

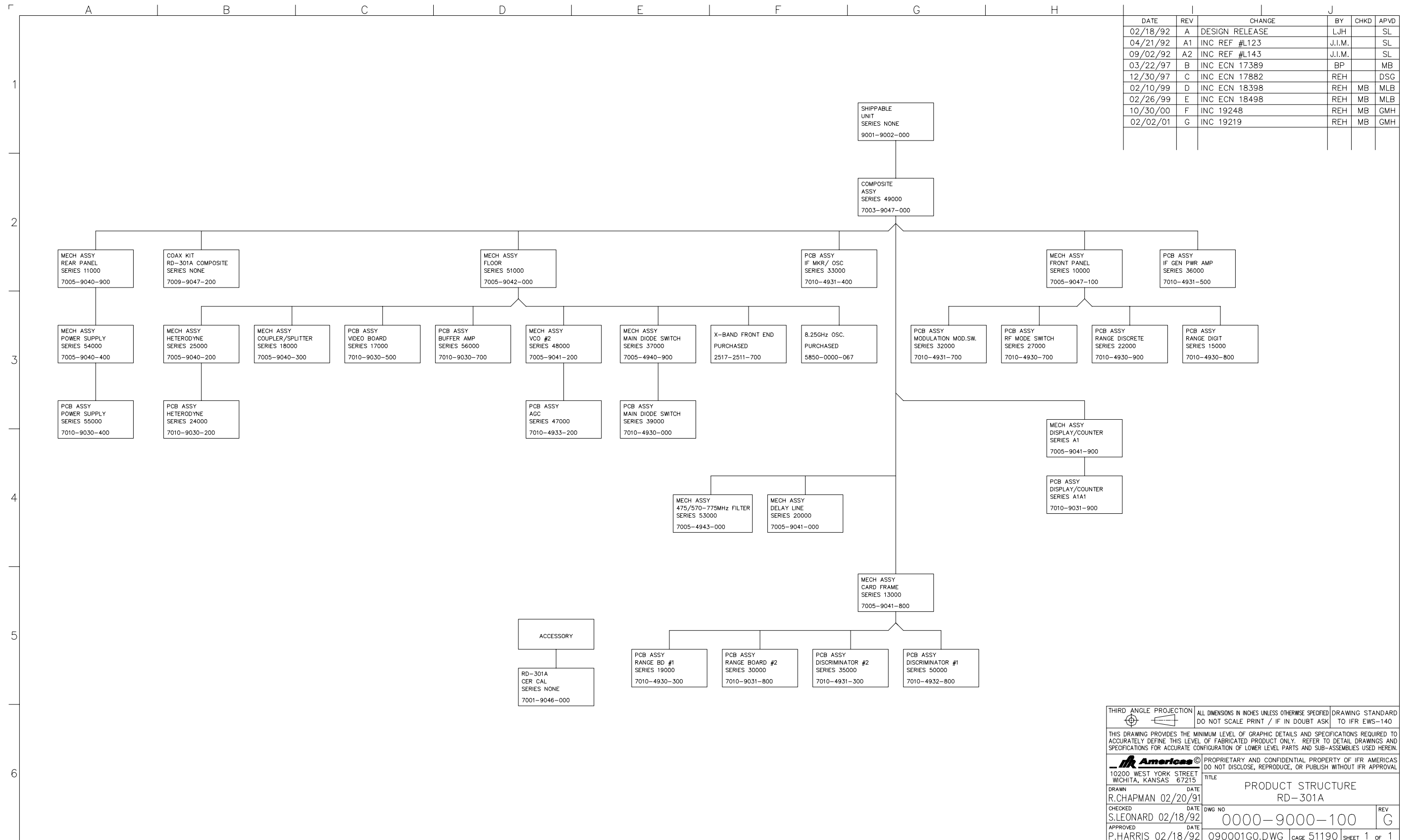


3. Assemblies and Schematics

TITLE	NUMBER/REVISION	PAGE
Product Structure	0000-9000-100-G	3
Composite Assy	7003-9047-000-B	4
Interconnect Diagram	0000-9040-000-E	8
Rear Panel Assy	7005-9040-900-A4	9
Rear Panel Assy Schematic	0000-9040-900-A1	10
Power Supply Assy	7005-9040-400-A3	11
Power Supply PCB Assy	7010-9030-400-E	12
Power Supply Assy Schematic	0000-9040-400-C2	14
Floor Assy	7005-9042-000-C	16
Floor Assy	7005-9042-000-C1	17
Floor Assy	7005-9042-000-D	19
Floor Assy Interconnect	0000-9042-000-B	21
Heterodyne Assy	7005-9040-200-C	23
Heterodyne PCB Assy	7010-9030-200-B	24
Heterodyne Assy Schematic	0000-9040-200-B2	25
Coupler/Splitter Assy	7005-9040-300-B1	27
Coupler/Splitter Assy Schematic	0000-9040-300-B1	28
Video PCB Assy	7010-9030-500-E	29
Video PCB Assy Schematic	0000-9030-500-D	30
Buffer Amp Assy	7010-9030-700-B1	33
Buffer Amp Assy Schematic	0000-9030-700-B	35
VCO #2 Assy	7005-9041-200-C1	36
VCO #2 Assy Schematic	0000-9041-200-A2	38
AGC PCB Assy	7010-4933-200-B	42
AGC PCB Assy Schematic	0000-4933-200-B1	43
Main Diode Switch Assy	7005-4940-900-K1	44
Main Diode Switch PCB Assy	7010-4930-000-E	45
Main Diode Switch Assy Schematic	0000-4910-000-E	46
X-Band Front End Assy	2517-2511-700-A	46
8.25 GHz LO Assy	5850-0000-067-B	50
8.25 GHz LO Assy	5850-0000-069-A	51
IF Marker/Oscillator PCB Assy	7010-4931-400-D1	52
IF Marker/Oscillator PCB Assy Schematic	0000-4911-400-C	53
IF Generator Power Amplifier PCB Assy	7010-4931-500-B	54
IF Generator Power Amplifier PCB Assy Schematic	0000-4911-500-A3	55
Front Panel Assy	7005-9047-100-A	56
Front Panel Assy Schematic	0000-9047-100-A	60
Modulation Mode Switch Assy	7010-4931-700-A2	61
Modulation Mode Switch Assy Schematic	0000-4911-700-A	62
RF Mode Switch PCB Assy	7010-4930-700-D1	63
RF Mode Switch PCB Assy Schematic	0000-4910-700-D	65
Range Discrete PCB Assy	7010-4930-900-E	66
Range Discrete PCB Assy Schematic	0000-4910-900-D	67
Range Digit PCB Assy	7010-4930-800-C2	68
Range Digit PCB Assy Schematic	0000-4910-800-C	69
Display Counter Assy	7005-9041-900-A	70
Display Counter PCB Assy	7010-9031-900-C	71
Display Counter Assy Schematic	0000-9041-900-C	72
475/570-775 MHz Filter Assy	7005-4943-000-F	75
475/570-775 MHz Filter Assy Schematic	0000-4913-000-C	76
Delay Line Assy	7005-9041-000-A	77
Card Frame Assy	7005-9041-800-A	78
Range #1 PCB Assy	7010-4930-300-H	80
Range #1 PCB Assy Schematic	0000-4910-300-H	81
Range #2 PCB Assy	7010-9031-800-B	84
Range #2 PCB Assy Schematic	0000-9031-800-B	85



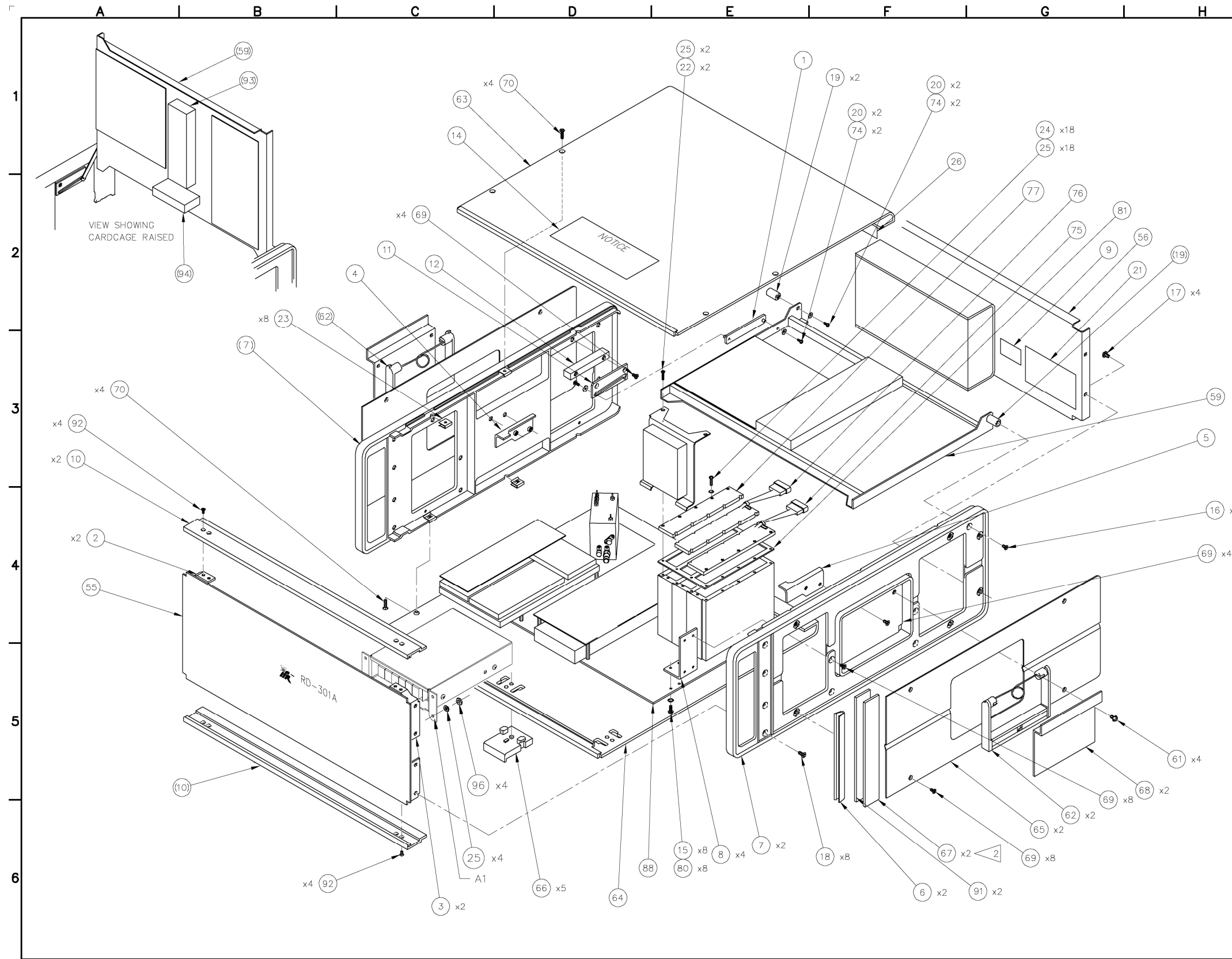
TITLE	NUMBER/REVISION	PAGE
Discriminator #2 PCB Assy	7010-4931-300-B5	87
Discriminator #2 PCB Assy Schematic	0000-4911-300-B1	88
Discriminator #1 PCB Assy	7010-4932-800-K	90
Discriminator #1 PCB Assy Schematic	0000-4912-800-L	93



THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
10200 WEST YORK STREET WICHITA, KANSAS 67215		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL
DRAWN R.CHAPMAN	DATE 02/20/91	TITLE PRODUCT STRUCTURE RD-301A
CHECKED S.LEONARD	DATE 02/18/92	DWG NO 0000-9000-100
APPROVED P.HARRIS	DATE 02/18/92	REV G
090001G0.DWG		CAGE 51190 SHEET 1 of 1

Subject to Export Control, see Cover Page for details.

