

Section 5

List of Replaceable Parts

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5-1. INTRODUCTION

2. This section contains an illustrated parts breakdown of the instrument. A similar parts listing for each of the Options will be found in Section 6. Components are listed alphanumerically by assembly. Both electrical and mechanical components are listed by reference designation. Each listed part is shown in an accompanying illustration.

5-3. Parts lists include the following information:

1. Reference Designation.
2. Description of each part.
3. FLUKE Stock Number.
4. Federal Supply Code for Manufacturers. (See Section 7 for Code-to-Name list).
5. Manufacturer's Part Number.
6. Total Quantity of components per assembly.
7. Recommended Quantity: This entry indicates the recommended number of spare parts necessary to support one to five instruments for a period of 2 years. This list presumes an availability of common electronic parts at the maintenance site. For maintenance for 1 year or more at an isolated site, it is recommended that at least one of each assembly in the instrument be stocked (see paragraph 5-7). In the case of optional subassemblies, plug-ins, etc., that are not always part of the instrument, or are deviations from the basic instrument model, the REC QTY column lists the recommended spares quantity for the items in that particular assembly.

5-4. HOW TO OBTAIN PARTS

5-5. Components may be ordered directly from the manufacturer by using the manufacturer's part number, or from the John Fluke Mfg. Co., Inc. or its authorized representatives by using the FLUKE STOCK NUMBER. In the event the part you order has been replaced by a new or improved part, the replacement will accompany an explanatory note and installation instructions, if necessary.

5-6. To ensure prompt and efficient handling of your order, include the following information:

1. Quantity.
2. FLUKE Stock Number.
3. Description.
4. Reference Designation.
5. Printed Circuit Board Part Number and Revision Letter.
6. Instrument Model and Serial Number.

5-7. A Recommended Spare Parts Kit for your basic instrument is available from the factory. This kit contains those items listed in the REC QTY column of the parts list in the quantities recommended.

5-8. Parts price information is available from the John Fluke Mfg. Co., Inc. or its representatives. Prices are also available in a Fluke Replacement Parts Catalog, which is available on request.

CAUTION 

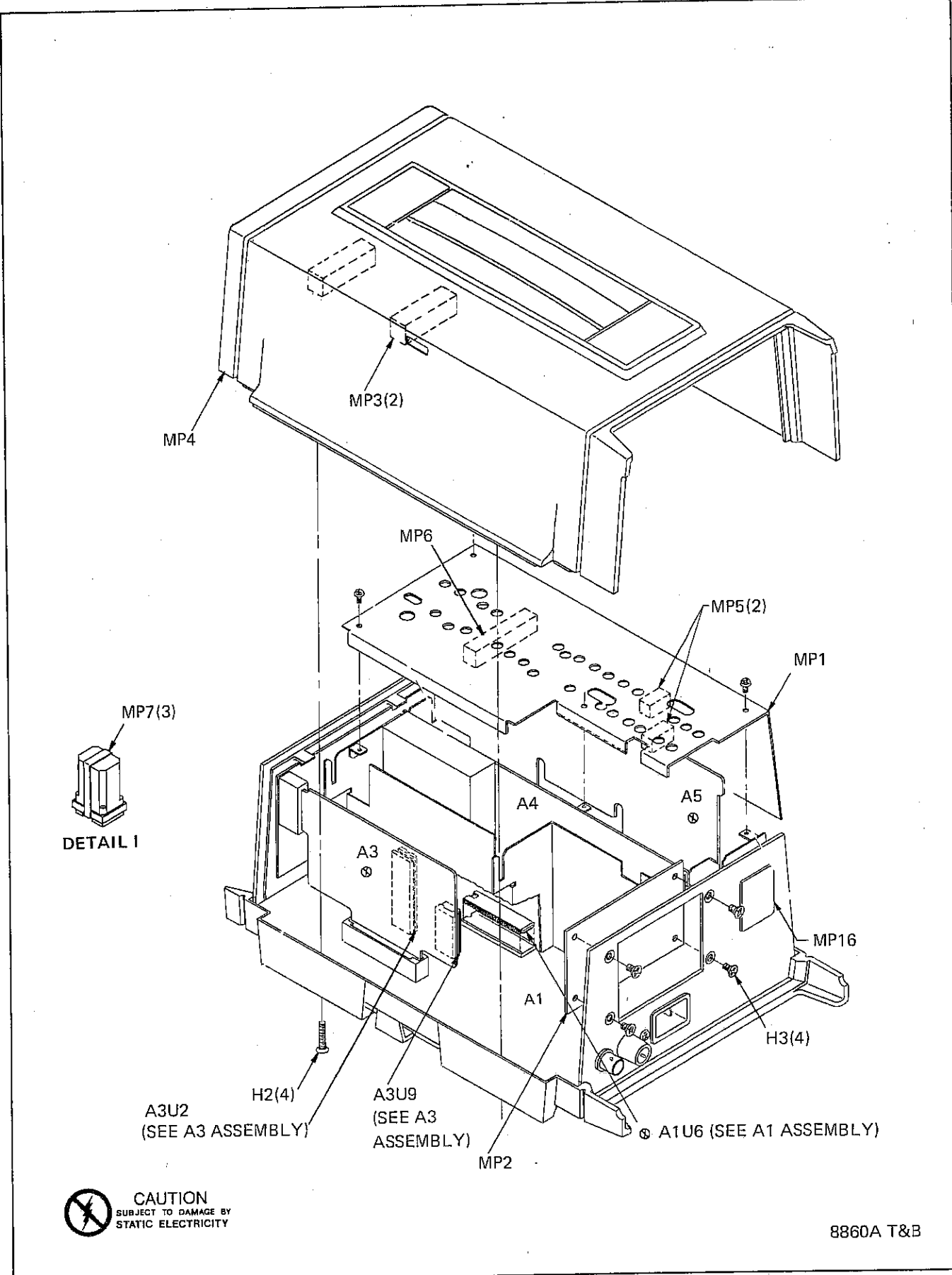
Indicated devices are subject to damage by static discharge.

Table 5-1. 8860A Final Assembly

REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	N O T E
	FINAL ASSEMBLY FIGURE 5-1 (8860A-5001/TB)	8860A	89535				
A1	MAIN PCB ASSEMBLY	531640	89536	531640	1		
A2	DISPLAY PCB ASSEMBLY	502708	89536	502708	1		
A3	⊗ CONTROLLER PCB ASSEMBLY	502716	89536	502716	1		
A4	AC/DC SCALING PCB ASSEMBLY	526665	89536	526665	1		
A5	⊗ A/D AND OHMS CONVERTER PCB ASSEMBLY	526673	89536	526673	1		
F1	FUSE, SLO-BLO, 1/4 AMP	166306	71400	MDL1-4	1		5
H1	SCREW, FHP/SS, 4-40 X 3/16	149567	89536	149567	9		
H2	SCREW, FHP/SS, 6-32 X 1/4	385401	89536	385401	4		
H3	SCREW, 6-32 X 1/4	543447	89536	543447	4		
H4	SCREW, FHP THD/FORM, 2-28 X 3/8	493965	89536	493965	2		
H5	SCREW, FHP, 6-32 X 3/8, S/S	334458	89536	334458	1		
H6	SCREW, FHP, 4-40 X 1/4	256156	89536	256156	1		
H7	SCREW, FHP, U/CUT, 6-32 X 1/4	320093	89536	320093	4		
H8	SCREW, FHP, 4-40 X 3/8	256164	89536	256164	1		
H9	WASHER, FLAT, S/STEEL	260471	89536	260471	3		
H10	WASHER, SPLIT/LOCK, S/STEEL	147603	89536	147603	5		
H11	WASHER, SHOULDER	436386	89536	436386	1		
H12	NUT, HEX, S/STEEL, 4-40	147611	89536	147611	3		
MP1	COVER, GUARD	502575	89536	502575	1		
MP2	PANEL, BLANK SUB-	531004	89536	531004	2		
MP3	CUSHION	541896	89536	541896	2		
MP4	COVER, D-SIZE (WITHOUT SHIELD)	516682	89536	516682	1		
MP5	CUSHION	541870	89536	541870	2		
MP6	CUSHION	545871	89536	545871	1		
MP7	RETAINER STRAP, RELAY	381624	77342	27E348	3		
MP8	PANEL, FRONT	502534	89536	502834	1		
MP9	BUTTON, GRAY (FRONT PANEL)	509232	89536	509232	14		
MP10	BUTTON, ORANGE (FRONT PANEL)	509265	89536	509265	1		
MP11	BUTTON (FRONT PANEL)	509356	89536	509356	1		
MP12	DECAL, FRONT PANEL	507574	89536	507574	1		
MP13	DECAL, BASE SIDES	473652	89536	473652	2		
MP14	PANEL, REAR	502559	89536	502559	1		
MP15	GUARD, MAIN BOARD	509273	89536	509273	1		
MP16	PLUG, REAR PANEL	530998	89536	530998	1		
MP17	GUARD, BASE	502567	89536	502567	1		
MP18	INSULATOR, XSTR	508630	55285	7403-09FR-51	1		
MP19	SPRING CONTACT, SHIELD	525261	89536	525261	3		
MP20	BASE (STANDARD)	454702	89536	454702	1		
MP21	BAIL STAND	467555	89536	467555	1		
MP22	LATCH	467548	89536	467548	2		
MP23	FOOT, NON-SKID	467571	89536	467571	4		
MP24	CONN, BNC FE PANEL MOUNT	414201	02660	31-010	1		

