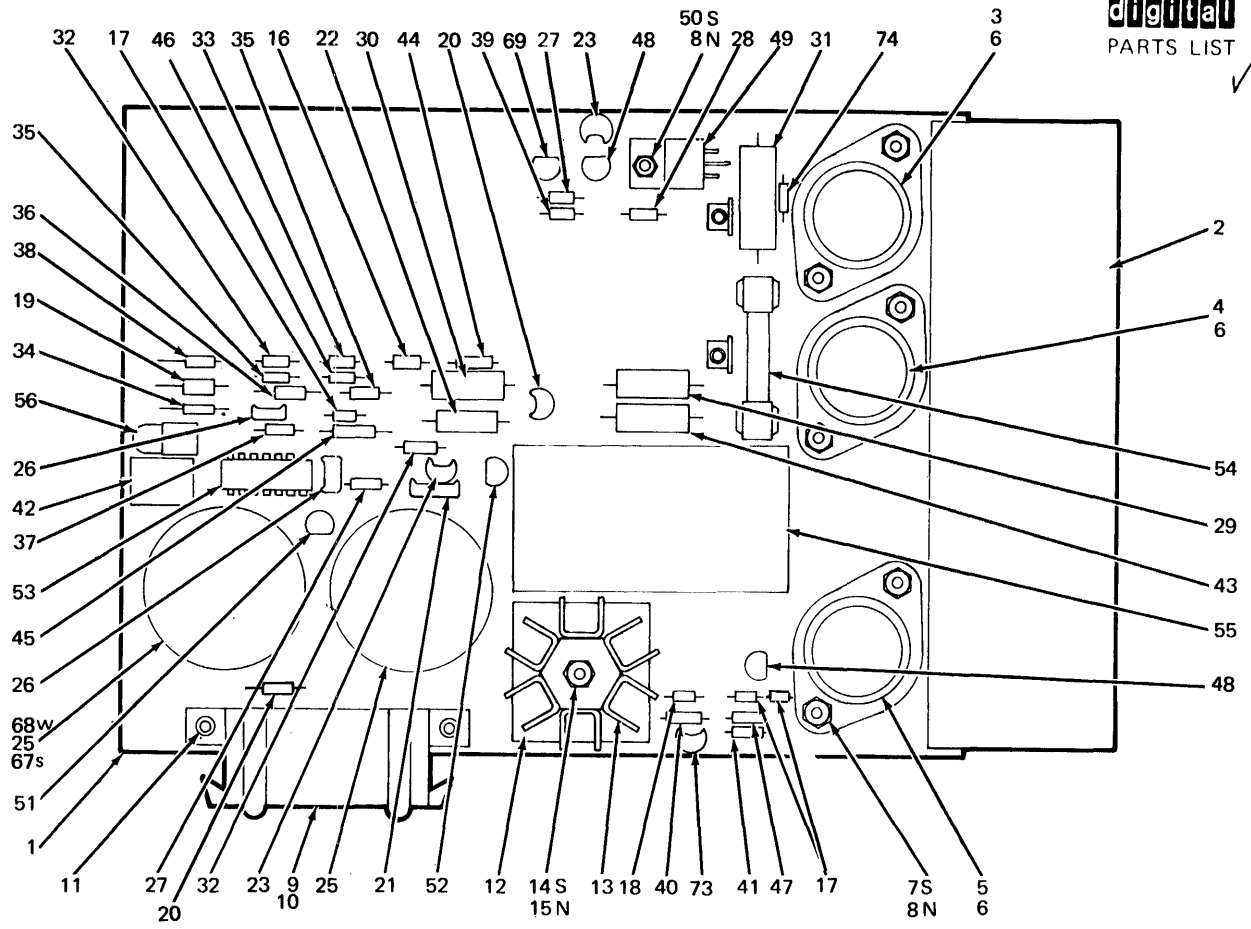


H744-01