DATE	REV	CHANGE	BY	CHKD	APVD
02/09/01	A	REL 19219	REH	MB	GMH
11/14/03	B	INC 19862	RLA		GH
3/16/05	B1	INC 19842	SCP	CJM	GMH



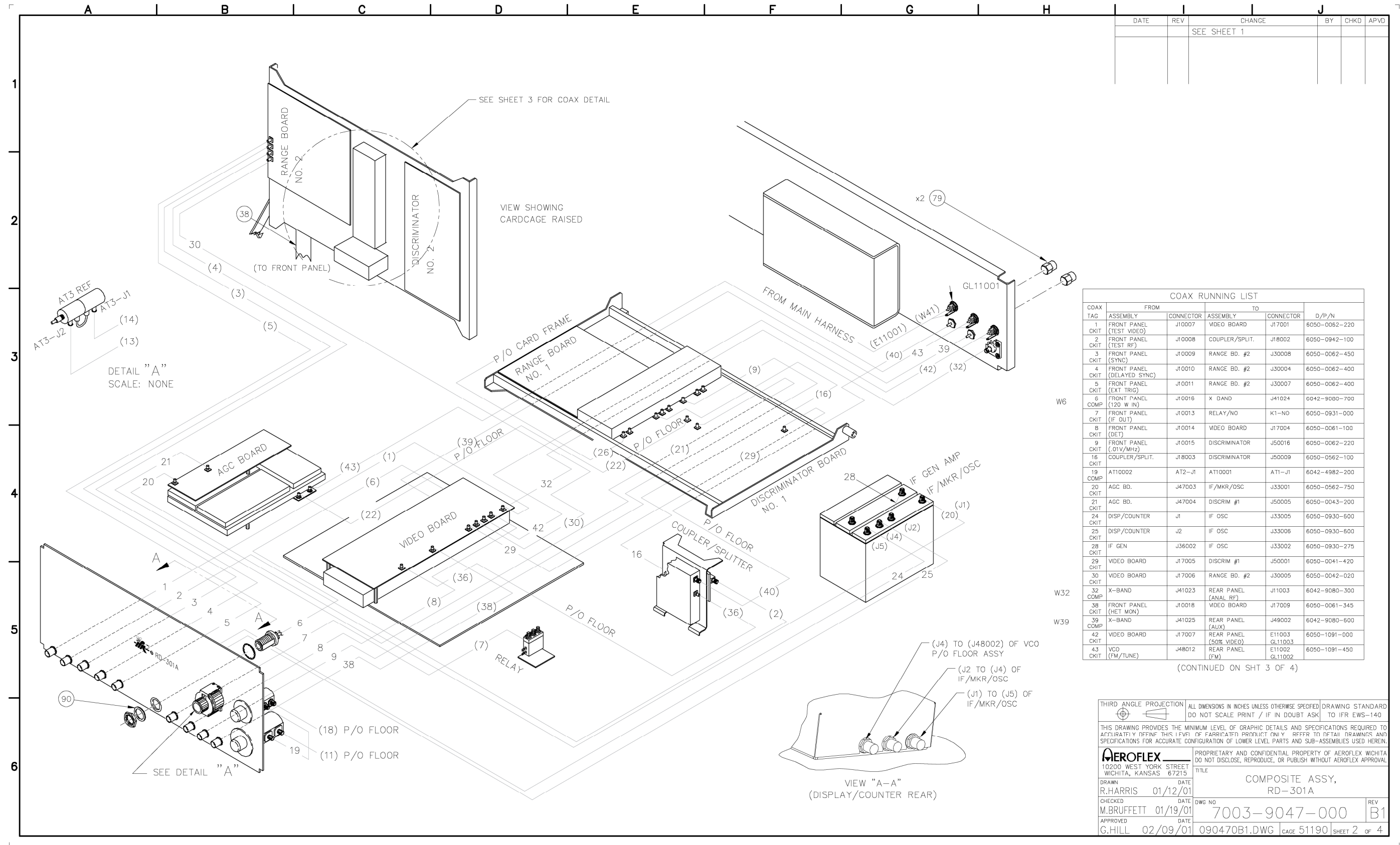
- NOTES:
1. BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
 2. MOUNT ITEM 67, DECAL TRIM STRIP, TO ITEM 7, SIDE FRAME, WITH ITEM 91, VINYL FOAM TAPE.



CAUTION:
CONTAINS PARTS AND ASSEMBLIES
SUSCEPTIBLE TO DAMAGE BY
ELECTROSTATIC DISCHARGE (ESD).

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PROPRIETARY AND CONFIDENTIAL PROPERTY OF AEROFLEX WICHITA DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT AEROFLEX APPROVAL		
DRAWN: R.HARRIS DATE: 01/12/01 CHECKED: M.BRUFFETT DATE: 01/19/01 APPROVED: G.HILL DATE: 02/09/01		TITLE: COMPOSITE ASSY, RD-301A DWG NO: 7003-9047-000 REV: B1
10200 WEST YORK STREET WICHITA, KANSAS 67215		CAGE 51190 SHEET 1 OF 4

Subject to Export Control, see Cover Page for details.



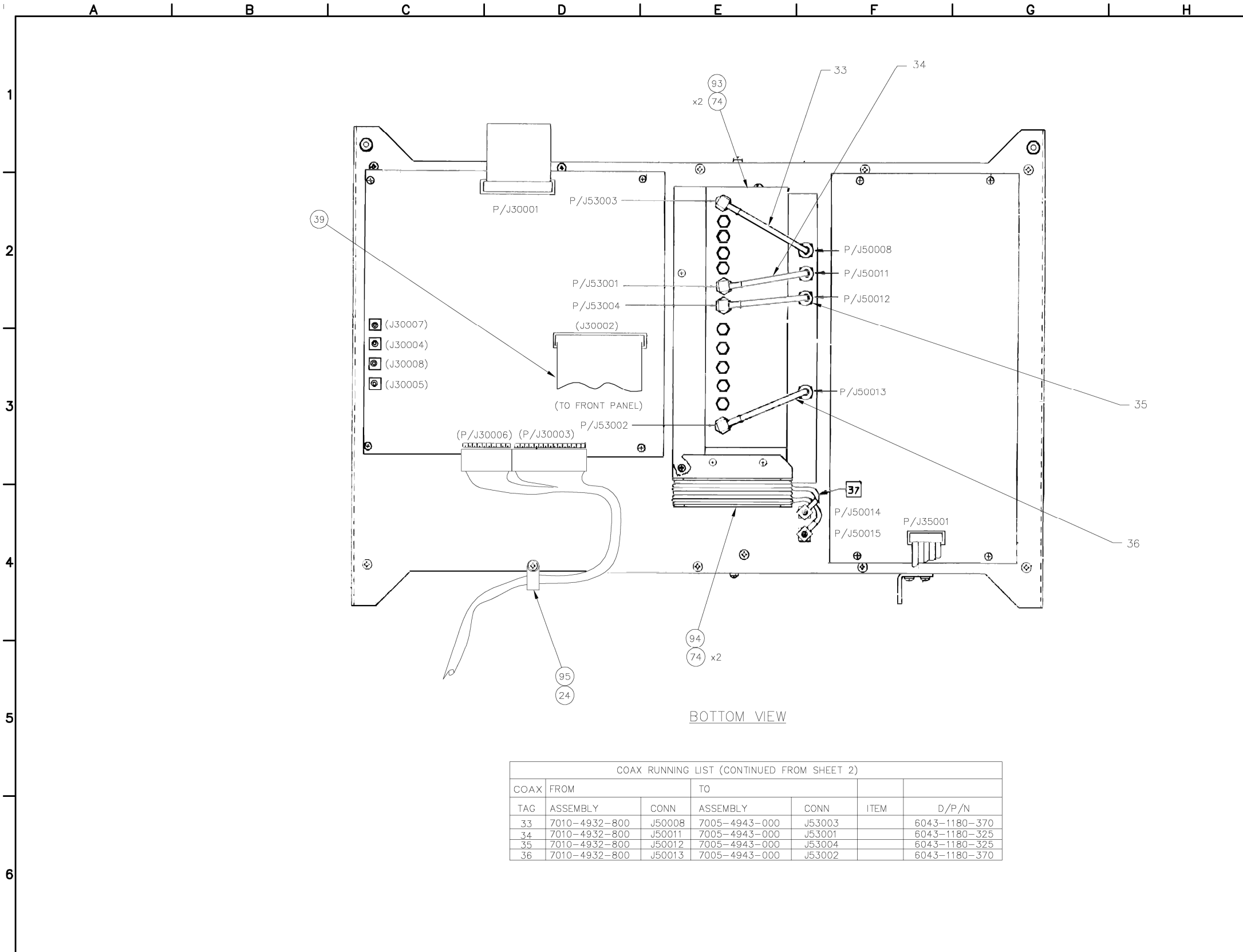
DATE	REV	CHANGE	BY	CHKD	APVD
		SEE SHEET 1			

COAX TAG	ASSEMBLY	FROM CONNECTOR	TO ASSEMBLY	CONNECTOR	D/P/N
1 CKIT	FRONT PANEL (TEST VIDEO)	J10007	VIDEO BOARD	J17001	6050-0062-220
2 CKIT	FRONT PANEL (TEST RF)	J10008	COUPLER/SPLIT.	J18002	6050-0942-100
3 CKIT	FRONT PANEL (SYNC)	J10009	RANGE BD. #2	J30008	6050-0062-450
4 CKIT	FRONT PANEL (DELAYED SYNC)	J10010	RANGE BD. #2	J30004	6050-0062-400
5 CKIT	FRONT PANEL (EXT TRIG)	J10011	RANGE BD. #2	J30007	6050-0062-400
6 CKIT	FRONT PANEL (120 W IN)	J10016	X DAND	J41024	6042-9080-700
7 CKIT	FRONT PANEL (IF OUT)	J10013	RELAY/NO	K1-NO	6050-0931-000
8 CKIT	FRONT PANEL (DET)	J10014	VIDEO BOARD	J17004	6050-0061-100
9 CKIT	FRONT PANEL (.01V/MHz)	J10015	DISCRIMINATOR	J50016	6050-0062-220
16 CKIT	COUPLER/SPLIT.	J18003	DISCRIMINATOR	J50009	6050-0562-100
19 COMP	AT10002	AT2-J1	AT10001	AT1-J1	6042-4982-200
20 CKIT	AGC BD.	J47003	IF/MKR/OSC	J33001	6050-0562-750
21 CKIT	AGC BD.	J47004	DISCRIM #1	J50005	6050-0043-200
24 CKIT	DISP/COUNTER	J1	IF OSC	J33005	6050-0930-600
25 CKIT	DISP/COUNTER	J2	IF OSC	J33006	6050-0930-600
28 CKIT	IF GEN	J36002	IF OSC	J33002	6050-0930-275
29 CKIT	VIDEO BOARD	J17005	DISCRIM #1	J50001	6050-0041-420
30 CKIT	VIDEO BOARD	J17006	RANGE BD. #2	J30005	6050-0042-020
32 COMP	X-BAND	J41023	REAR PANEL (ANAL RF)	J11003	6042-9080-300
38 CKIT	FRONT PANEL (HEI MON)	J10018	VIDEO BOARD	J17009	6050-0061-345
39 COMP	X-BAND	J41025	REAR PANEL (AUX)	J49002	6042-9080-600
42 CKIT	VIDEO BOARD	J17007	REAR PANEL (50% VIDEO)	E11003 GL11003	6050-1091-000
43 CKIT	VCO (FM/TUNE)	J48012	REAR PANEL (FM)	E11002 GL11002	6050-1091-450