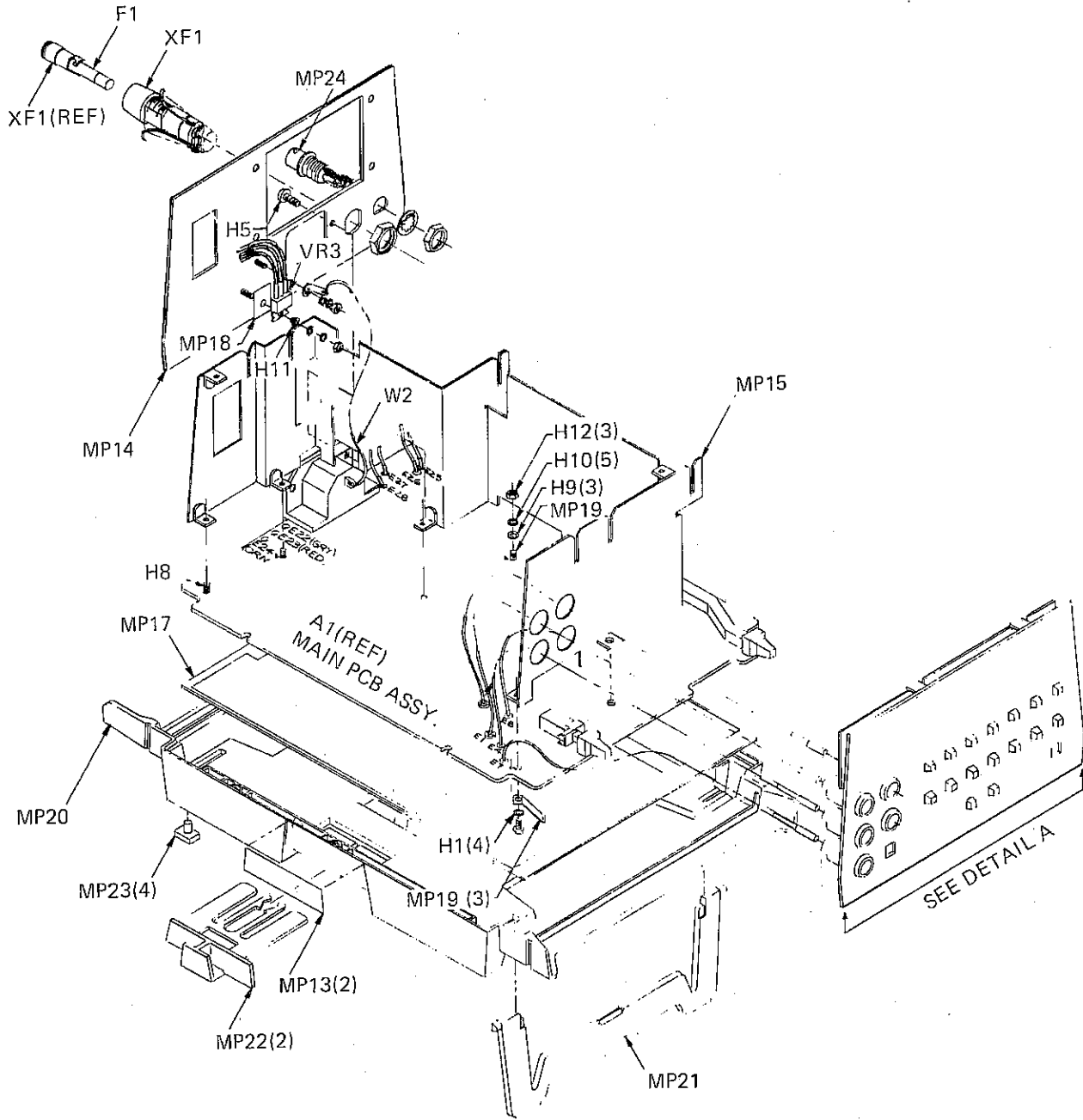
Table 5-1. 8860A Final Assembly (cont)

REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	N O T E
TM1	8860A INSTRUCTION MANUAL SET (NOT SHOWN)	545004	89536	545004	1		
VR3	VOLTAGE REGULATOR, 3-TERMINAL	538108	89536	538108	1	1	
W1	LINE CORD WITH INTRNL CONN, (NOT SHOWN)	343723	89536	343723	1		
W2	WIRE ASSEMBLY (GRN/YEL)	509348	89536	509349	1		
W18	WIRE ASSY, (BLK)	538165	89536	538165	1		
W19	WIRE ASSY, (BRN)	538173	89536	538173	1		
W20	WIRE ASSY, (BLU)	538181	89536	538181	1		
W21	WIRE ASSY, (WHT)	538199	89536	538199	1		
XF1	FUSEHOLDER (BODY/NUT ONLY)	375188	89536	375188	1		1
	FUSEHOLDER CAP (CAP ONLY)	460238	89536	460238	1		1
	LEAD & PROBE ASSEMBLY (NOT SHOWN)	516666	89536	Y8132	1		
	RECOMMENDED SPARE PARTS LIST/KIT	583500	89536	583500			
1	MUST BE ORDERED AS SEPARATE ITEMS.						



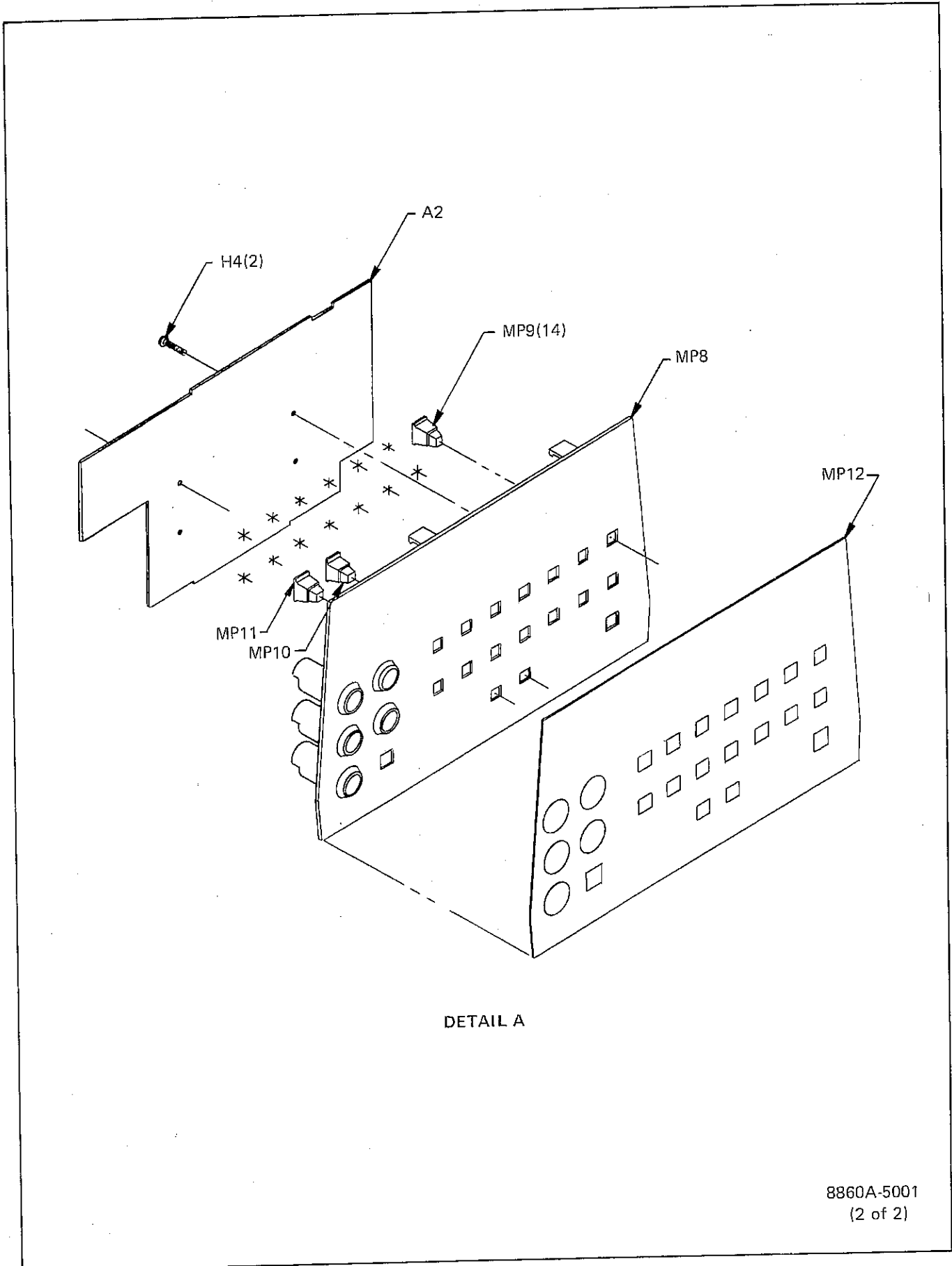
8860A T&B

Figure 5-1. Final Assembly



8860A-5001
(1 of 2)

Figure 5-1. Final Assembly (cont)



DETAIL A

8860A-5001
(2 of 2)

Figure 5-1. Final Assembly (cont)

Table 5-2. Main PCB Assembly

REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	NOTE
A1	MAIN PCB ASSEMBLY FIGURE 5-2 (8860A-1001T)	531640	89536	531640			REF
C1	CAP, ELECT, 4700 UF -10/+100%, 15V	379370	80031	3050HJ472U015	2		
C2	CAP, ELECT, 4700 UF -10/+100%, 15V	379370	80031	3050HJ472U015			REF
C3	CAP, ELECT, 470 UF -10/+25%, 35V	478792	89536	478792	2		
C4	CAP, ELECT, 470 UF -10/+25%, 35V	478792	89536	478792			REF
C6	CAP, MYLAR, FXD, 0.047 UF +/-10%, 1000V	529446	03797	1.600.047/10/1000	1		
C7	CAP, ELECT, 4700 UF -10/+100%, 100V	460261	54473	ECE-T16R4700S	1		
C8	CAP, ELECT, 1200 UF -10/+100%, 2000VDC	500322	56289	672D128H6R3DS2C	1		
C9	CAP, CER, 0.22 UF, +/-20%, 50V	519157	51406	RPE11125U224M50V	2		
C10	CAP, TA, 4.7 UF +/-20%, 25V	161943	56289	196D475X0025KA1	2		
C12	CAP, TA, 4.7 UF +/-20%, 25V	161943	56289	196D475X0025KA1			REF
C14	CAP, TA, 2.2 UF +/-20%, 20V	161927	56289	196D2225X0020HA1	1		
C16	CAP, MYLAR, 0.0047 UF +/-20%, 200V	106054	56289	152P47202	1		
C17	CAP, CERAM, 0.05 UF -20/+80%, 500V	105676	56289	33C58B	1		
C18	CAP, CER, 0.22 UF, +/-20%, 50V	519157	51406	RPE11125U224M50V			REF
CR1	DIODE, SI, HI-SPEED SWITCHING	203323	07910	1N4448	7		2
CR2	DIODE, SI, HI-SPEED SWITCHING	203323	07910	1N4448			REF
CR3	DIODE, SI, HI-SPEED SWITCHING	203323	07910	1N4448			REF
CR4	DIODE, SI, HI-SPEED SWITCHING	203323	07910	1N4448			REF
CR6	DIODE, SI	343491	04713	1N4002	5		1
CR7	DIODE, SI, HI-SPEED SWITCHING	203323	07910	1N4448			REF
CR10	DIODE, SI	343491	04713	1N4002			REF
CR11	DIODE, SI	343491	04713	1N4002			REF
CR12	DIODE, SI	343491	04713	1N4002			REF
CR13	DIODE, SI	343491	04713	1N4002			REF
CR14	RECTIFIER BRIDGE	296509	21845	F903C-22	1		1
CR15	DIODE, SI, HI-SPEED SWITCHING	203323	07910	1N4448			REF
CR16	DIODE, SI, HI-SPEED SWITCHING	203323	07910	1N4448			REF
E:	WIRE TERMINATIONS						
H1	NUT, 6-32 (NOT SHOWN)	110551	89536	110551	1		
H2	WASHER, EXT/LK #4 (NOT SHOWN)	169235	73734	1322	1		
J1	CONN, 44 CONTACT	542258	00779	1-530843-5	3		
J2	CONN, 30 CONTACT	520163	00779	1-530843-3	1		
J3	CONN, 44 CONTACT	542258	00779	1-530843-5			REF
J4	CONN, 44 CONTACT	542258	00779	1-530843-5			REF
J5	CONN, CARD-EDGE	291708	91662	6308-006-313-001	3		
J6	CONN, CARD-EDGE	291708	91662	6308-006-313-001			REF
J7	CONN, CARD-EDGE	291708	91662	6308-006-313-001			REF
J9	CONNECTOR, AC	461806	89536	461806	1		
K1	RELAY, DPDT, 4.5V	514240	89536	514240	3		
K2	RELAY, DPDT, 4.5V	514240	89536	514240			REF
K3	REED RELAY, HV, 1000VDC	520247	71707	UF-40115	1		
K4	RELAY, DPDT, 4.5V	514240	89536	514240			REF
L1	INDUCTOR 10 UH +/-10%	249078	24759	MR-10	2		
L2	INDUCTOR 10 UH +/-10%	249078	24759	MR-10			REF
MP1	CONNECTOR (FASTON TAP)	512889	02660	62395-1834	6		
MP2	HEATSINK (TO VR1, VR2 AND Q6)	428805	13103	6046P8	3		
MP3	TERMINAL (TEFLON)(NOT SHOWN)	529297	98291	011-6812-00-0-206	12		