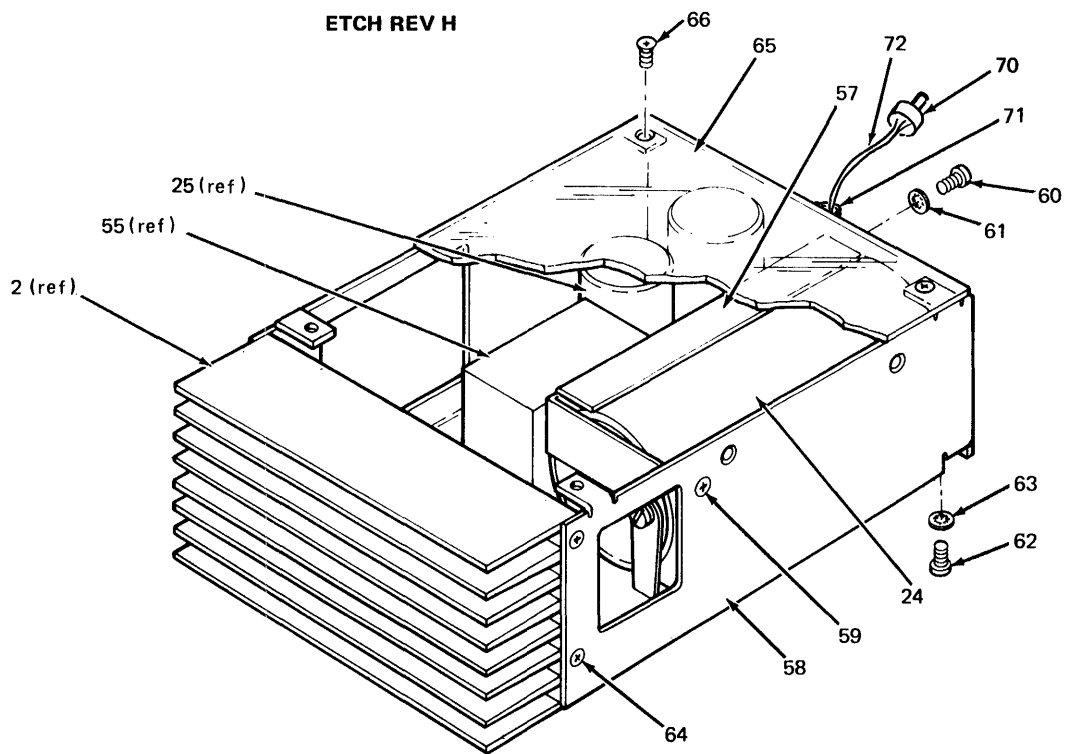
Figure 1. H744 Regulator Assembly (Etch Rev. F)