(CONTINUED ON SHT 3 OF 4)

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK TO IFR EWS-140	DRAWING STANDARD
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
AEROFLEX 10200 WEST YORK STREET WICHITA, KANSAS 67215		PROPRIETARY AND CONFIDENTIAL PROPERTY OF AEROFLEX WICHITA DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT AEROFLEX APPROVAL.
DRAWN: R.HARRIS DATE: 01/12/01		TITLE: COMPOSITE ASSY, RD-301A
CHECKED: M.BRUFFETT DATE: 01/19/01		DWG NO: 7003-9047-000
APPROVED: G.HILL DATE: 02/09/01		REV: B1 090470B1.DWG (PAGE 51190) SHEET 2 OF 4

DATE	REV	CHANGE	BY	CHKD	APVD
		SEE SHEET 1			



BOTTOM VIEW

COAX TAG	FROM ASSEMBLY	CONN	TO ASSEMBLY	CONN	ITEM	D/P/N
33	7010-4932-800	J50008	7005-4943-000	J53003		6043-1180-370
34	7010-4932-800	J50011	7005-4943-000	J53001		6043-1180-325
35	7010-4932-800	J50012	7005-4943-000	J53004		6043-1180-325
36	7010-4932-800	J50013	7005-4943-000	J53002		6043-1180-370

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED
DO NOT SCALE PRINT / IF IN DOUBT ASK TO IFR EWS-140

DRAWING STANDARD TO IFR EWS-140

THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.

AEROFLEX
10200 WEST YORK STREET
WICHITA, KANSAS 67215

PROPRIETARY AND CONFIDENTIAL PROPERTY OF AEROFLEX WICHITA
DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT AEROFLEX APPROVAL

TITLE: COMPOSITE ASSY, RD-301A

DRAWN: R.HARRIS DATE: 01/12/01

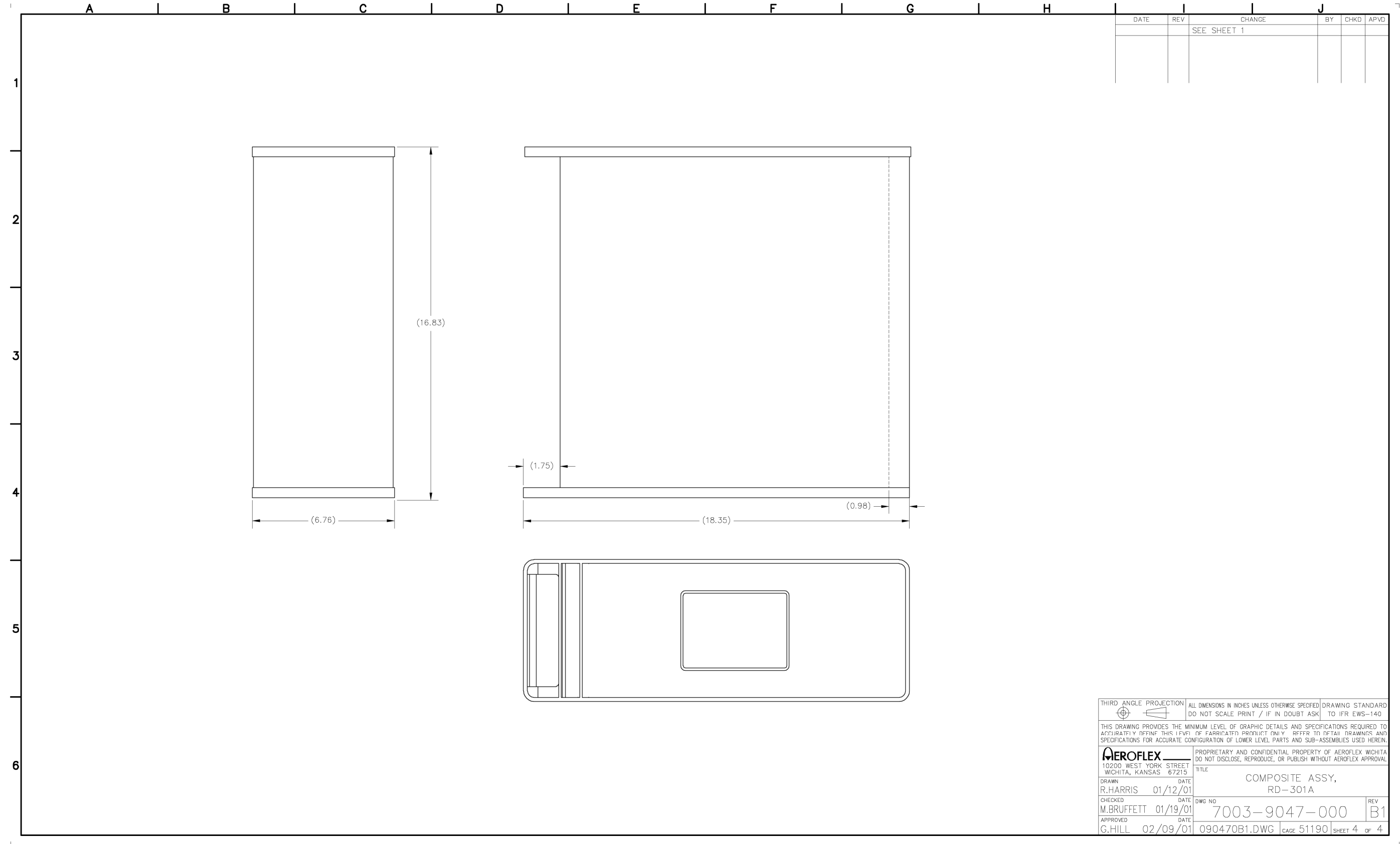
CHECKED: M.BRUFFETT DATE: 01/19/01

APPROVED: G.HILL DATE: 02/09/01

DWG NO: 7003-9047-000

REV: B1

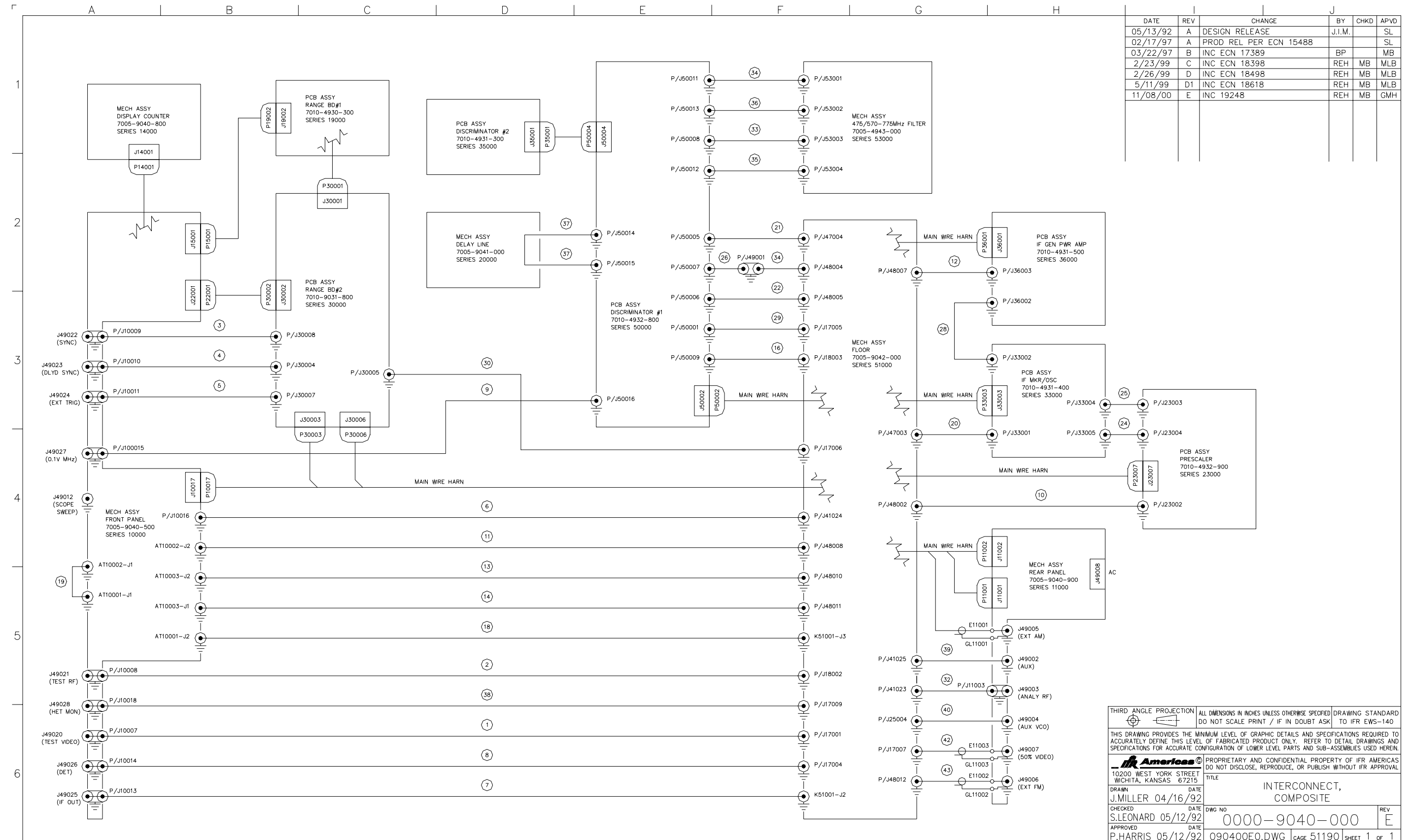
090470B1.DWG | CAGE 51190 | SHEET 3 OF 4