Table 5-2. Main PCB Assembly (cont)

REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	N O T E
MP4	TERMINAL (TEFLON)(NOT SHOWN)	529305	98291	011-6811-00-0-202	4		
MP5	BUTTON, SWITCH (TO S3) GREEN	445197	89536	445197	1		
MP6	BUTTON, SWITCH (TO S1) GREY	425900	89536	425900	1		
MP8	PUSH ROD	509380	89536	509380	1		
MP9	COVER, AC SWITCH (W/S3)	475681	89536	475681	1		
Q1	XSTR, SI, PNP	195974	64713	2N3906	4	1	
Q2	XSTR, SI, PNP	195974	64713	2N3906	REF		
Q3	XSTR, SI, PNP	195974	64713	2N3906	REF		
Q4	XSTR, SI, PNP	195974	64713	2N3906	REF		
Q6	XSTR, PWR, PNP, SI	325753	09214	D45C5	1	1	
Q7	XSTR, SI, NPN	218396	89536	218396	4	1	
Q8	XSTR, SI, NPN	218396	89536	218396	REF		
Q9	XSTR, SI, NPN	218396	89536	218396	REF		
Q10	XSTR, SI, PNP	340026	07263	MPS6563	1	1	
Q11	XSTR, SI, NPN	218396	89536	218396	REF		
Q13	XSTR, J-FET, N-CHANNEL	343830	89536	343830	2	1	
Q15	XSTR, SI, NPN	218396	89536	218396	REF		
R1	RES, DEP. CAR, 2.2K +/-5%, 1/4W	343400	80031	CR251-4-5P2K2T	4		
R2	RES, DEP. CAR, 2.2K +/-5%, 1/4W	343400	80031	CR251-4-5P2K2T	REF		
R3	RES, DEP. CAR, 2.2K +/-5%, 1/4W	343400	80031	CR251-4-5P2K2T	REF		
R4	RES, DEP. CAR, 2.2K +/-5%, 1/4W	343400	80031	CR251-4-5P2K2T	REF		
R6	RES, FXD WW, 1000 +/-10%, 2W	474080	89536	474080	1		
R7	RES, MTL. FILM, 2K +/-1%, 7W	500033	89536	500033	1		
R8	RES, COMP 100K +/-5%, 2W	285056	89536	285056	2		
R9	RES, COMP 100K +/-5%, 2W	285056	89536	285056	REF		
R10	RES, MTL. FILM, 2K +/-1%, 1/2W	151266	91637	CMF552001F	2		
R11	RES, MTL. FILM, 2K +/-1%, 1/2W	235226	91637	CMF552001F	REF		
R12	RES, MTL. FILM, 10K +/-1%, 1/8W	168260	91637	CMF551002F	2		
R13	RES, MTL. FILM, 10K +/-1%, 1/8W	168260	91637	MFF1-81002F	REF		
R14	RES, DEP. CAR, 1.3K +/-5%, 1/4W	441394	80031	CR251-4-5P1K3	1		
R15	RES, DEP. CAR, 3.6K +/-5%, 1/4W	442343	80031	CR251-4-5P3K6	2		
R16	RES, DEP. CAR, 3.6K +/-5%, 1/4W	442343	80031	CR251-4-5P3K6	REF		
R18	RES, DEP. CAR, 6.2K +/-5%, 1/4W	442368	80031	CR251-4-5P6K2	5		
R19	RES, DEP. CAR, 6.2K +/-5%, 1/4W	442368	80031	CR251-4-5P6K2	REF		
R20	RES, DEP. CAR, 6.2K +/-5%, 1/4W	442368	80031	CR251-4-5P6K2	REF		
R21	RES, DEP. CAR, 6.2K +/-5%, 1/4W	442368	80031	CR251-4-5P6K2	REF		
R22	RES, DEP. CAR, 2.7K +/-5%, 1/4W	386490	80031	CR251-4-5P2K7T	3		
R23	RES, DEP. CAR, 2.7K +/-5%, 1/4W	386490	80031	CR251-4-5P2K7T	REF		
R24	RES, DEP. CAR, 2.7K +/-5%, 1/4W	386490	80031	CR251-4-5P2K7T	REF		
R25	RES, DEP. CAR, 15K +/-5%, 1/4W	348854	80031	CR251-4-5P15K	1		
R26	RES, DEP. CAR, 6.2K +/-5%, 1/4W	442368	80031	CR251-4-5P6K2	REF		
R27	RES, DEP. CAR, 2K +/-5%, 1/4W	441469	80031	CR251-4-5P2K	1		
R28	RES, DEP. CAR 220 +/-5%, 1/4W	342626	80031	CR251-4-5P220ET	1		
R29	RES, COMP, 10M +/-5%, 1/4W	194944	01121	CB1065	2		
R30	RES, COMP, 10M +/-5%, 1/4W	194944	01121	CB1065	REF		
R31	RES, DEP. CAR, 100K +/-5%, 1/4W	348920	80031	CR251-4-5P100K	1		
R32	RES, DEP. CAR, 150K +/-5%, 1/4W	348938	80031	CR251-4-5P150K	4		
R33	RES, DEP. CAR, 150K +/-5%, 1/4W	348938	80031	CR251-4-5P150K	REF		
R34	RES, DEP. CAR, 150K +/-5%, 1/4W	348938	80031	CR251-4-5P150K	REF		
R35	RES, DEP. CAR, 150K +/-5%, 1/4W	348938	80031	CR251-4-5P150K	REF		

Table 5-2. Main PCB Assembly (cont)

REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	N O T E
RT1	THERMISTER, 1K, +/-40%	494740	50157	180Q10215	1		
RV1-8	VARISTOR, 390V	423475	09214	V390MAX781	8		
S1	SWITCH, DPDT	520437	89536	520437	1		
S3	SWITCH, POWER, ON-OFF	453605	89536	453605	1		
S4	SWITCH, SLIDE, DPDT	504738	82389	11A-1437	2		
S5	SWITCH, SLIDE, DPDT	504738	82389	11A-1437	REF		
T1	TRANSFORMER, POWER	531558	89536	531558	1		
U1	IC, LIN, OP-AMP	413740	12040	LM307N	1	1	
U2	IC, LIN, QUAD, COMPARATOR	387233	12040	LM339N	2	1	
U3	NETWORK, RESISTOR	520353	89536	520353	2	1	
U4	NETWORK, RESISTOR	520353	89536	520353	REF		
U5	IC, LIN, QUAD, COMPARATOR	387233	12040	LM339N	REF		
U6	IC, MICROCOMPUTER	504563	89536	504563	1	1	
U7	IC, PHOTOTRANSISTOR, OPTICALLY COUPLED	504977	29083	MCT2E	4	1	
U8	IC, PHOTOTRANSISTOR, OPTICALLY COUPLED	504977	29083	MCT2E	REF		
U9	IC, PHOTOTRANSISTOR, OPTICALLY COUPLED	504977	29083	MCT2E	REF		
U10	IC, PHOTOTRANSISTOR, OPTICALLY COUPLED	504977	29083	MCT2E	REF		
VR1	VOLTAGE REGULATOR, LIN, FXD	428847	04713	MC805TP	1	1	
VR2	VOLTAGE REGULATOR, LIN, RCD	413187	04713	MC7815CT	1	1	
VR3	VOLTAGE REGULATOR, 3-TERMINAL	538108	89536	538108	1	1	
W1-W24	JUMPER WIRE (NOT SHOWN)				3		
XK1	SOCKET RELAY	376665	77342	27E501	REF		
XK2	SOCKET RELAY	376665	77342	27E501	REF		
XK4	SOCKET RELAY	376665	77342	27E501	REF		
XU6	SOCKET, IC, 40-PIN	429282	09922	DILB40P-108	1		
Y1	CRYSTAL 4 MHZ, QUARTZ	474072	89536	474072	1	1	