FIG & ITEM NO.	DESCRIPTION	DEC PART NO.	K ECO CUT-IN H744 00004	USED ON CODE	VENDOR		REF FIG NO.
					CODE	PART NO.	
1-	H744 REGULATOR ASSEMBLY 5V (ETCH REV. F)	H744-00					
1	*Board, Etched Circuit	50-09725-00					
2	*Heat Sink, Regulator	12-10737-00					
3	*Transistor (Q2) 2N5302	15-10196-00					
4	*Diode (D5) PWR NSR 8117	11-10715-00					
5	*SCR (D7) MCR 649P-2	11-09465-00					
6	*Washer, Insulator	90-06721-00					
7	*Screw, Phl Pan Hd No. 4-40 x 1/2 Lg	90-06013-01					
8	*Nut, Kep No. 4-40	90-06557-00					
9	*Connector, Mate-N-Lok (J1), 8 Pin	12-09340-00					
10	*Contact, Female	12-09456-00					
11	*Eyelet, GS-4-7	90-06732-00					
12	*Diode, Bridge (D1)	11-10714-00					
13	*Heat Sink Bridge	12-10907-00					
14	*Screw, Phl Pan Hd No. 6-32 x 1/2	90-06024-01					
15	*Nut, Keps No. 6-32	90-08185-00					
16	*Diode, Zener (D2) 1N4744	11-05648-00					
17	*Diode, PWR (D4,D8) D664	11-00114-00					
18	*Diode, Zener (D3) 1 MA 5.1V	11-10925-00					
19	*Capacitor (C6) 2.2 MFD 20V 10%	10-02627-00					
20	*Capacitor (C7,C10) .01 MFD 100V 20% Disc	10-01610-00					
21	*Capacitor (C11) 2700 PF 100V 5% DM	10-01637-00					
22	*Capacitor (C2) 15 MFD 20V 10%	10-04812-00					
23	*Capacitor (C3,C4) .05 MFD 25V -20%	10-01774-00					
24	*Capacitor (C1) 31K MFD 50V	10-10858-00					
25	*Capacitor (C8,C9) 6K MFD 10V	10-10704-00					
26	*Capacitor (C5, C12) 56 PF 100V 5%	10-00012-00					
27	*Resistor (R10,R12) 150 Ohms 1/4W 5%	13-00250-00					
28	*Resistor (R5,R13) 10 Ohms 1/4W 5%	13-01317-00					
29	*Resistor (R1) 3.9K Ohms 1W 10%	13-02927-00					
30	*Resistor (R2) 820 Ohms 1W 10%	13-00358-00					
31	*Resistor (R4) .02 Ohms 5W 3%	13-10876-00					
32	*Resistor (R6,R15) 10K Ohms 1/4W 5%	13-00479-00					
33	*Resistor (R25) 18K Ohms 1/4W 5%	13-02465-00					
34	*Resistor (R18) 511 Ohms 1/8W 1%	13-02411-00					
35	*Resistor (R8,R16) 1K Ohms 1/4W 5%	13-00365-00					
36	*Resistor (R7) 18.2K Ohms 1/8W 1%	13-09412-00					
37	*Resistor (R9) 27 Ohms 1/4W 5%	13-01522-00					
38	*Resistor (R17) 750 Ohms 1/8W 1%	13-02955-00					
39	*Resistor (R11) 27 Ohms 1/4W 10%	13-01420-00					
40	*Resistor (R23) 100 Ohms 1/4W 5%	13-00229-00					
41	*Resistor (R21) 5.1 Ohms 1/4W 5%	13-09422-00					
42	*Resistor, Variable (R14) 200 Ohms 1/2W 20%	13-10852-00					
43	*Resistor (R24) 10 Ohms 1W 5%	13-00171-00					
44	*Resistor (R3) 12K Ohms 1/4W 5%	13-00488-00					
45	*Resistor (R19) 7.5K Ohms 1/8W 1%	13-05322-00					
46	*Resistor (R26) 1.5K Ohms 1/4W 5%	13-00391-00					
47	*Resistor (R22) 680 Ohms 1/4W 5%	13-01424-00					
48	*Transistor (Q1,Q4,Q6) MPSA55 MOT	15-10706-00					
49	*Transistor (Q3) D45HS	15-10708-00					

FIG & ITEM NO.	DESCRIPTION	DEC PART NO.	ECO CUT-IN H744 00004	USED ON CODE	VENDOR		REF FIG NO.
					CODE	PART NO.	
1-							
50	*Screw, Phl Pan Hd No. 4-40 x 5/16	90-06010-00					
51	*Transistor (Q5) A05	15-10705-00					
52	*Transistor, Unijunction (Q7) 2N6028	15-10877-00					
53	*IC (E1) DEC 7230	19-10415-00					
54	*Fuse (F1) 15 Amp	90-07226-00					
55	*Reactor (L1) 60 UHY mmc4347	16-10850-00					
56	*Lamp 5V	12-09219-01					
57	*Holder, Capacitor	53-09761-00					
58	*Bracket, Regulator	53-09756-00					
59	*Screw, Phl Flt Hd No. 6-32 x 1/4	90-06020-02					
60	*Screw, Phl Pan Hd No. 6-32 x 1/4	90-06020-01					
61	*Washer, Int. Tooth Lock No. 6	90-07649-00					
62	*Screw, Phl Pan Hd No. 4-40 x 1/4	90-06009-01					
63	*Washer, Int. Tooth Lock No. 4	90-06632-00					
64	*Screw, Phl Flt Hd No. 4 x 5/16 (Self Tap)	90-09142-00					
65	*Cover (Plastic Shield) (see note)	53-09760-00					
66	*Screw, Phl Flt Hd No. 4-40 x 5/16 (see note)	90-06010-02					
	NOTE: Items 65, 66 are discarded when installed in H750 Power Supply Chassis.						