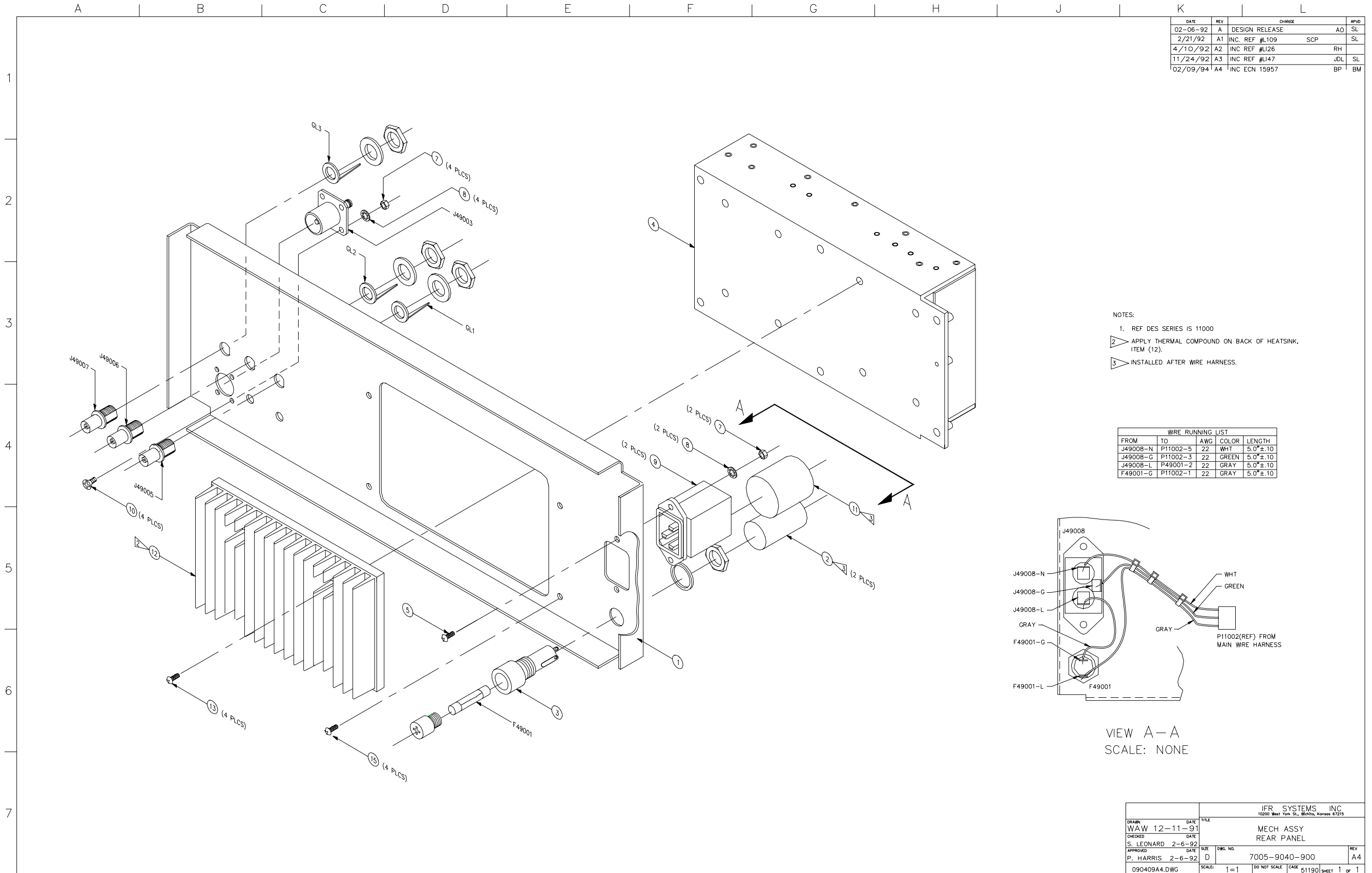
DATE	REV	CHANGE	BY	CHKD	APVD
		SEE SHEET 1			

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AEROFLEX 10200 WEST YORK STREET WICHITA, KANSAS 67215		PROPRIETARY AND CONFIDENTIAL PROPERTY OF AEROFLEX WICHITA DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT AEROFLEX APPROVAL.
DRAWN R.HARRIS	DATE 01/12/01	TITLE COMPOSITE ASSY, RD-301A
CHECKED M.BRUFFETT	DATE 01/19/01	DWG NO 7003-9047-000
APPROVED G.HILL	DATE 02/09/01	REV B1
090470B1.DWG CAGE 51190 SHEET 4 OF 4		

Subject to Export Control, see Cover Page for details.



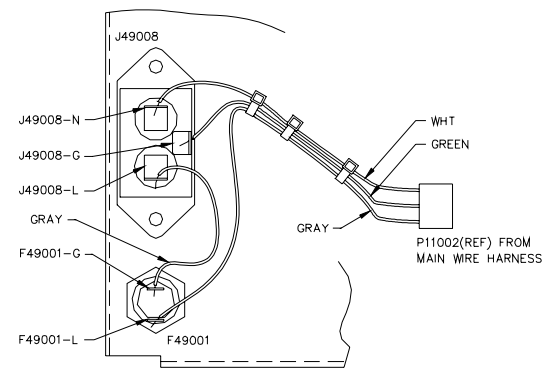
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DATE	REV	CHANGE	APD
02-06-92	A	DESIGN RELEASE	AO SL
2/21/92	A1	INC. REF #L109	SCP SL
4/10/92	A2	INC REF #L126	RH
11/24/92	A3	INC REF #L147	JDL SL
02/09/94	A4	INC ECN 15957	BP BM

- NOTES:
- REF DES SERIES IS 11000
 - APPLY THERMAL COMPOUND ON BACK OF HEATSINK ITEM (12).
 - INSTALLED AFTER WIRE HARNESS.

WIRE RUNNING LIST				
FROM	TO	AWG	COLOR	LENGTH
J49008-N	P11002-5	22	WHT	5.0"±.10
J49008-G	P11002-3	22	GREEN	5.0"±.10
J49008-L	P49001-2	22	GRAY	5.0"±.10
F49001-G	P11002-1	22	GRAY	5.0"±.10

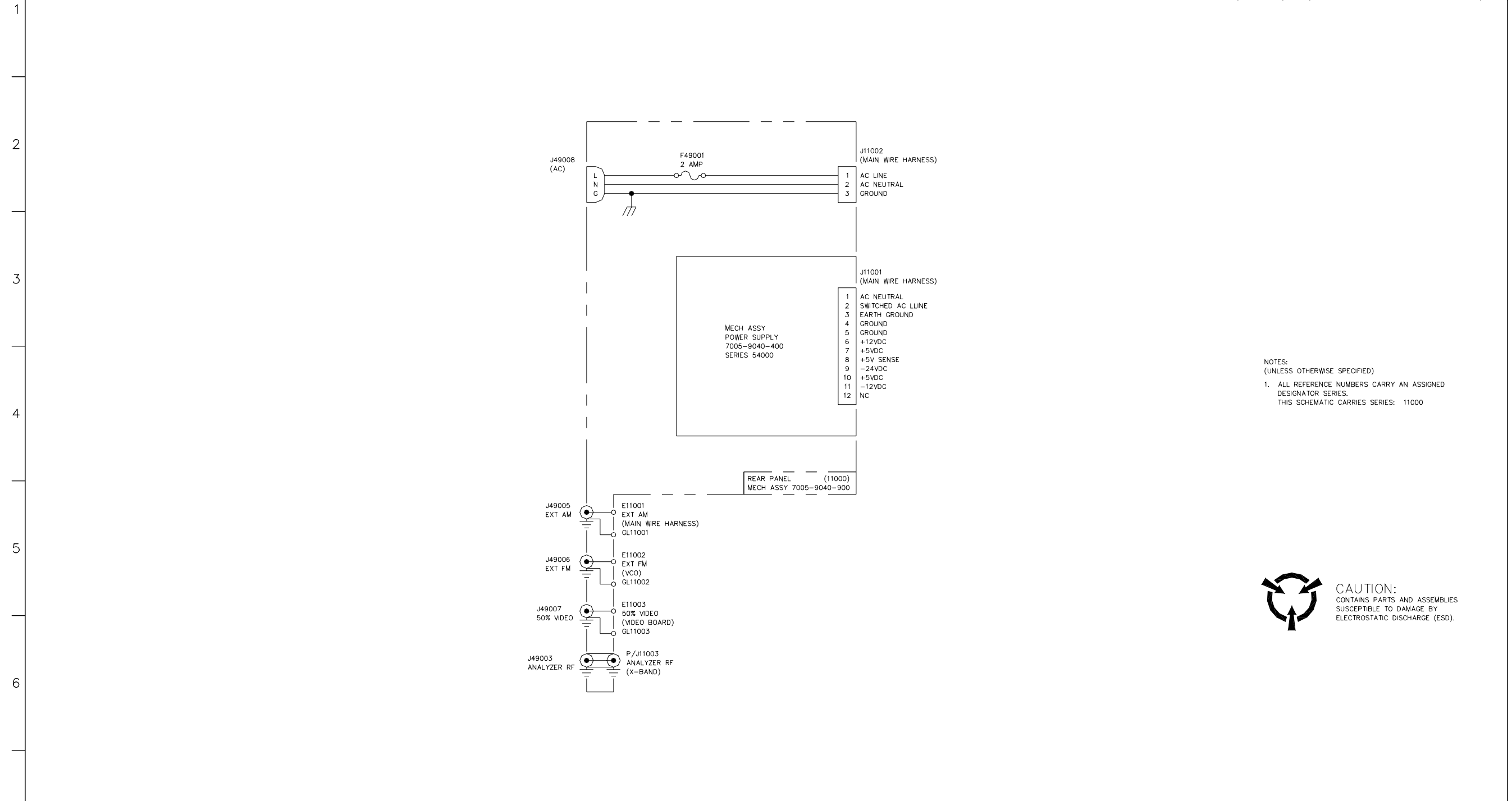


VIEW A-A
SCALE: NONE

DRAWN		DATE		TITLE		IFR SYSTEMS, INC	
WAW	12-11-91	12-11-91	12-11-91	MECH ASSY		10200 West York St., Wichita, Kansas 67215	
CHECKED	2-6-92	2-6-92	2-6-92	REAR PANEL			
APPROVED	2-6-92	2-6-92	2-6-92	SIZE	DWG. NO.	REV	
P. HARRIS				D	7005-9040-900	A4	
090409A4.DWG	SCALE:	1=1	DO NOT SCALE	CAGE	51190	SHEET	1 of 1

Subject to Export Control, see Cover Page for details.

DATE	REV	CHANGE	APPROVED
3-23-92	A	DESIGN RELEASE	LJH
5-6-92	A1	INC REF #L132	J.I.M.