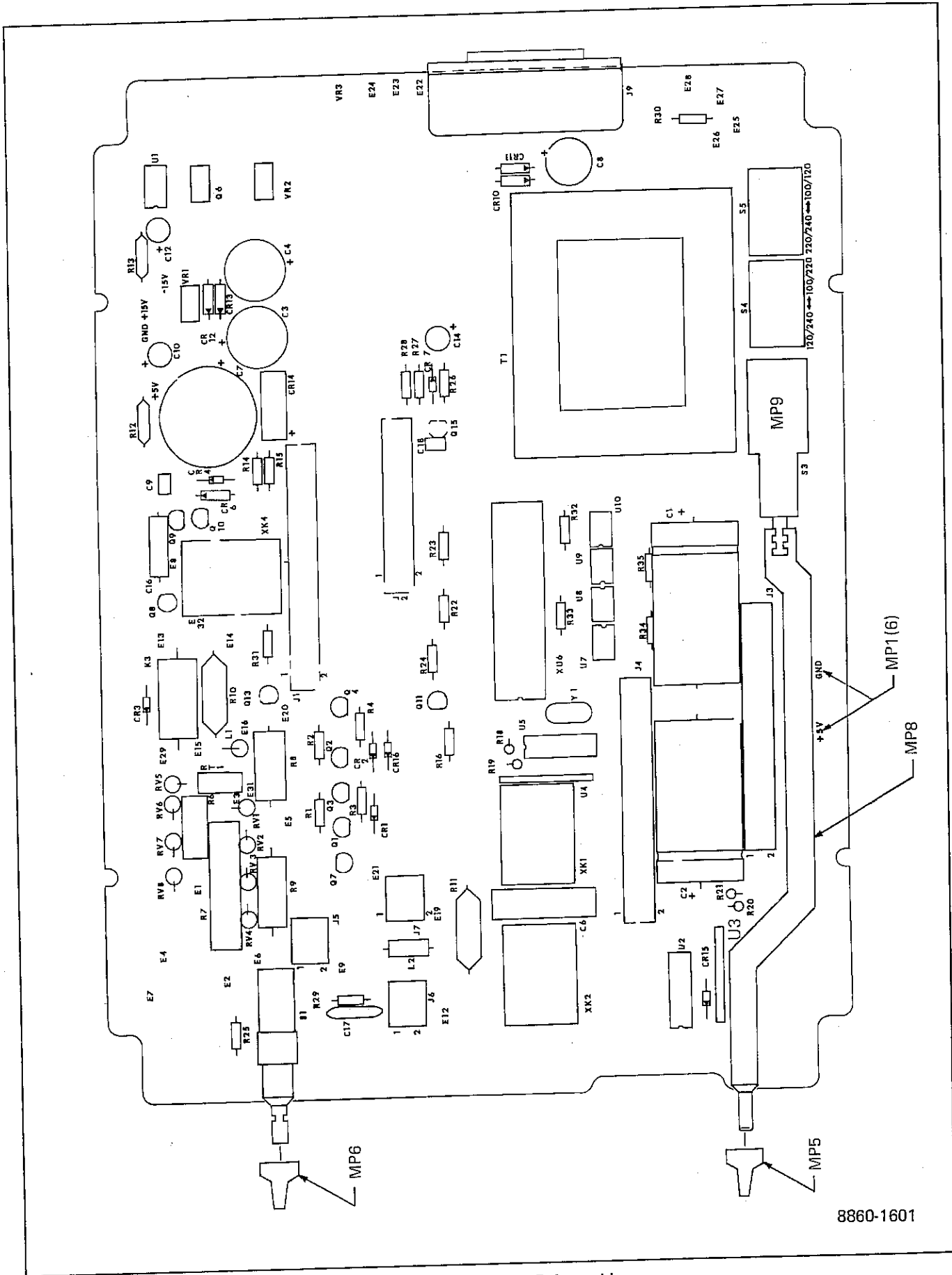


Figure 5-2. A1 Main PCB Assembly

8860-1601

Table 5-3. Display PCB Assembly

REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	NOTE
A2	DISPLAY PCB ASSEMBLY FIGURE 5-3 (8860A-1002T)	502708	89536	502708	REF		
C1	CAP, TA, 1UF, +/-20%, 35V	161919	56289	196D105X0020JA1	3		
C2	CAP, TA, 1UF, +/-20%, 35V	161919	56289	196D105X0020JA1	REF		
C3	CAP, TA, 1UF, +/-20%, 35V	161919	56289	196D105X0020JA1	REF		
CR1	DIODE, HI-SPEED SWITCHING	203323	07910	1N4448	8	2	
CR2	DIODE, HI-SPEED SWITCHING	203323	07910	1N4448	REF		
CR3	DIODE, HI-SPEED SWITCHING	203323	07910	1N4448	REF		
CR4	DIODE, HI-SPEED SWITCHING	203323	07910	1N4448	REF		
CR5	DIODE, HI-SPEED SWITCHING	203323	07910	1N4448	REF		
CR6	DIODE, HI-SPEED SWITCHING	203323	07910	1N4448	REF		
CR7	DIODE, HI-SPEED SWITCHING	203323	07910	1N4448	REF		
CR8	DIODE, HI-SPEED SWITCHING	203323	07910	1N4448	REF		
DS1	DISPLAY, LED	504787	89536	504787	1	1	
DS2	DISPLAY, LED, 7-SEGMENT	418012	28480	5082-7651	5	1	
DS3	DISPLAY, LED, 7-SEGMENT	418012	28480	5082-7651	REF		
DS4	DISPLAY, LED, 7-SEGMENT	418012	28480	5082-7651	REF		
DS5	DISPLAY, LED, 7-SEGMENT	418012	28480	5082-7651	REF		
DS6	DISPLAY, LED, 7-SEGMENT	418012	28480	5082-7651	REF		
DS7	DISPLAY, LED	495457	28480	QDSP3507	1		
DS8	DISPLAY, LED	504779	89536	504779	1		
DS9	DISPLAY, LED	504779	89536	504779	REF		
DS10-22	DISPLAY, LED	504753	28480	HLMP-1301	16	4	
DS23	LIGHT EMITTING DIODE	504761	14936	MV57124	5	1	
DS24	LIGHT EMITTING DIODE	504761	14936	MV57124	REF		
DS25	LIGHT EMITTING DIODE	504761	14936	MV57124	REF		
DS26	DISPLAY, LED	504753	28480	HLMP-1301	REF		
DS27	LIGHT EMITTING DIODE	504761	14936	MV57124	REF		
DS28	LIGHT EMITTING DIODE	504761	14936	MV57124	REF		
DS29	DISPLAY, LED	504753	28480	HLMP-1301	REF		
DS30	DISPLAY, LED	504753	28480	HLMP-1301	REF		
J1	RECEPTACLE	520189	01295	H421121-18	1		
MP1	KEYBOARD, FRONT PANEL (NOT SHOWN)	504886	89536	504886	1		
MP2	SOCKET, COMPONENT LEAD (NOT SHOWN)	376418	22526	75060-007	42		
Q1	XSTR, SI, PNP, SM. SIG	418707	04713	MPS56562	8	2	
Q2	XSTR, SI, PNP, SM. SIG	418707	04713	MPS56562	REF		
Q3	XSTR, SI, PNP, SM. SIG	418707	04713	MPS56562	REF		
Q4	XSTR, SI, PNP, SM. SIG	418707	04713	MPS56562	REF		
Q5	XSTR, SI, PNP, SM. SIG	418707	04713	MPS56562	REF		
Q6	XSTR, SI, PNP, SM. SIG	418707	04713	MPS56562	REF		
Q7	XSTR, SI, PNP, SM. SIG	418707	04713	MPS56562	REF		
Q8	XSTR, SI, PNP, SM. SIG	418707	04713	MPS56562	REF		
U1	IC, 4-LINE TO 10-LINE DECODER	408716	01295	SN74LS42N	1	1	
U2	RESISTOR NETWORK, 270 OHMS	501239	89536	501239	1	1	