ETCH REV H



H744-02

Figure 2. H744 Regulator Assembly (Etch Rev. H)

FIG & ITEM NO.	DESCRIPTION	W DEC PART NO.	ECO CUT-IN H744 00006	USED ON CODE	VENDOR		REF FIG NO.
					CODE	PART NO.	
2-	H744 REGULATOR ASSEMBLY Code A—Used on Model H744-00 5V Code B—Used on Model H744-YA 5V (Added)	H744-00 H744-YA	00012	A B			
1	*Board, Etched Circuit	50-09725-00					
2	*Heat Sink, Regulator	12-10737-00					
3	*Transistor (Q2) 2N5302	15-10196-00					
4	*Diode (D5) PWR NSR 8117	11-10715-00					
5	*SCR (D7) MCR 649P-2	11-09465-00					
6	*Washer, Insulator	90-06721-00					
7	*Screw, Phl Pan Hd No. 4-40 x 9/16	90-08033-01					
8	*Nut, Kep No. 4-40	90-06557-00					
9	*Connector, (J1) 8 Pin Mate-N-Lok	12-09340-00					
10	*Contact, Female	12-09456-00					
11	*Eyelet, GS4-5	90-09000-00					
12	*Diode, Bridge (D1)	11-10714-00					
13	*Heat Sink Bridge	12-10907-00					
14	*Screw, Phl Pan Hd No. 6-32 x 5/8	90-06025-01					
15	*Nut, Kep No. 6-32	90-08185-00					
16	*Diode, Zener (D2) IN4744	11-05648-00					
17	*Diode, PWR (D4,D8,D9) D664 (Note - D9 is used on Model H744-YA only.)	11-00114-00					
18	*Diode, Zener (D3) 1 MA 5.1V	11-10925-00		A			
	*Diode, Zener (D3) IN754 (Added)	11-09991-00		B			
19	*Capacitor (C6) 2.2 MFD 20V 10%	10-02627-00					
20	*Capacitor (C10,C13) .01 MFD 100V 20%	10-01610-00					
21	*Capacitor (C11) 2700 PF 100V 5% DM	10-01637-00					
22	*Capacitor (C2) 15 MFD 20V 10% (Deleted)	10-04812-00					
	*Capacitor (C2) .033 MFD 100V 10% (Added)	10-00050-00	00011				
23	*Capacitor (C3,C4) .05 MFD 25V -20%	10-01774-00					
24	*Capacitor (C1) 31K MFD 50V	10-10858-00					
25	*Capacitor (C8,C9) 6K MFD 10V	10-10704-00					
26	*Capacitor (C5,C12) 56 PF 100V 5%	10-00012-00					
27	*Resistor (R10,R12) 150 Ohm 1/4W 5%	13-00250-00					
28	*Resistor (R5) 10 Ohm 1/4W 5%	13-01317-00					
29	*Resistor (R1) 3.9K Ohm 1W 10%	13-02927-00					
30	*Resistor (R2) 820 Ohm 1W 10%	13-00358-00					
31	*Resistor (R4) .02 Ohm 5W 3%	13-10876-00		A			
	*Resistor (R4) .06 Ohm 5W 3% (Added)	13-10876-02	00012	B			
32	*Resistor (R6,R15) 10K Ohm 1/4W 5%	13-00479-00					
33	*Resistor (R25) 18K Ohm 1/4W 5%	13-02465-00					
34	*Resistor (R18) 511 Ohm 1/8W 1%	13-02411-00		A			
	*Resistor (R18) 150 Ohm 1/4W 5% (Added)	13-00250-00	00012	B			
35	*Resistor (R8,R16) 1K Ohm 1/4W 5%	13-00365-00					
36	*Resistor (R7) 18.2K Ohm 1/8W 1%	13-09412-00					
37	*Resistor (R9) 27 Ohm 1/4W 5%	13-01522-00					
38	*Resistor (R17) 750 Ohm 1/8W 1%	13-02955-00		A			
	*Resistor (R17) 300 Ohm 1/4W 5% (Added)	13-01425-00	00012	B			
39	*Resistor (R11) 27 Ohm 1/4W 10%	13-01420-00					
40	*Resistor (R23) 100 Ohm 1/4W 5%	13-00229-00					
41	*Resistor (R21) 5.1 Ohm 1/4W 5%	13-09422-00					
42	*Resistor (R14) 200 Ohm 1/2W 20%	13-10852-00		A			
43	*Resistor (R24) 10 Ohm 1W 5%	13-00171-00					
44	*Resistor (R3) 12K Ohm 1/4W 5%	13-00488-00					