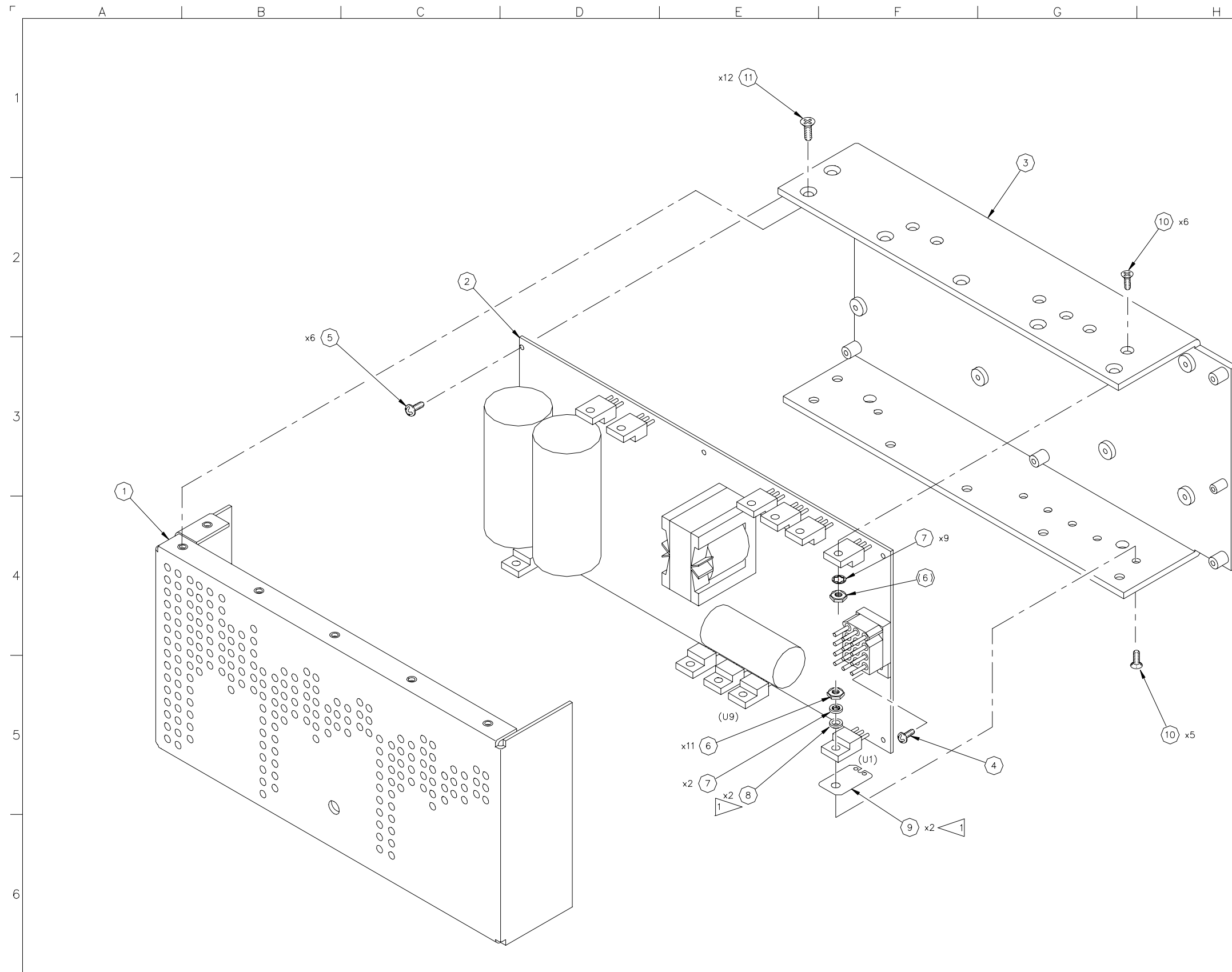


NOTES:
(UNLESS OTHERWISE SPECIFIED)
1. ALL REFERENCE NUMBERS CARRY AN ASSIGNED DESIGNATOR SERIES.
THIS SCHEMATIC CARRIES SERIES: 11000



DRAWN D. HARDER 10-25-91		DATE		TITLE	
CHECKED S. LEONARD 3-23-92		DATE		SCHEMATIC REAR PANEL	
APPROVED P. HARRIS 3-24-92		DATE		DWG. NO. 0000-9040-900	
SCALE:		DO NOT SCALE		REV A1	
SCALE: 51190		SHEET 1		OF 1	

DATE	REV	CHANGE	BY	CHKD	APVD
02/03/92	A	DESIGN RELEASE	REH		SL
02/21/92	A1	INC. REF# L110	SCP		SL
04/23/92	A2	INC. REF# L129	REH		SL
02/17/93	A2	PROD. REL. PER ECN 15488	REH		SL
12/14/98	A3	INC ECN 18442	REH	RLD	EM



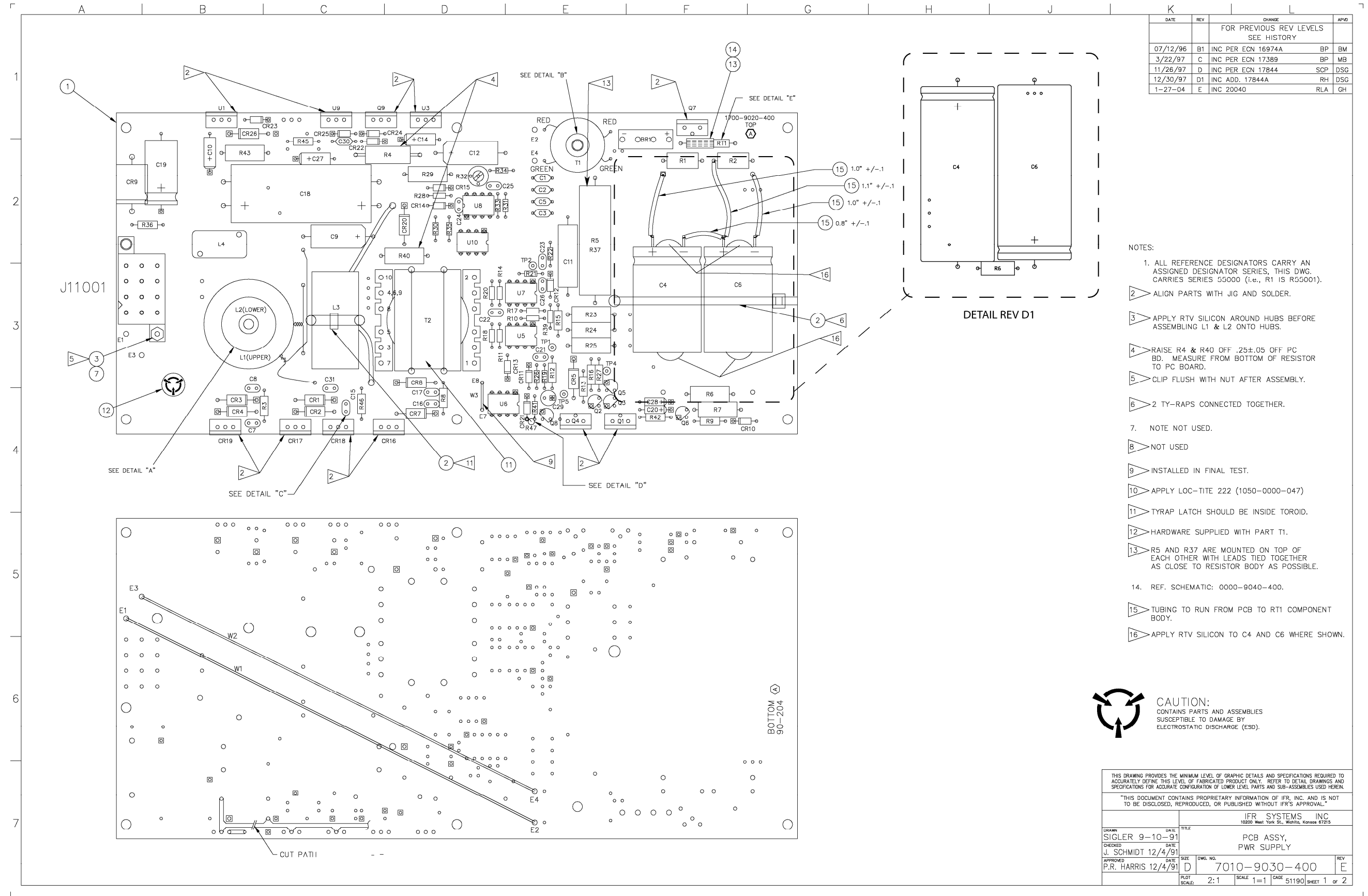
NOTES:

1. ITEM #8 AND #9 ARE USED ON U1 AND U9 ONLY.
2. REF SCHEMATIC: 0000-9040-400.
3. BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.



CAUTION:
CONTAINS PARTS AND ASSEMBLIES
SUSCEPTIBLE TO DAMAGE BY
ELECTROSTATIC DISCHARGE (ESD).

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
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10200 WEST YORK STREET WICHITA, KANSAS 67215	TITLE MECH ASSY, PWR SUPPLY	
DRAWN R.HARRIS 01/31/92	DATE 01/31/92	
CHECKED S.LEONARD 02/03/92	DATE 02/03/92	DWG NO 7005-9040-400
APPROVED P.HARRIS 02/03/92	DATE 02/03/92	REV A3
090404A3.DWG		CAGE 51190 SHEET 1 OF 1



DATE	REV	CHANGE	APVD
FOR PREVIOUS REV LEVELS SEE HISTORY			
07/12/96	B1	INC PER ECN 16974A	BP BM
3/22/97	C	INC PER ECN 17389	BP MB
11/26/97	D	INC PER ECN 17844	SCP DSG
12/30/97	D1	INC ADD. 17844A	RH DSG
1-27-04	E	INC 20040	RLA GH

- NOTES:
- ALL REFERENCE DESIGNATORS CARRY AN ASSIGNED DESIGNATOR SERIES, THIS DWG. CARRIES SERIES 55000 (i.e., R1 IS R55001).
 - ALIGN PARTS WITH JIG AND SOLDER.
 - APPLY RTV SILICON AROUND HUBS BEFORE ASSEMBLING L1 & L2 ONTO HUBS.
 - RAISE R4 & R40 OFF .25±.05 OFF PC BD. MEASURE FROM BOTTOM OF RESISTOR TO PC BOARD.
 - CLIP FLUSH WITH NUT AFTER ASSEMBLY.
 - 2 TY-RAPS CONNECTED TOGETHER.
 - NOTE NOT USED.
 - NOT USED
 - INSTALLED IN FINAL TEST.
 - APPLY LOC-TITE 222 (1050-0000-047)
 - TYRAP LATCH SHOULD BE INSIDE TOROID.
 - HARDWARE SUPPLIED WITH PART T1.
 - R5 AND R37 ARE MOUNTED ON TOP OF EACH OTHER WITH LEADS TIED TOGETHER AS CLOSE TO RESISTOR BODY AS POSSIBLE.
 - REF. SCHEMATIC: 0000-9040-400.
 - TUBING TO RUN FROM PCB TO RT1 COMPONENT BODY.
 - APPLY RTV SILICON TO C4 AND C6 WHERE SHOWN.