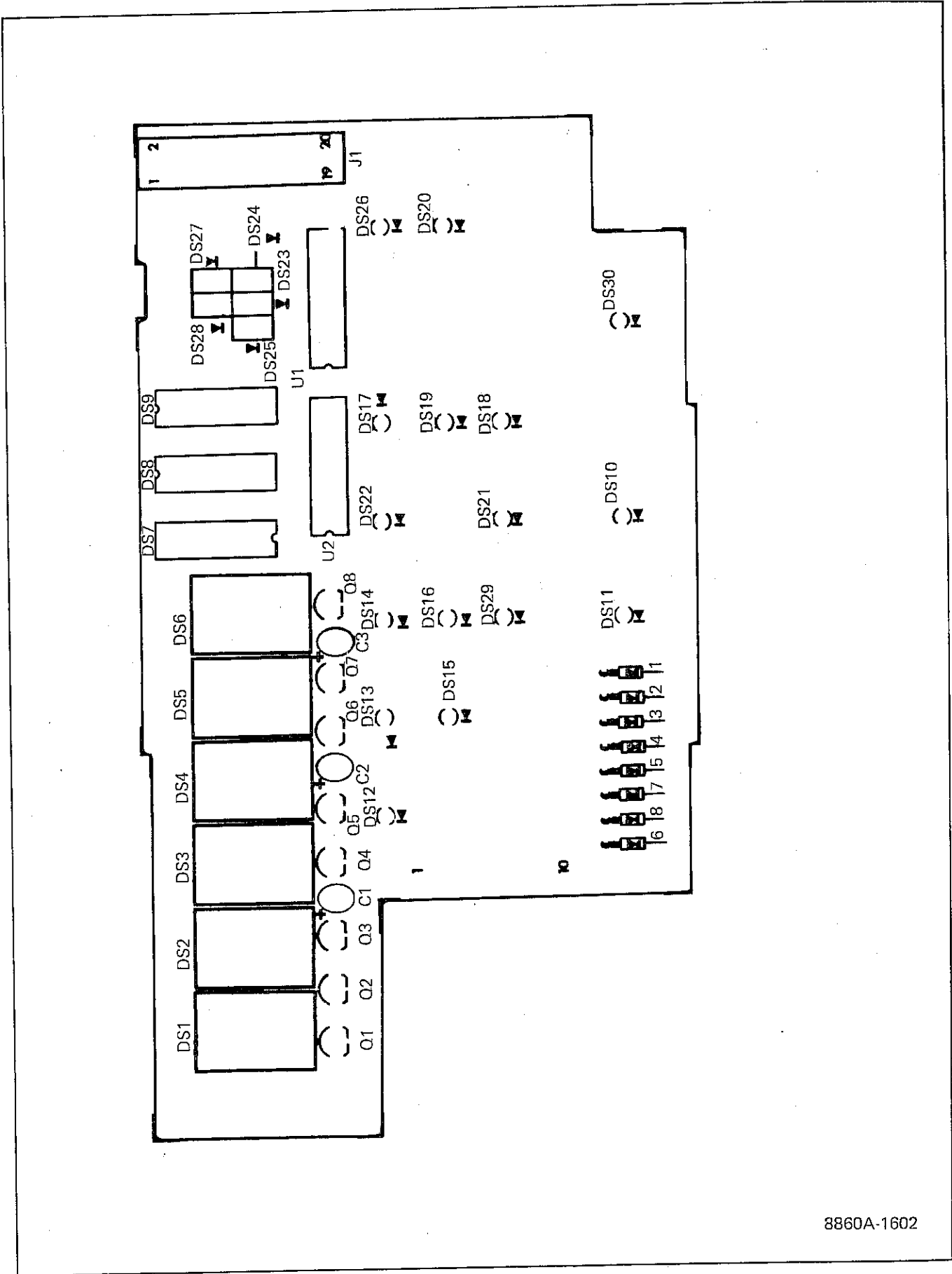
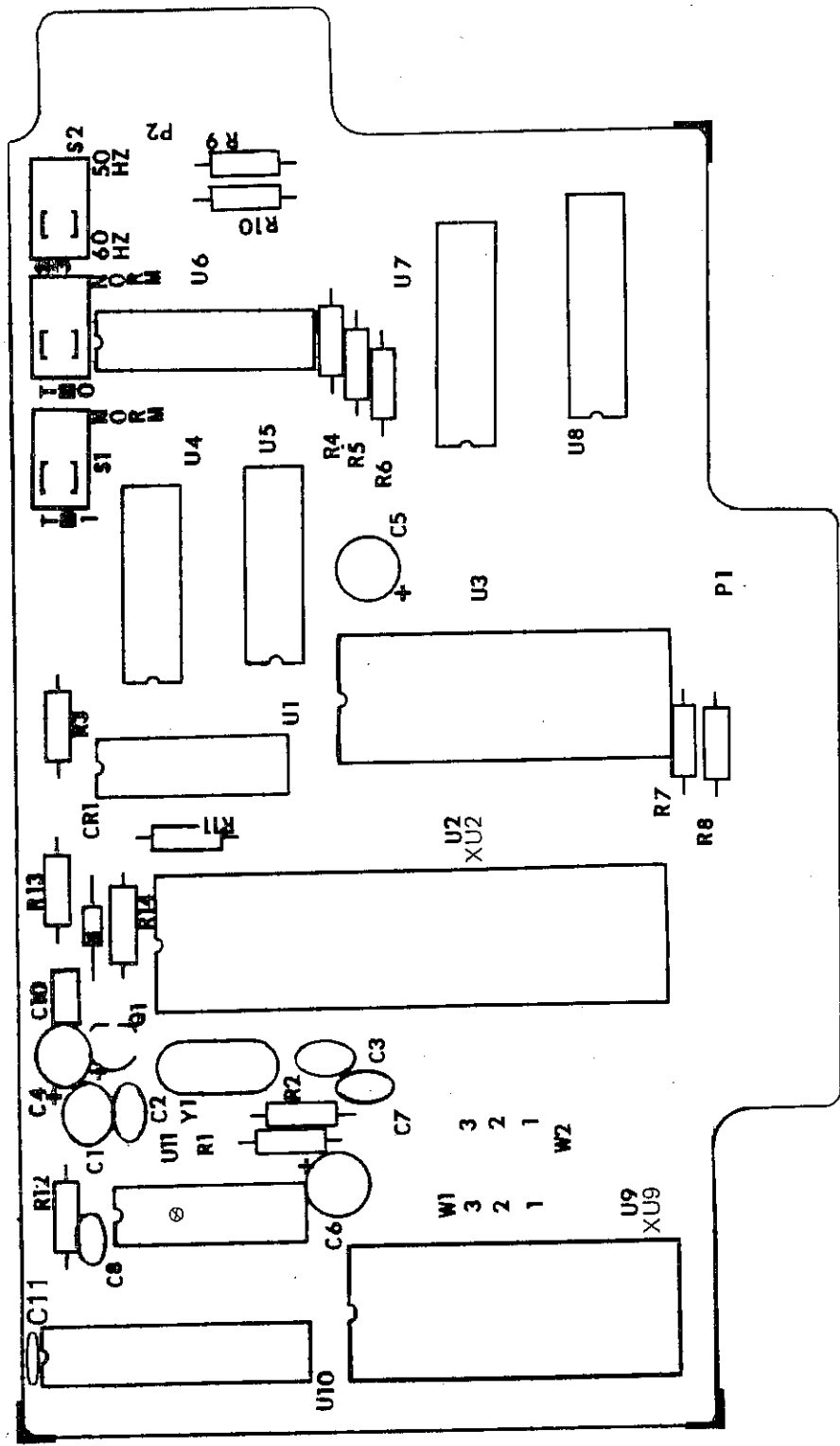



Figure 5-3. A2 Display PCB Assembly

8860A-1602

Table 5-4. A3 Controller PCB Assembly

REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	NOTE
A3	⊗ CONTROLLER PCB ASSEMBLY FIGURE 5-4 (8860A-4003T)	502716	89536	502716	REF		
C1	CAP, TA, 1UF, +/-20%, 35V	161919	56289	196D105X0020JA1	4		
C2	CAP, CERAM, 20 PF +/-10%	106369	56289	561CT2HBA102AE200K	2		
C3	CAP, CERAM, 20 PF +/-10%	106369	56289	561CT2HBA102AE200K	REF		
C4	CAP, CERAM, 0.22 UF +/-20%, 50V	519157	51406	RPE111Z5U224M50V	5		
C5	CAP, CERAM, 0.22 UF +/-20%, 50V	519157	51406	RPE111Z5U224M50V	REF		
C6	CAP, CERAM, 0.22 UF +/-20%, 50V	519157	51406	RPE111Z5U224M50V	REF		
C7	CAP, CERAM, 20 PF +/-10%, 500V	357806	71590	CF-102	1		
C8	CAP, CERAM, .05 UF +/-20%, 50V	149161	56289	55C23A1	1		
C10	CAP, CERAM, 0.22 UF +/-20%, 50V	519157	51406	RPE111Z5U224M50V	REF		
C11	CAP, CERAM, 0.22 UF +/-20%, 50V	519157	51406	RPE111Z5U224M50V	REF		
CR1	DIODE, SI, HI-SPEED SWITCHING	203323	07910	1N4448	1	1	
P1	BOARD CONNECTION CIRCUIT						
P2	BOARD CONNECTION CIRCUIT				1	1	
Q1	XSTR, SI, NPN	218396	07263	2N3904	2		
R1	RES, DEP. CAR, 10K +/-5%, 1/4W	348839	80031	CR251-4-5P10K	REF		
R2	RES, DEP. CAR, 10K +/-5%, 1/4W	348839	80031	CR251-4-5P10K	2		
R3	RES, DEP. CAR, 33K +/-5%, 1/4W	348888	80031	CR251-4-5P33K			
R4	RES, DEP. CAR, 51 +/-5%, 1/4W	414540	80031	CR251-4-5P51E	3		
R5	RES, DEP. CAR, 51 +/-5%, 1/4W	414540	80031	CR251-4-5P51E	REF		
R6	RES, DEP. CAR, 51 +/-5%, 1/4W	414540	80031	CR251-4-5P51E	REF		
R7	RES, DEP. CAR, 6.2K +/-5%, 1/4W	442368	80031	CR251-4-5P6K2	4		
R8	RES, DEP. CAR, 6.2K +/-5%, 1/4W	442368	80031	CR251-4-5P6K2	REF		
R9	RES, DEP. CAR, 6.2K +/-5%, 1/4W	442368	80031	CR251-4-5P6K2	REF		
R10	RES, DEP. CAR, 6.2K +/-5%, 1/4W	442368	80031	CR251-4-5P6K2	REF		
R11	RES, DEP. CAR, 33K +/-5%, 1/4W	348888	80031	CR251-4-5P33K	REF		
R12	RES, DEP. CAR, 300K +/-5%, 1/4W	441535	80031	CR251-4-5P300K	1		
R13	RES, DEP. CAR, FXD, 2K +/-5%, 1/4W	441469	80031	CR251-4-5P2K	1		
R14	RES, DEP. CAR, 220 +/-5%, 1/4W	342626	80031	CR251-4-5P220E	1		
S1	SWITCH, SLIDE	477984	79727	GS-115	3	1	
S2	SWITCH, SLIDE	477984	79727	GS-115	REF		
S3	SWITCH, SLIDE	477984	79727	GS-115	REF		
U1	IC, C-MOS, DUAL D F/F	340117	02735	CD4013AE	1	1	
U2	IC, MICRO PROCESSOR	524827	89536	524827	1	1	
U3	IC, N-MOS, INPUT OUTPUT EXPANDER	507293	34649	P8243	1	1	
U4	IC, TTL, DIGITAL, COLLECTOR	328021	01295	SN7417N	2	1	
U5	IC, TTL, DIGITAL, COLLECTOR	328021	01295	SN7417N	REF		
U6	RESISTOR NETWORK, 82 OHMS	478859	89536	478859	1	1	
U7	IC, C-MOS, HEX BUFF/INVERTER	381830	02735	CD650AE	1	1	
U8	RESISTOR NETWORK	501494	89536	501494	1	1	
U9	IC, 4K X 8 BIT	525048	89536	525048	1	1	
U10	IC, TTL, DIGITAL	504514	01295	SN74LS373	1	1	
U11	⊗ IC, C-MOS, MONO/ASTABLE MLTVBRTR	535575	12040	CD4047E	1	1	
XU2	SOCKET, IC, 40-PIN	429282	09922	DILB40P-108	1		
XU9	SOCKET, IC, 24-PIN	418970	91506	324-AG39D	1		
Y1	CRYSTAL, 6 MHZ +/-0.015%	461665	89536	461665	1	1	