FIG & ITEM NO.	DESCRIPTION	DEC PART NO.	ECO CUT-IN H744 00006	USED ON CODE	VENDOR		REF FIG NO.
					CODE	PART NO.	
2-							
45	*Resistor (R19) 7.5K Ohm 1/8W 1%	13-05322-00					
46	*Resistor (R26) 1.5K Ohm 1/4W 5%	13-00391-00					
47	*Resistor (R22) 680 Ohm 1/4W 5%	13-01424-00					
48	*Transistor (Q1,Q6) MPSA55 MOT	15-10706-00					
49	*Transistor (Q3) D45H8 (Deleted)	15-10708-00					
	*Transistor (Q3) D45H8 (Added)	15-10708-01	00013				
50	*Screw, Phi Pan Hd No. 4-40 x 5/16 (Deleted)	90-06010-00					
	*Screw, Phi Pan Hd No. 4-40 x 3/8 (Added)	90-06011-01	00013				
51	*Transistor (Q5) A05	15-10705-00					
52	*Transistor, Unijunction (Q7) 2N6028	15-10877-00					
53	*IC (E1) DEC 7230	19-10415-00					
54	*Fuse (F1) 15 Amp (Deleted)	90-07226-00					
	*Fuse (F1) 15 Amp (Added)	12-13237-01	00016				
55	*Reactor (L1) 60 UHY MMC 4347	16-10850-00					
56	*Lamp 5V	12-09219-01		A			
	*Lamp 15V	12-09169-00		B			
57	*Holder, Capacitor (Deleted)	53-09761-00					
	*Holder, Capacitor (Added)	74-12388-00	00009				
58	*Bracket, Regulator	53-09756-00					
59	*Screw, Phi Flt Hd No. 6-32 x 3/16	90-08020-02					
60	*Screw, Phi Pan Hd No. 6-32 x 1/4	90-06020-01					
61	*Washer, Int. Tooth Lock No. 6	90-06633-00					
62	*Screw, Phi Pan Hd No. 4-40 x 1/4	90-08301-01					
63	*Washer, Int. Tooth Lock No. 4	90-06632-00					
64	*Screw, Phi Flt Hd No. 4 x 5/16 Self-Tap	90-09142-00					
65	*Cover (Plastic Shield)	53-09760-00					
66	*Screw, Phi Flt Hd No. 4-40 x 1/4	90-06009-02					
67	*Screw, Slotted Pan Hd No. 10-32 x .31	90-09669-01					
68	*Washer, Int. Tooth Lock No. 10	90-06635-00					
69	*Transistor (Q4) MPSA55 MOT (Deleted)	15-10706-00					
	*Transistor (Q4) 2N4235 (Added)	15-05555-00	00011				
	*Transistor (Q4) 2N4235 (Deleted)	15-05555-00					
	*Transistor (Q4) MPSA55 MOT (Added)	15-10706-00	00016				
70	*Potentiometer (R14) 1K Ohm (Added)	13-09532-04	00012	B			
71	*Clamp, Cable (Added)	90-07079-00	00012	B			
72	*Wire, Microdot (Added)	70-00014-00	00012	B			
73	*Capacitor (C7) .01 MFD 100V 20% (Deleted)	10-01610-00					
	*Capacitor (C7) .22 MFD 50% (Added)	10-10274-00	00016				
74	*Resistor (R13) 10 Ohm 1/4W 5% (Deleted)	13-01317-00					
	*Resistor (R13) 10 Ohm 1/4W 5% Fusible (Added)	13-12496-00	00016				
75	*Washer, Rectangular (Added)	90-09769-00	00016				
<p>Note: Items 65, 66 are discarded when installed in H750 Power Supply chassis.</p>							

DEC