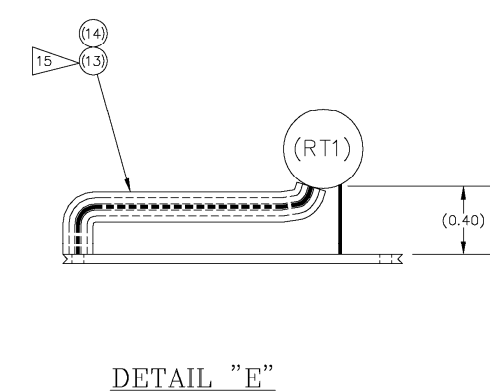
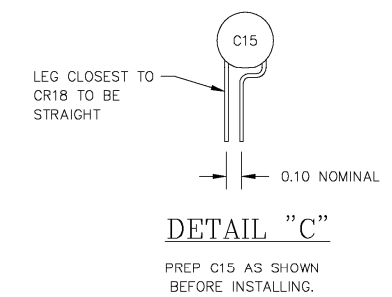
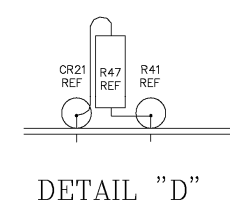
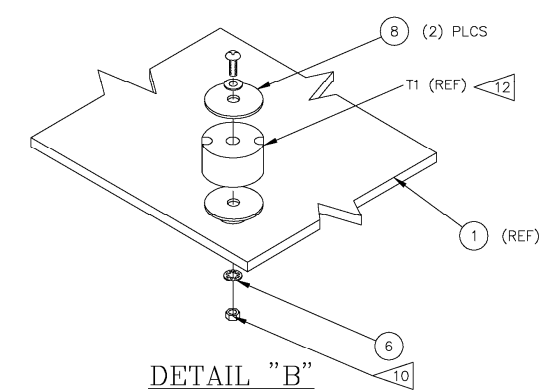
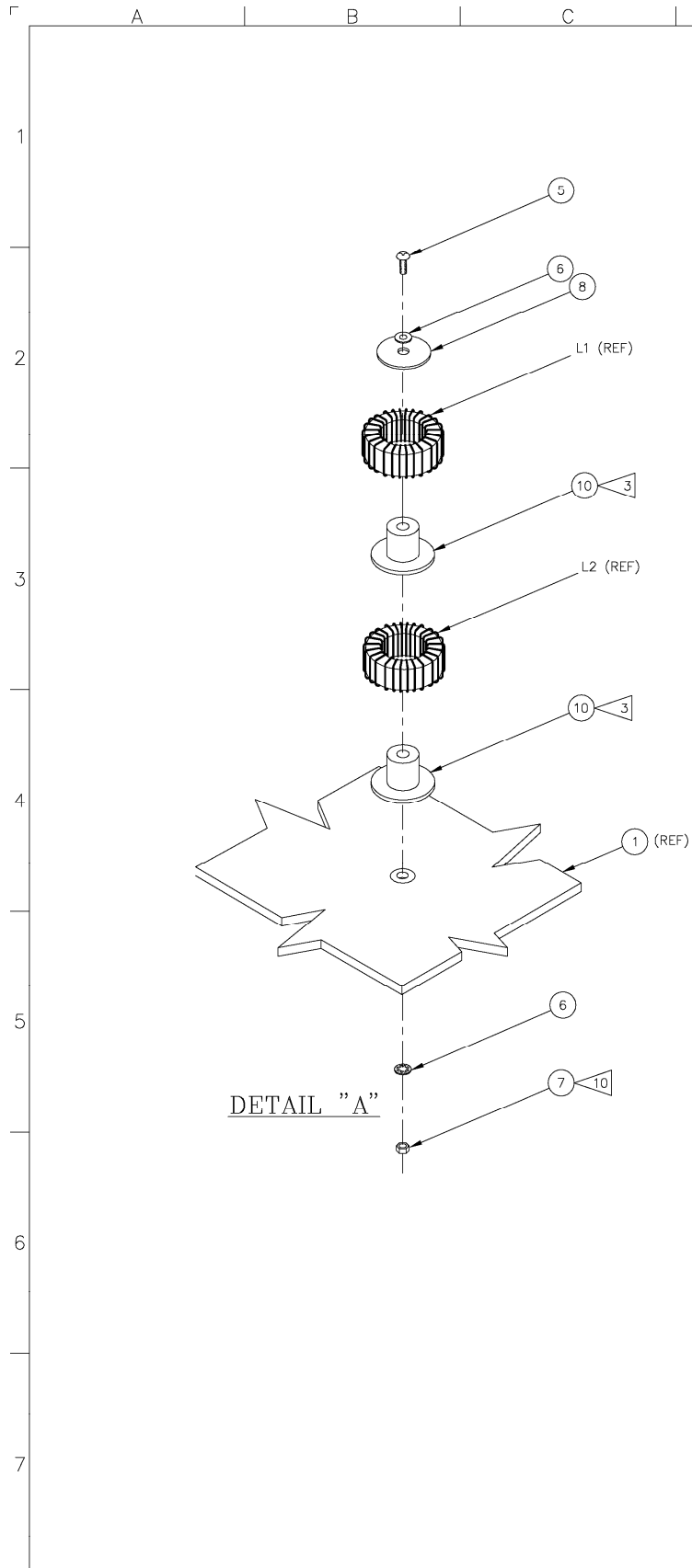
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DRAWN		DATE		TITLE	
SIGLER 9-10-91				IFR SYSTEMS, INC. 10200 West York St., Wichita, Kansas 67215	
CHECKED		DATE		PCB ASSY, PWR SUPPLY	
J. SCHMIDT 12/4/91					
APPROVED		DATE		SIZE	
P.R. HARRIS 12/4/91				D	
		DWG. NO.		REV	
		7010-9030-400		E	
PLOT SCALE:		SCALE		CASE	
2:1		1=1		51190	
				SHEET 1 OF 2	

DATE	REV	CHANGE	APPROV
		SEE PAGE ONE	

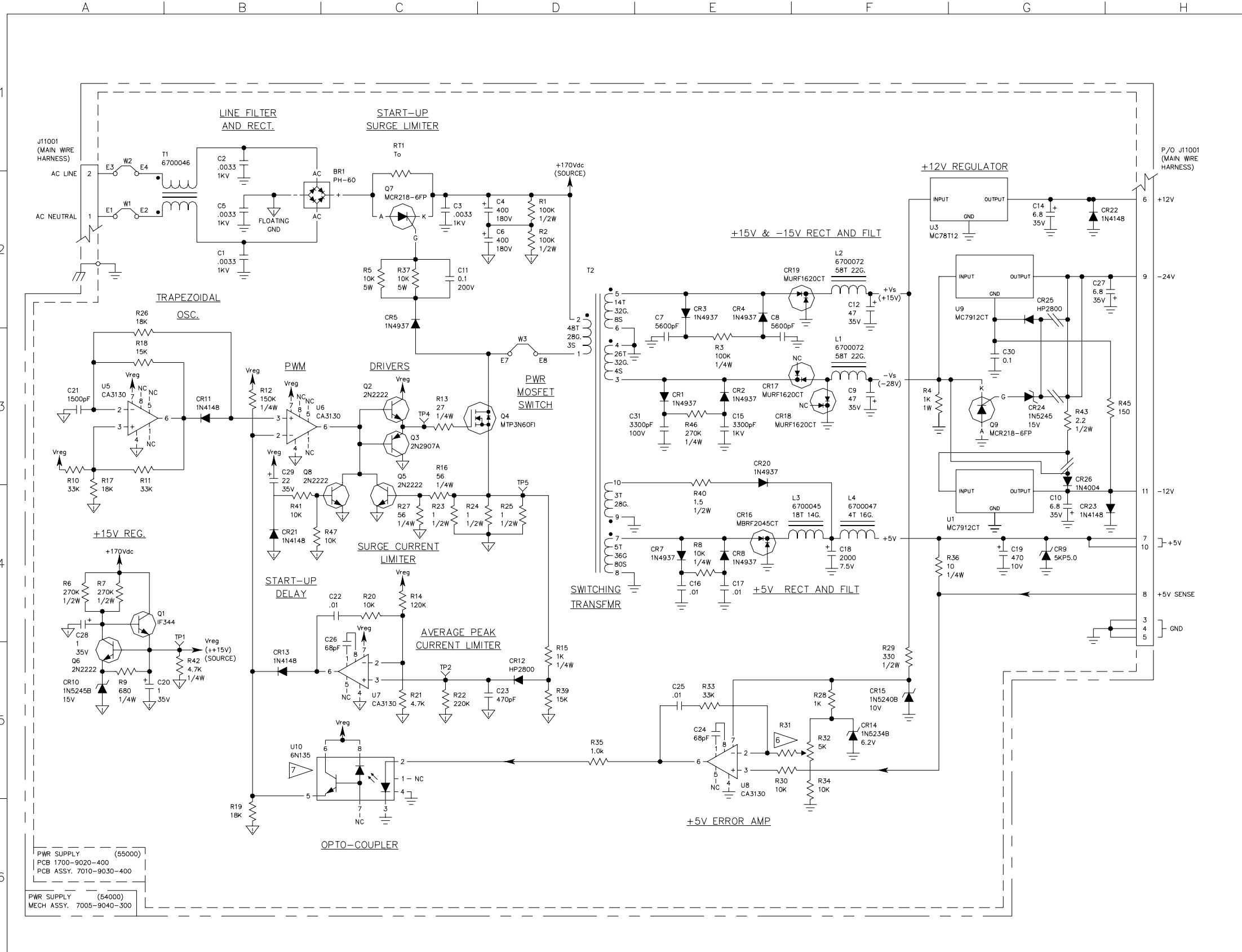


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DRAWN		DATE		TITLE	
SIGLER		9-10-91		PCB ASSY, PWR SUPPLY	
CHECKED		DATE		REV	
J. SCHMIDT		12/4/91		E	
APPROVED		DATE		DWG. NO.	
P.R. HARRIS		12/4/91		7010-9030-400	
PLOT SCALE:		2:1		SCALE 1=1	
CAGE		51190		SHEET 2 of 2	

DATE	REV	CHANGE	BY	CHKD	APVD
11/12/92	A	DESIGN RELEASE	JIM		SL
02/17/93	A	PROD REL PER 15488	REH		SL
3/17/00	A1	INC ECN 15620	BP		BM
04/25/94	A2	INC ECN 16076	BP		BM
05/16/96	B	INC ECN 16974	RLA		BM
03/22/97	C	INC ECN 17389	BP		MB
12/14/98	C1	INC ECN 18442	REH		EM
03/20/00	C2	INC RC 18982	REH	SCP	TCN