CAUTION
 SUBJECT TO DAMAGE BY
 STATIC ELECTRICITY

8860A-1603

Figure 5-4. A3 Controller PCB Assembly

Table 5-5. A4 AC/DC Scaling PCB Assembly

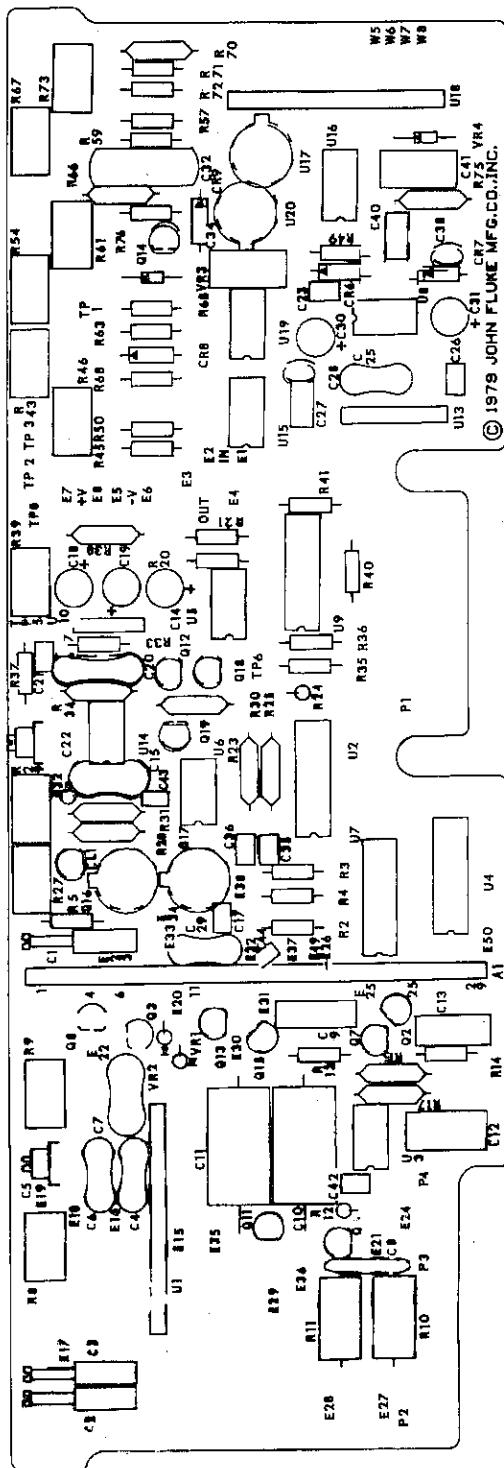
REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	N O T E
A4	AC/DC SCALING PCB ASSEMBLY FIGURE 5-5 (8860A-4004T)	526665	89536	526665	REF		
A4A1	CIRCUIT, HYBRID, AC/DC	496349	89536	496349	1	1	
C1	CAP, VAR, .25 - 1.5 PF, 2000VDC	435016	72082	530-006	3		
C2	CAP, VAR, .25 - 1.5 PF, 2000VDC	435016	72082	530-006	REF		
C3	CAP, VAR, .25 - 1.5 PF, 2000VDC	435016	72082	530-006	REF		
C4	CAP, MICA, 270 PF, +/-5%, 500V	148452	72136	DM15F271J	1		
C5	CAP, VAR, 1.7 - 10 PF, 250V	375238	56289	GKC10000	2		
C6	CAP, MICA, 27 PF, +/-5%, 500V	177998	72136	DM15E270J	1		
C7	CAP, MICA, 330 PF, +/-5%, 500V	148445	72136	DM15E331J	2		
C8	CAP, CERAM, 68 PF	519181	71590	DD-3R3	1		
C9	CAP, POLYPROP, .033 UF	519850	52763	MKP-1840/1841	1		
C10	CAP, POLYPROP, .22 UF +/-10%, 50V	423210	89536	423210	2		
C11	CAP, POLYPROP, .22 UF +/-10%, 50V	423210	89536	423210	REF		
C12	CAP, MYLAR, .22 UF +/-10%, 100V	436113	73445	C280MAH/A220K	2		
C13	CAP, MYLAR, .047 UF +/-10%, 250V	162008	73445	C280MAE/A47K	1		
C14	CAP, TA, 4.7 UF +/-20%, 25V	161943	56289	196D685X9035KA1	5		
C15	CAP, MICA, 100 PF +/-5%, 500V	148494	72136	DM15F101J	1		
C17	CAP, CERAM, 33PF +/-5%, 100V	354852	80031	2222-638-10339	1		
C18	CAP, TA, 4.7 UF +/-20%, 25V	161943	56289	196D685X9035KA1	REF		
C19	CAP, TA, 4.7 UF +/-20%, 25V	161943	56289	196D685X9035KA1	REF		
C20	CAP, MICA, 680 PF	148403	02799	DM15F101J	1		
C21	CAP, CERAM, 4.7 UF +/-0.25%, 100V	362731	89536	362731	3		
C22	CAP, VAR, 1.7 - 10 PF, 250V	375238	56289	GKC10000	REF		
C23	CAP, CERAM, 2.2 PF +/-0.25%, 100V	362731	89536	362731	REF		
C25	CAP, MICA, 150 PF +/-5%, 500V	148478	72136	DM15F151J	1		
C26	CAP, CERAM, 2.2 PF +/-0.25%, 100V	362731	89536	362731	REF		
C27	CAP, CERAM, .22 UF +/-20%, 50V	309849	71590	CW30C224K	1		
C28	CAP, CERAM, .01 UF +/-20%, 100V	149153	56289	C0238101F103M	2		
C29	CAP, MICA, 330 PF, +/-5%, 500V	148445	72136	DM15E331J	REF		
C30	CAP, TA, 4.7 UF +/-20%, 25V	161943	56289	196D685X9035KA1	REF		
C31	CAP, TA, 4.7 UF +/-20%, 25V	161943	56289	196D685X9035KA1	REF		
C32	CAP, POLY, .47 UF +/-10%, 100V	446807	89536	446807	1		
C34	CAP, POLY, .22 UF +/-10%, 100V	614172	73445	C280MCH/A220K	1		
C35	CAP, CERAM, 22 PF +/-5%, 100V	448449	80031	2222-638-10229	2		
C36	CAP, CERAM, 22 PF +/-5%, 100V	448449	80031	2222-638-10229	REF		
C38	CAP, CERAM, .01 UF +/-20%, 100V	149153	56289	C0238101F103M	REF		
C40	CAP, CERAM, 1.0 PF	436477	80031	2222-638-03108	1		
C41	CAP, MYLAR, .22 UF +/-10%, 100V	436113	73445	C280MAH/A220K	REF		
C42	CAP, CERAM, 4700 PF	362871	72982	8121-A100-W5R-472M	1		
C43	CAP, CERAM, 22 PF +/-5%, 100V	448449	80031	2222-638-10229	REF		
C44	CAP, CERAM, .68 PF +/-1%, 100V	485011	89536	485011	1		
CL1	DIODE, FED, CURRENT REG.	393454	07910	TCR5290	1	1	
CR6	DIODE, LOW-LEAK, LO-CAP	375907	07263	FD7222	4	1	
CR7	DIODE, LOW-LEAK, LO-CAP	375907	07263	FD7222	REF		
CR8	DIODE, LOW-LEAK, LO-CAP	375907	07263	FD7222	REF		
CR9	DIODE, LOW-LEAK, LO-CAP	375907	07263	FD7222	REF		
E1-E49	(SEE INSERT A, WIRE LIST)						
H1	SCREW, FHP, S/S, 6-32 X 1/4 (ON SHIELD)	385401	89536	385401	3		

Table 5-5. A4 AC/DC Scaling PCB Assembly (cont)

REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	NO TE
MP1	SHIELD, AC/DC (NOT SHOWN)	502591	89536	502591	1		
MP2	SUPPORT, RES. NETWORK (ON SHIELD)	531046	89536	531046	1		
MP3	TERMINAL, FEED-THRU/TEFLON	529305	98291	011-6811-00-0-202	14		
MP4	TERMINAL, FEED-THRU/TEFLON	529297	98291	011-6812-00-0-206	9		
MP5	HEATSINK (WITH U17, U20)	354993	98978	TXC20CB	2		
Q2	XSTR, J-FET, N-CHAN	343830	89536	343830	5		2
Q3	XSTR, J-FET, N-CHAN	535039	89536	535039	1		1
Q6	XSTR, J-FET, N-CHAN	343830	89536	343830		REF	
Q7	XSTR, J-FET, N-CHAN	343830	89536	343830		REF	
Q8	XSTR, J-FET, N-CHAN	508697	21845	FS933	1		1
Q11	XSTR, J-FET, N-CHAN	429977	21845	F2811	1		1
Q12	XSTR, FET, N-CHAN	261578	89536	261578	3		1
Q13	XSTR, J-FET, N-CHAN	343830	89536	343830		REF	
Q14	XSTR, SI, PNP	229898	04713	MPS6522	1		1
Q15	XSTR, J-FET, N-CHAN	343830	89536	343830		REF	
Q16	XSTR, DUAL FET, N-CHAN	419283	89536	419283	1		1
Q17	XSTR, DUAL FET, N-CHAN	578799	89536	578799	1		1
Q18	XSTR, FET, N-CHAN	261578	89536	261578		REF	
Q19	XSTR, FET, N-CHAN	386730	12040	SF-1102	1		1
R2	RES, DEP. CAR, 47K +/-5%, 1/4W	348896	80031	CR251-4-5P47K	6		
R3	RES, DEP. CAR, 47K +/-5%, 1/4W	348896	80031	CR251-4-5P47K		REF	
R4	RES, DEP. CAR, 47K +/-5%, 1/4W	348896	80031	CR251-4-5P47K		REF	
R5	RES, DEP. CAR, 22K +/-5%, 1/4W	348870	80031	CR251-4-5P22K	1		
R8	RES, VAR. CERMET, 200 +/-10%, 1/2W	285148	89536	285148	3		
R9	RES, VAR. CERMET, 200 +/-10%, 1/2W	285148	89536	285148		REF	
R10	RES, COMP, 47K +/-5%, 1/4W	150219	01121	CB4735	2		
R11	RES, COMP, 47K +/-5%, 1/4W	150219	01121	CB4735		REF	
R12	RES, DEP. CAR, 100K +/-5%, 1/4W	348920	80031	CR251-4-5P100K	3		
R13	RES, DEP. CAR, 10K +/-5%, 1/4W	348839	80031	CR251-4-5P10K	3		
R14	RES, DEP. CAR, 10K +/-5%, 1/4W	348839	80031	CR251-4-5P10K		REF	
R15	RES, MTL FILM, 100K +/-1%, 1/8W	248807	91637	MFF1-81003F	2		
R17	RES, MTL FILM, 100K +/-1%, 1/8W	248807	91637	MFF1-81003F		REF	
R20	RES, DEP. CAR, 3.3K +/-5%, 1/4W	348813	80031	CR251-4-5P3K3	2		
R21	RES, DEP. CAR, 3.3K +/-5%, 1/4W	348813	80031	CR251-4-5P3K3		REF	
R23	RES, MTL FILM, 10K +/-1%, 1/8W	168260	91637	MFF1-81002F	2		
R24	RES, DEP. CAR, 4.3K +/-5%, 1/4W	441576	80031	CR251-4-5P4K3	1		
R25	RES, MTL FILM, 10K +/-1%, 1/8W	168260	91637	MFF1-81002F		REF	
R27	RES, VAR. 50 +/-10%, 1/2W	285122	89536	285122	1		
R28	RES, MTL FILM, 3.83K +/-1%, 1/8W	260323	91637	CMF553831F	1		
R29	RES, VAR. 2K +/-10%, 1/2W	285163	89536	285163	1		
R30	RES, MTL FILM, 3.65K +/-1%, 1/8W	168252	91637	CMF553651F	1		
R31	RES, MTL FILM, 392 +/-1%, 1/8W	260299	91637	MFF1-83920F	1		
R32	RES, DEP. CAR, 7.5K +/-5%, 1/4W	441667	80031	CR251-4-5P7K5	1		
R33	RES, DEP. CAR, 47K +/-5%, 1/4W	348896	80031	CR251-4-5P47K		REF	
R34	RES, MTL FILM, 3.57K +/-1%, 1/8W	226217	91637	MFF1-83571F	1		
R35	RES, DEP. CAR, 47K +/-5%, 1/4W	348896	80031	CR251-4-5P47K		REF	
R36	RES, DEP. CAR, 47K +/-5%, 1/4W	348896	80031	CR251-4-5P47K		REF	
R37	RES, DEP. CAR, 100 +/-5%, 1/4W	348771	80031	CR251-4-5P100E	1		
R38	RES, MTL FILM, 143K +/-1%, 1/8W	291336	91637	MFF1-81433F	1		
R39	RES, VAR. CERMET, 50K +/-10%, 1/2W	288290	89536	288290	1		