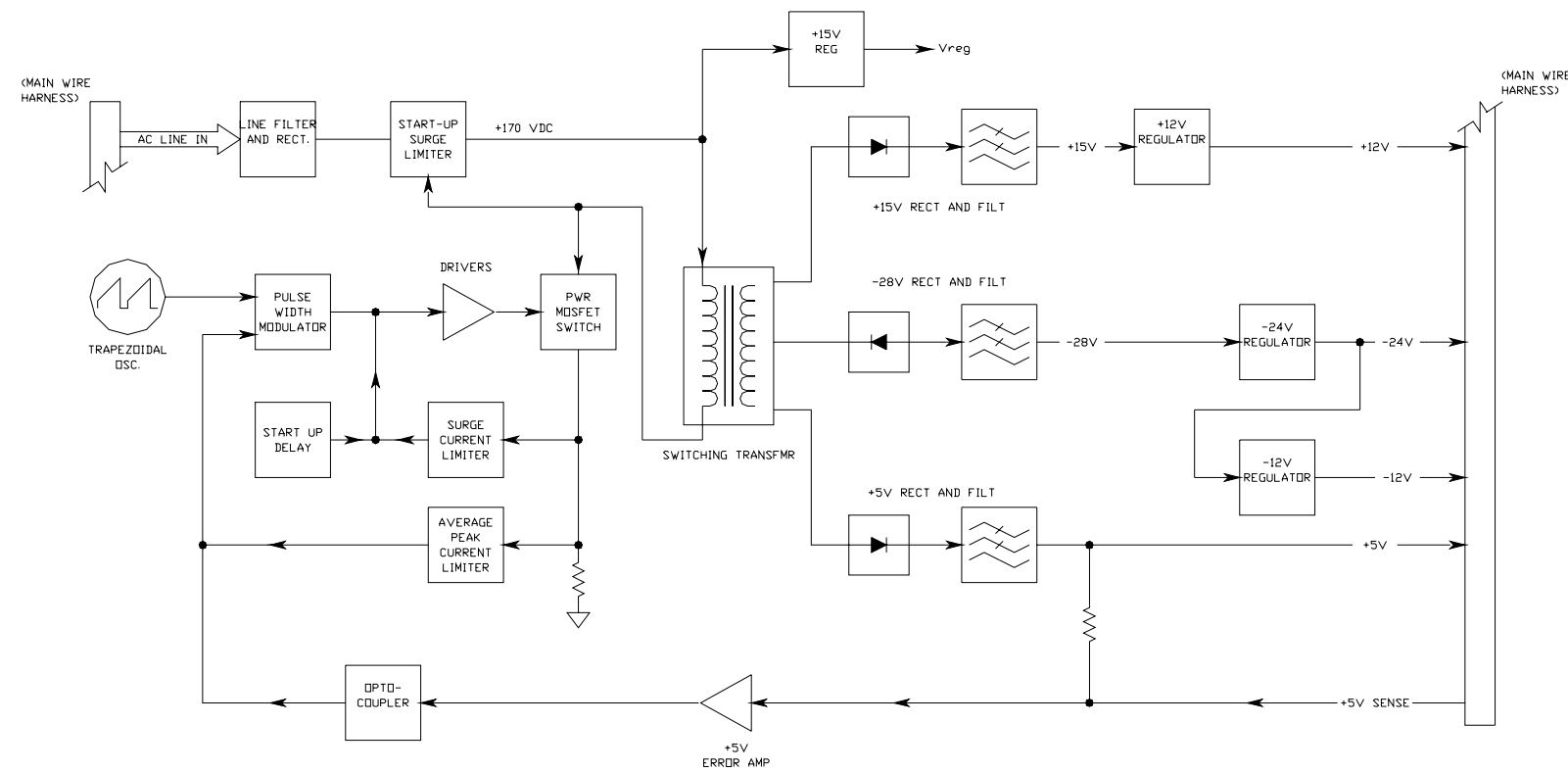


- NOTES:
(UNLESS OTHERWISE SPECIFIED)
- ALL REFERENCE NUMBERS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES: 7005-9040-400 54000 7010-9030-400 55000
 - ALL RESISTORS ARE 5% 1/8 W. ALL CAPACITANCE IS EXPRESSED IN MICROFARADS.
 - HIGHEST REFERENCE DESIGNATIONS. C31 R47 L4 CR26 Q9 U10 T2 BR1 W3 TP5
 - REFERENCE DESIGNATIONS NOT USED. C13, CR6, R44, TP3, U2, U4
- 6 R31 IS S.A.T. NOMINAL VALUE: 15K SELECT VALUE: 12K, 18K, 22K
- 7 U10 IS S.A.T. DEVICE C.T.R. = 15-22 VCE = 2 VOLTS



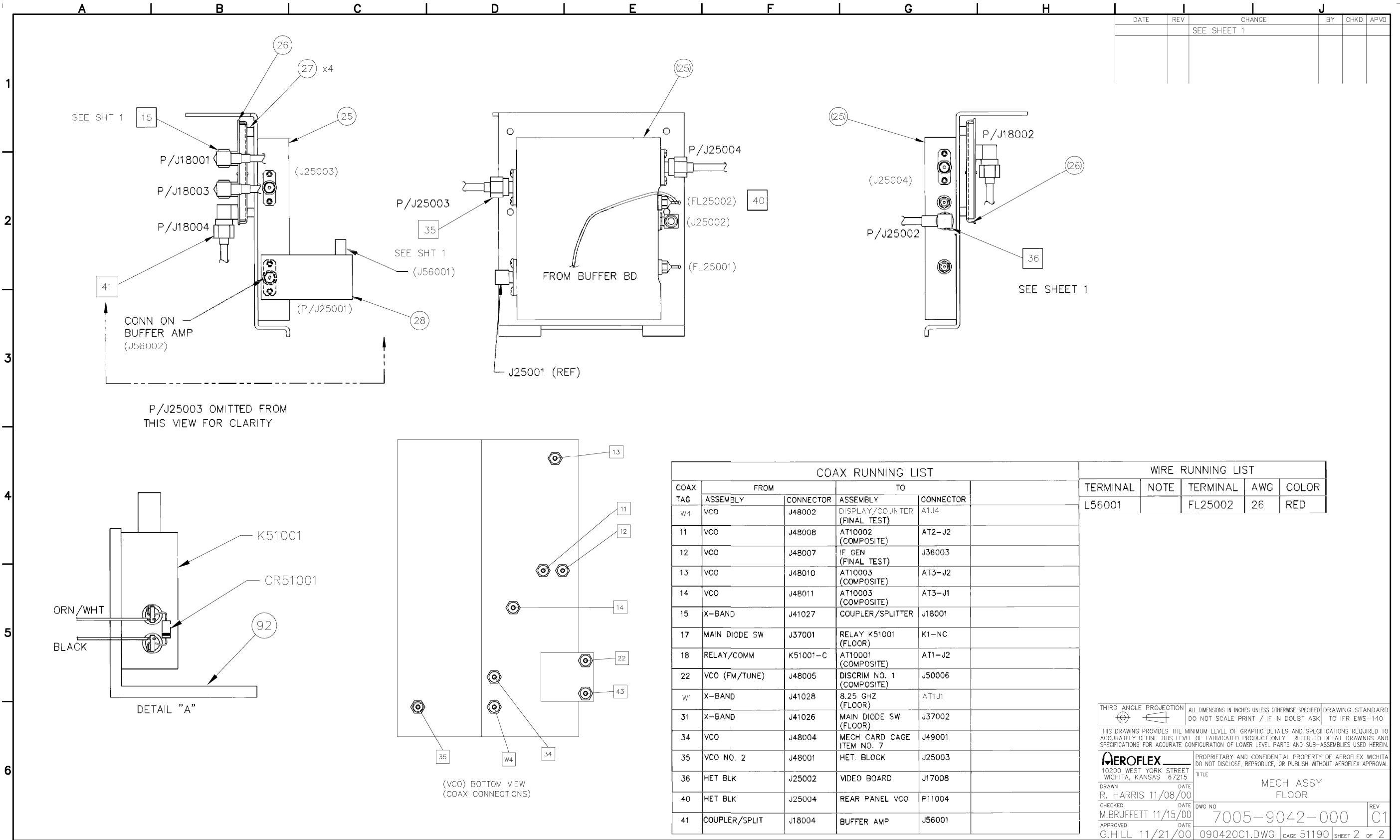
THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
10200 WEST YORK STREET WICHITA, KANSAS 67215 TITLE: SCHEMATIC, MECH PWR SUPPLY		
DRAWN: D.HARDER	DATE: 9/4/91	REV: C2
CHECKED: P.HARRIS	DATE: 01/14/92	DWG NO: 0000-9040-400
APPROVED: J.SCHMIDT	DATE: 12/4/91	090404C2.DWG
PAGE 51190		SHEET 1 OF 2

DATE	REV	CHANGE	BY	CHKD	APVD
		SEE SHEET 1			



THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
 10200 WEST YORK STREET WICHITA, KANSAS 67215		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL
DRAWN D.HARDER 9/4/91	DATE 9/4/91	TITLE SCHEMATIC, MECH PWR SUPPLY
CHECKED P.HARRIS 01/14/92	DATE 01/14/92	DWG NO 0000-9040-400
APPROVED J.SCHMIDT 12/4/91	DATE 12/4/91	REV C2
090404C2.DWG		CAGE 51190 SHEET 2 OF 2

Subject to Export Control, see Cover Page for details.



DATE	REV	CHANGE	BY	CHKD	APVD
		SEE SHEET 1			

P/J25003 OMITTED FROM THIS VIEW FOR CLARITY

DETAIL "A"

(VCO) BOTTOM VIEW (COAX CONNECTIONS)

COAX RUNNING LIST

COAX TAG	FROM		TO	
	ASSEMBLY	CONNECTOR	ASSEMBLY	CONNECTOR
W4	VCO	J48002	DISPLAY/COUNTER (FINAL TEST)	A1J4
11	VCO	J48008	AT10002 (COMPOSITE)	AT2-J2
12	VCO	J48007	IF GEN (FINAL TEST)	J36003
13	VCO	J48010	AT10003 (COMPOSITE)	AT3-J2
14	VCO	J48011	AT10003 (COMPOSITE)	AT3-J1
15	X-BAND	J41027	COUPLER/SPLITTER	J18001
17	MAIN DIODE SW	J37001	RELAY K51001 (FLOOR)	K1-NC
18	RELAY/COMM	K51001-C	AT10001 (COMPOSITE)	AT1-J2
22	VCO (FM/TUNE)	J48005	DISCRIM NO. 1 (COMPOSITE)	J50006
W1	X-BAND	J41028	8.25 GHZ (FLOOR)	AT1J1
31	X-BAND	J41026	MAIN DIODE SW (FLOOR)	J37002
34	VCO	J48004	MECH CARD CAGE ITEM NO. 7	J49001
35	VCO NO. 2	J48001	HET. BLOCK	J25003
36	HET BLK	J25002	VIDEO BOARD	J17008
40	HET BLK	J25004	REAR PANEL VCO	P11004
41	COUPLER/SPLIT	J18004	BUFFER AMP	J56001

WIRE RUNNING LIST

TERMINAL	NOTE	TERMINAL	AWG	COLOR
L56001		FL25002	26	RED

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DRAWING STANDARD DO NOT SCALE PRINT / IF IN DOUBT ASK TO IFR EWS-140

THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.

AEROFLEX
10200 WEST YORK STREET
WICHITA, KANSAS 67215

PROPRIETARY AND CONFIDENTIAL PROPERTY OF AEROFLEX WICHITA DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT AEROFLEX APPROVAL.

TITLE
MECH ASSY FLOOR

DRAWN: R. HARRIS DATE: 11/08/00
CHECKED: M. BRUFFETT DATE: 11/15/00
APPROVED: G. HILL DATE: 11/21/00

DWG NO: 7005-9042-000
CAGE 51190

REV: C1
SHEET 2 OF 2

This document contains controlled technology or technical data under the jurisdiction of the Export Administration Regulations (EAR), 15 CFR 730-774. It cannot be transferred to any foreign third party without the specific prior approval of the U.S. Department of Commerce Bureau of Industry and Security (BIS). Violations of these regulations are punishable by fine, imprisonment, or both.

DATE	REV	CHANGE	BY	CHKD	APVD
12/04/00	A	REL 19248	REH	MB	GMH
01/10/01	B	REL 19219	REH	MB	GMH
04/18/01	C	REL 19491	REH	MB	GMH
03/18/05	C1	INC 19842	SCP	CJM	GMH
11/16/07	D	INC 20933	DCM	JAA	RC