Table 5-5. A4 AC/DC Scaling PCB Assembly (cont)

REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	NO TE
R40	RES, DEP. CAR, 4.7K +/-5%, 1/4W	348821	80031	CR251-4-5P4K7	3		
R41	RES, DEP. CAR, 4.7K +/-5%, 1/4W	348821	80031	CR251-4-5P4K7	REF		
R43	RES, VAR. CERMET, 100 +/-10%, 1/2W	285130	89536	285130	1		
R45	RES, COMP, 22M +/-5%, 1/4W	221986	01121	CB2265	1		
R46	RES, VAR. CERMET, 100K +/-10%, 1/4W	288308	89536	288308	2		
R49	RES, DEP. CAR, 43K +/-5%, 1/4W	442418	80031	CR251-4-5P43K	2		
R50	RES, DEP. CAR, 43K +/-5%, 1/4W	442418	80031	CR251-4-5P43K	REF		
R54	RES, VAR. CERMET, 25K +/-10%, 1/2W	289678	89536	289678	1		
R57	RES, DEP. CAR, 100K +/-5%, 1/4W	348920	80031	CR251-4-5P100K	REF		
R59	RES, DEP. CAR, 100K +/-5%, 1/4W	348920	80031	CR251-4-5P100K	REF		
R61	RES, VAR. CERMET, 10K +/-10%, 1/2W	285171	89536	285171	1		
R63	RES, DEP. CAR, 6.2K +/-5%, 1/4W	442368	80031	CR251-4-5P6K2	1		
R64	RES, DEP. CAR, 1 +/-5%, 1/4W	357665	80031	CR251-4-5P1E	1		
R65	RES, DEP. CAR, 10K +/-5%, 1/4W	348839	80031	CR251-4-5P10K	REF		
R66	RES, MTL FILM, 1K +/-1%, 1/8W	320333	91637	CMF551001F	1		
R67	RES, VAR. CERMET, 200 +/-10%, 1/2W	285148	89536	285148	REF		
R68	RES, DEP. CAR, 120K +/-5%, 1/4W	441386	80031	CR251-4-5P120K	1		
R70	RES, MTL FILM, 402K +/-1%, 1/8W	217984	91637	MFF1-84023F	1		
R71	RES, COMP, 2.7M +/-5%, 1/4W	193490	01121	CB2755	1		
R72	RES, DEP. CAR, 1.8K +/-5%, 1/4W	441444	80031	CR251-4-5P1K8	1		
R73	RES, VAR. CERMET, 100K +/-10%, 1/4W	288308	89536	288308	REF		
R75	RES, MTL FILM, 715 +/-1%, 1/8W	313080	91637	CMF557150F	1		
R76	RES, DEP. CAR, 4.7K +/-5%, 1/4W	348821	80031	CR251-4-5P4K7	REF		
1	RES. NETWORK, INPUT DIVIDER	510636	89536	510636	1		1
02	IC, LIN, QUAD, COMPARATOR	387233	12040	LM339N <i>ECG 834</i>	4		1
U3	IC, LIN, OP-AMP	478107	12040	LM308A	1		1
U4	IC, LIN, QUAD, COMPARATOR	387233	12040	LM339N	REF		
U5	IC, OP-AMP, J-FET INPUT	418780	12040	LF351	1		1
U6	IC, LIN, J-FET INPUT, DUAL OP-AMP	495192	12040	LF353BN	1		1
U7	IC, LIN, QUAD, COMPARATOR	387233	12040	LM339N	REF		
U8	IC, LIN, OP-AMP, J-FET INPUT	535856	01295	TL081ACL	1		1
U9	IC, LIN, QUAD, COMPARATOR	387233	12040	LM339N	REF		
U10	RES. NETWORK, OUTPUT DIVIDER	511196	89536	511196	1		1
U13	RESISTOR NETWORK	520387	89536	520387	1		1
U14	IC, LIN, OP-AMP	495051	18324	NE5534N	1		1
U15	IC, LIN, OP-AMP, PROGRAMMABLE, 8 PIN DIP	418913	12040	LM4250CN	1		1
U16	IC, OP-AMP, MONO, J-FET INPUT	524033	12040	LF356H	1		1
U17	IC, XSTR ARRAY	504191	89536	504191	2		1
U18	RES. NETWORK, RMS	511147	89536	511147	1		1
U19	IC, LIN, SELECTED	473777	89536	473777	1		1
U20	IC, XSTR ARRAY	504191	89536	504191	REF		
VR1	DIODE, ZENER, 6.2V +/-5%	325811	04713	1N753A	2		1
VR2	DIODE, ZENER, 6.2V +/-5%	325811	04713	1N753A	REF		
VR3	DIODE, ZENER, 9.1V +/-5%	386557	04713	1N960B	2		1
VR4	DIODE, ZENER, 9.1V +/-5%	386557	04713	1N960B	REF		
W1-W25	WIRE, JUMPER AND HOOK-UP (SEE INSERT A, WIRE TERMINATIONS Figure 5-5)						



WIRE TERMINATIONS

WIRE LIST		
NO.	FROM	TO
W22	E33	E34
W23	E35	E36
W24	E37	E38
W25	E49	E50

WIRE LIST		
NO.	FROM	TO
W15	E22	E23
W16	E24	E25
W17	E25	E26
W18	E27	E28
W19	E29	E30
W20	E31	E32
W21	E32	E33

WIRE LIST		
NO.	FROM	TO
W8	E13	E14
W9	E15	E16
W10	E17	E18
W11	E16	E18
W12	E18	E19
W13	E19	E20
W14	E21	E22

WIRE LIST		
NO.	FROM	TO
W1	E1	E2
W2	E3	E4
W3	E5	E6
W4	E7	E8
W5	E10	E11
W6	E11	E12
W7	E12	E13

INSERT "A"

Figure 5-5. A4 AC/DC Scaling PCB Assembly

Table 5-6. A/D And Ohms Converter PCB Assembly

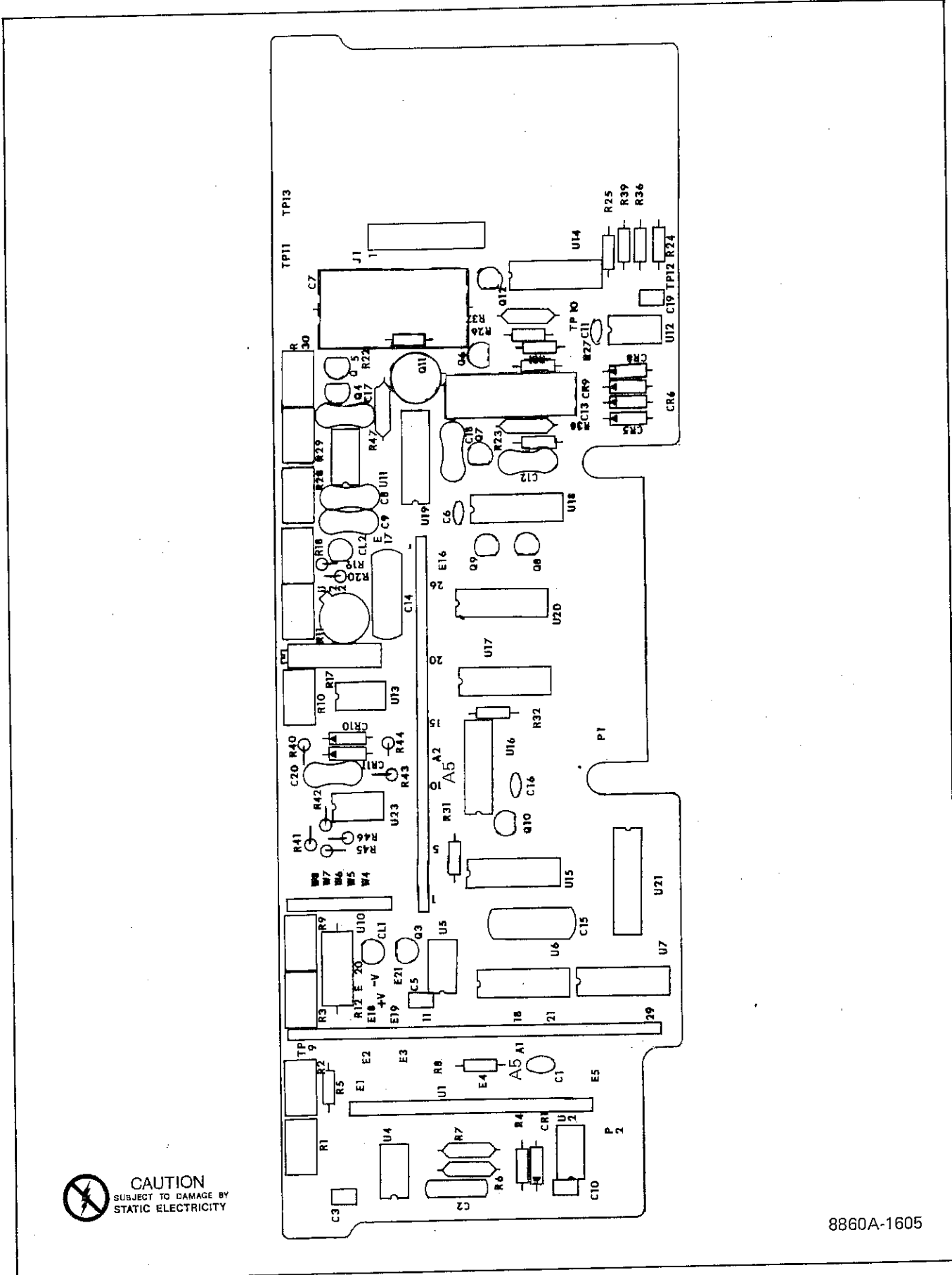
REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	NOTE
A5	⊗ A/D AND OHMS CONVERTER PCB ASSEMBLY FIGURE 5-6 (8860A-4005T)	526673	89536	526673	REF		
A5A1	IC, OHMS RANGE HYBRID	496356	89536	496356	1	1	
A5A2	IC, A-D SWITCHING HYBRID	496364	89536	496364	1	1	
C1	CAP, CERAM, .05 UF +/-20%, 50V	175232	56289	C023B101H253M	3		
C2	CAP, FXD, .01 UF +/-20%, 400V	402818	72445	C280MAF/A10K	1		
C3	CAP, CERAM, 33 PF +/-2%, 100V	354852	80031	2222-638-10339	4		
C5	CAP, CERAM, 33 PF +/-2%, 100V	354852	80031	2222-638-10339	REF		
C6	CAP, CERAM, .005 UF +/-20%, 50V	175232	56289	C023B101E502M	REF		
C7	CAP, POLYPRO, 0.47 UF +/-5%, 50V	364042	84411	JF78B	1		
C8	CAP, MICA, 150 PF +/-5%, 500V	148478	02799	DM150F101J	2		
C9	CAP, MICA, 150 PF +/-5%, 500V	148478	02799	DM150F101J	REF		
C10	CAP, CERAM, 33 PF +/-2%, 100V	354852	80031	2222-638-10339	REF		
C11	CAP, CERAM, .005 UF +/-20%, 50V	175232	56289	C023B101E502M	REF		
C12	CAP, MICA, 430 PF +/-5%, 500V	177980	02799	DM430F101J	1		
C13	CAP, POL. CAR, 2.2 UF +/-10%, 100V	306522	80031	C280MC	1		
C14	CAP, FXD, 1MF +/-10%, 100V	447847	73445	C280MAH/A1M	2		
C15	CAP, FXD, 1MF +/-10%, 100V	447847	73445	C280MAH/A1M	REF		
C16	CAP, CERAM, 100 PF +/-2%, 100V	369173	80031	2222-638-1010	1		
C17	CAP, MICA, 2 PF +/-10%, 500V	175208	02799	DM02C101D	1		
C18	CAP, MICA, 8 PF +/-10%, 500V	216986	02799	DM08C101K	1		
C19	CAP, CERAM, 33 PF +/-2%, 100V	354852	80031	2222-638-10339	REF		
C20	CAP, MICA, 270 PF +/-5%, 500V	148452	02799	DM270F101J	1		
CL1	DIO, (FED) 0.47 NOM., 400 MW	393454	07910	TCR5290	2	1	
CL2	DIO, (FED) 0.47 NOM., 400 MW	393454	07910	TCR5290	REF		
CR1	DIO, SI, LO-CAP/LO-LEAK	375907	07263	FD7223	7	2	
CR5	DIO, SI, LO-CAP/LO-LEAK	375907	07263	FD7223	REF		
CR6	DIO, SI, LO-CAP/LO-LEAK	375907	07263	FD7223	REF		
CR8	DIO, SI, LO-CAP/LO-LEAK	375907	07263	FD7223	REF		
CR9	DIO, SI, LO-CAP/LO-LEAK	375907	07263	FD7223	REF		
CR10	DIO, SI, LO-CAP/LO-LEAK	375907	07263	FD7223	REF		
CR11	DIO, SI, LO-CAP/LO-LEAK	375907	07263	FD7223	REF		
E	JUMPER WIRE CONNECTIONS						
J1	CONN, HEADER	519751	89536	519751	1		
MP1	SOCKET, COMPONENT LEAD (NOT SHOWN)	376418	22526	75060-007	4		
MP2	TRANSISTOR PAD, SPACER (NOT SHOWN)	152207	07047	10123-DAP	1		
Q3	XSTR, J-FET, N-CHAN	343830	89536	343830	6	2	
Q4	XSTR, FET	429977	89536	429977	2	1	
Q5	XSTR, FET	429977	89536	429977	REF		
Q6	XSTR, J-FET, N-CHAN	343830	89536	343830	REF		
Q7	XSTR, J-FET, N-CHAN	343830	89536	343830	REF		
Q8	XSTR, J-FET, N-CHAN	343830	89536	343830	REF		
Q9	XSTR, J-FET, N-CHAN	343830	89536	343830	REF		
Q10	XSTR, J-FET, N-CHAN	343830	89536	343830	REF		
Q11	XSTR, J-FET, N-CHAN	419283	32293	ITS3079	1	1	
Q12	XSTR, NPN	218396	89536	218396	1	1	
R1	RES, VAR, SIDE-ADJUST, 20K	291609	75378	360S-203AZ	1		
R2	RES, VAR, 2K +/-10%	285163	75378	360T-202AZ	1		
R3	RES, VAR, 200 +/-10%	285148	75378	360T-200AZ	3		


Table 5-6. A/D And Ohms Converter PCB Assembly (cont)

REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	NO TE
R4	RES, COMP, 4.7M +/-5%, 1/4W	220046	01121	CB4755	1		
R5	RES, DEP. CAR, 10K +/-5%, 1/4W	348839	80031	CR251-4-5P10K	1		
R6	RES, MTL. FILM, 10K +/-1%, 1/8W	168260	91637	CMF55103	2		
R7	RES, MTL. FILM, 10K +/-1%, 1/8W	168260	91637	CMF55103	REF		
R8	RES, DEP. CAR, 2.0K +/-5%, 1/4W	441469	80031	CR251-4-5P2K	2		
R9	RES, VAR, 20 +/-10%	285114	75378	360T-020A2	1		
R10	RES, VAR, 50 +/-10%	285122	75378	360T-050A2	1		
R11	RES, VAR, 200 +/-10%	285148	75378	360T-200AZ	REF		
R12	RES, 54.7K +/-0.05%, 1/4W	492223	89536	492223	1		
R17	RES, VAR, 50, RECT.	267815	11236	190PC500B	1		
R18	RES, VAR, 100K +/-10%	288308	75378	360T-102A2	1		
R19	RES, DEP. CAR, 1M +/-5%, 1/4W	348987	80031	CR251-4-5P1M	1		
R20	RES, DEP. CAR, 10 +/-5%, 1/4W	340075	80031	CR251-4-5P10E	1		
R21	RES, DEP. CAR, 2.0K +/-5%, 1/4W	441469	80031	CR251-4-5P2K	REF		
R22	RES, COMP, 1.5M +/-5%, 1/4W	182857	01121	CB1555	1		
R23	RES, COMP, 10 +/-5%, 1/4W	147868	01121	CB1005	1		
R24	RES, DEP. CAR, 1K +/-5%, 1/4W	343426	80031	CR251-4-5P1K	2		
R25	RES, DEP. CAR, 33K +/-5%, 1/4W	348888	80031	CR251-4-5P33K	2		
R26	RES, DEP. CAR, 8.2K +/-5%, 1/4W	441675	80031	CR251-4-5P8K2	1		
R27	RES, DEP. CAR, 1K +/-5%, 1/4W	343426	80031	CR251-4-5P1K	REF		
R28	RES, VAR, 200 +/-10%	285148	75378	360T-200AZ	REF		
R29	RES, VAR, 5K +/-10%	288282	75378	360T-052A2	2		
R30	RES, VAR, 5K +/-10%	288282	75378	360T-052A2	REF		
R31	RES, DEP. CAR, 82K +/-5%, 1/4W	348912	80031	CR251-4-5P82K	1		
R32	RES, DEP. CAR, 200K +/-5%, 1/4W	441485	80031	CR251-4-5P200K	1		
R36	RES, DEP. CAR, 68K +/-5%, 1/4W	376632	80031	CR251-4-5P68K	1		
R37	RES, MTL. FILM, 6.81K +/-1%, 1/8W	268417	91637	CMF556813F	1		
R38	RES, MTL. FILM, 402K +/-1%, 1/8W	217984	91637	CMF554023	1		
R39	RES, DEP. CAR, 33K +/-5%, 1/4W	348888	80031	CR251-4-5P33K	REF		
R40	RES, MTL. FILM, 3.74K +/-1%, 1/8W	272096	91637	CMF553743F	2		
R41	PART OF U22 REF AMP SET						
R42	PART OF U22 REF AMP SET						
R43	RES, MTL. FILM, 3.74K +/-1%, 1/8W	272096	91637	CMF553743F	REF		
R44	RES, COMP, 3.3K +/-5%, 1/4W	148056	01121	CB3325	1		
R45	RES, MTL. FILM, 64.9K +/-1%, 1/8W	288530	91637	CMF556493F	1		
R46	RES, MTL. FILM, 110K +/-1%, 1/8W	234708	91637	CMF551103F	1		
R47	RES, MTL. FILM, 113K +/-1%, 1/8W	291302	91637	CMF551133F	1		
TP	TEST POINTS						
U1	RESISTOR NETWORK	511097	89536	511097	1	1	
U2	IC, OP AMP	413732	12040	LM308N	2	1	
U4	IC, OP AMP	413732	12040	LM308N	REF		
U5	IC, LINEAR	478107	12040	LM308A	1	1	
U6	IC, LIN, QUAD COMPARATOR	387233	12040	LM339N	6	2	
U7	IC, LIN, QUAD COMPARATOR	387233	12040	LM339N	REF		
U10	RES NETWORK, 5.6K	511048	89536	511048	1	1	
U11	IC, LIN, J-FET	495192	12040	LF353BN	3	1	
U12	IC, LIN, OP AMP	495051	18324	NE5534N	1	1	
U13	IC, LIN, J-FET	495192	12040	LF353BN	REF		
U14	IC, LIN, NPN, 5-XSTR, SIL. ARRAY	248906	02735	CA3046	1	1	
U15	IC, LIN, QUAD COMPARATOR	387233	12040	LM339N	REF		

Table 5-6. A/D And Ohms Converter PCB Assembly (cont)

REF DES	DESCRIPTION	FLUKE STOCK NO.	MFG SPLY CODE	MFG PART NO.	TOT QTY	REC QTY	N O T E
U16	IC, LIN, QUAD COMPARATOR	387233	12040	LM339N	REF		
U17	IC, LIN, QUAD COMPARATOR	387233	12040	LM339N	REF		
U18	IC, LIN, QUAD COMPARATOR	387233	12040	LM339N	REF		
U19	RES NETWORK, MIXED VALUE +/-2%, 1/8W	520379	89536	520379	1	1	
U20	RES NETWORK, MIXED VALUE +/-2%, 1/8W	520361	89536	520361	1	1	
U21	⊗ IC, C-MOS, DUAL MULTIPLEXER	408369	95303	CD4556BE	1	1	
U22	REF AMP SET (WITH R41 & R42)	523407	89536	532407	1	1	
U23	IC, LIN, J-FET	495192	12040	LF353BN	REF		
W4-W8	JUMPER WIRE CONNECTIONS						




CAUTION
 SUBJECT TO DAMAGE BY
 STATIC ELECTRICITY

8860A-1605

Figure 5-6. A5 A/D and Ohms Converter PCB Assembly