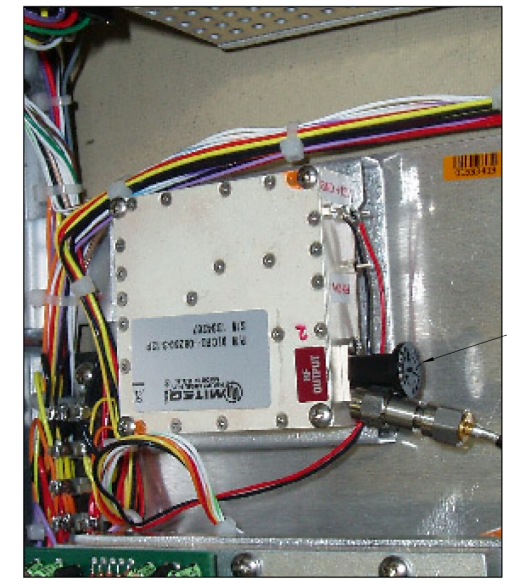
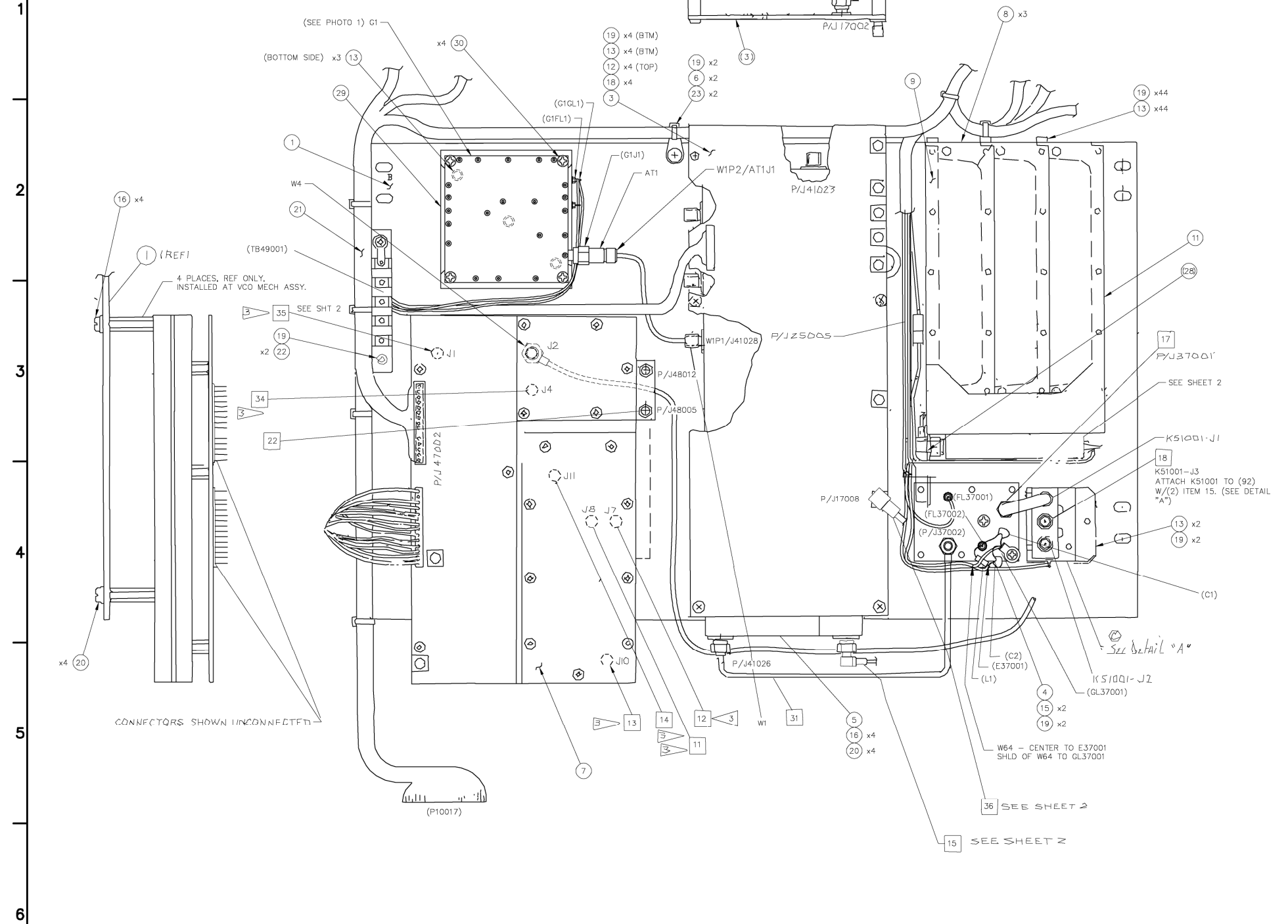
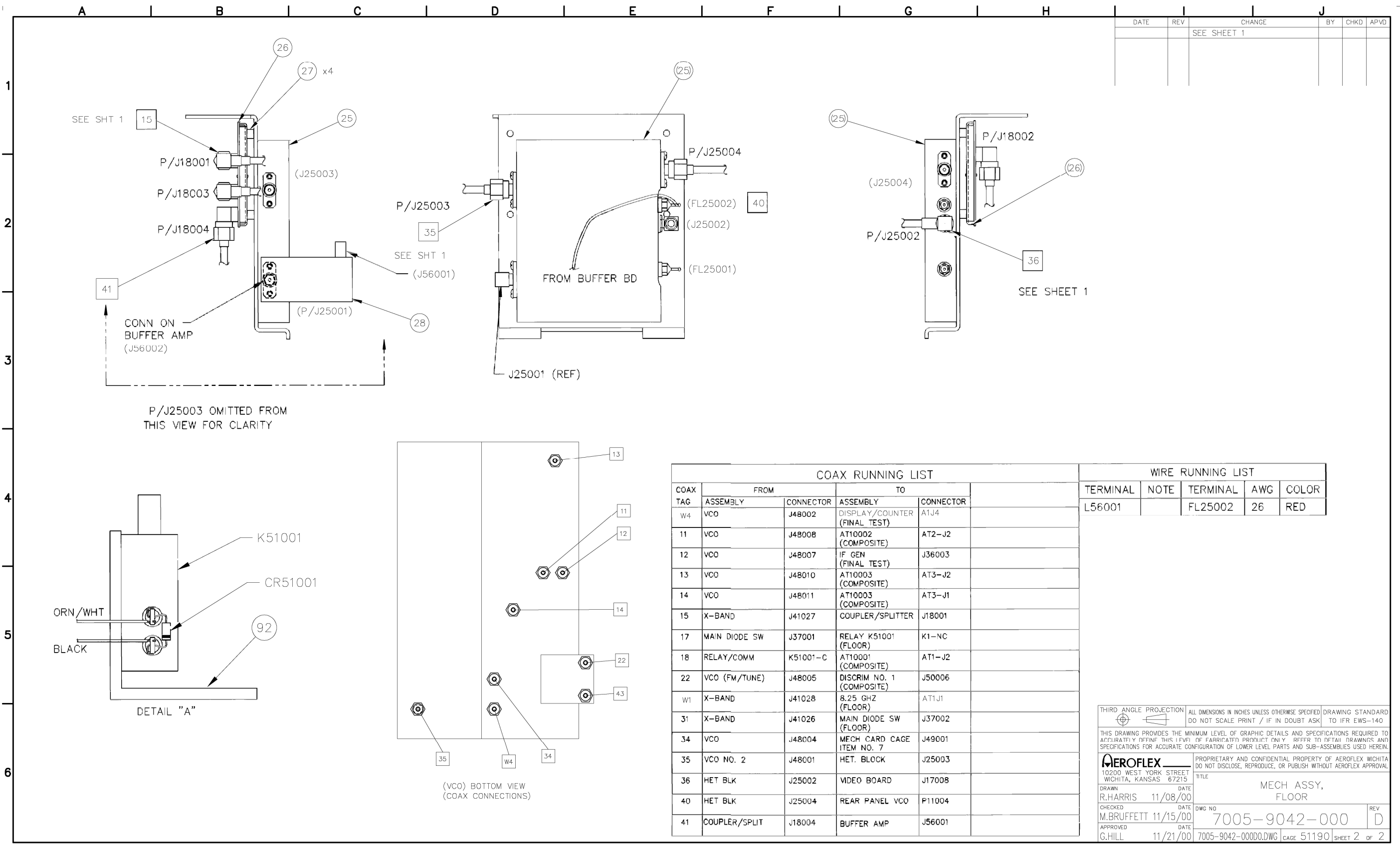


PHOTO 1

- NOTES:
- 1 ALL REFERENCE DESIGNATORS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS DRAWING CARRIES SERIES 51XXX (e.g., GL1 IS GL51001)
 - 2 NOTE NOT USED
 - 3 MOUNT THE FOLLOWING CABLES BEFORE INSTALLING THE VCO TO THE FLOOR ASSY:

COAX TAG NO.	CONNECTOR
W4	J48002
11	J48008
12	J48007
13	J48010
14	J48011
34	J48004
35	J48001
 4. [XX] INDICATES WIRE TAG NO
 5. FOR COAX RUNNING LIST, SEE SHEET NO. 2.

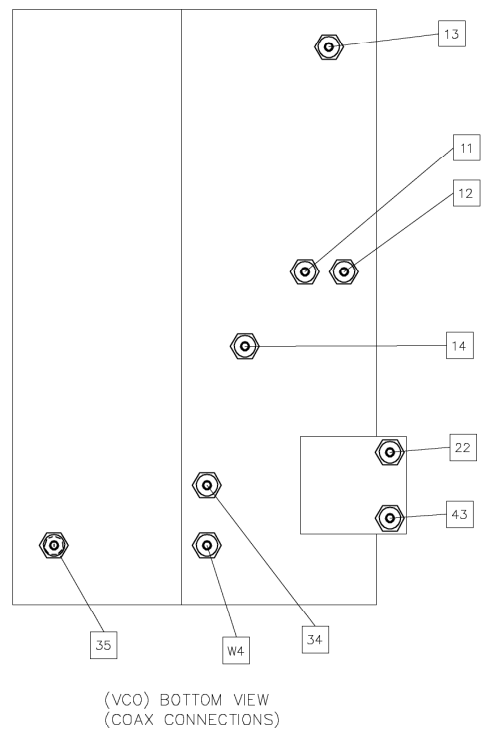
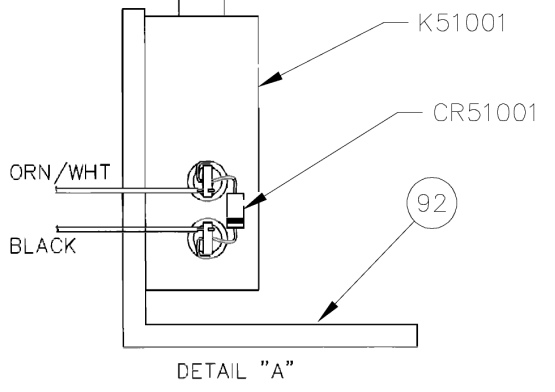
THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
AEROFLEX 10200 WEST YORK STREET WICHITA, KANSAS 67215		PROPRIETARY AND CONFIDENTIAL PROPERTY OF AEROFLEX WICHITA DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT AEROFLEX APPROVAL
DRAWN: R.HARRIS DATE: 11/08/00		TITLE: MECH ASSY, FLOOR
CHECKED: M.BRUFFETT DATE: 11/15/00		DWG NO: 7005-9042-000
APPROVED: G.HILL DATE: 11/21/00		REV: D 7005-9042-0000.DWG (CAGE 51190) SHEET 1 OF 2



SEE SHT 1

CONN ON
BUFFER AMP
(J56002)

P/J25003 OMITTED FROM
THIS VIEW FOR CLARITY



COAX RUNNING LIST				
COAX TAG	FROM		TO	
	ASSEMBLY	CONNECTOR	ASSEMBLY	CONNECTOR
W4	VCO	J48002	DISPLAY/COUNTER (FINAL TEST)	AT1J4
11	VCO	J48008	AT10002 (COMPOSITE)	AT2-J2
12	VCO	J48007	IF GEN (FINAL TEST)	J36003
13	VCO	J48010	AT10003 (COMPOSITE)	AT3-J2
14	VCO	J48011	AT10003 (COMPOSITE)	AT3-J1
15	X-BAND	J41027	COUPLER/SPLITTER	J18001
17	MAIN DIODE SW	J37001	RELAY K51001 (FLOOR)	K1-NC
18	RELAY/COMM	K51001-C	AT10001 (COMPOSITE)	AT1-J2
22	VCO (FM/TUNE)	J48005	DISCRIM NO. 1 (COMPOSITE)	J50006
W1	X-BAND	J41028	8.25 GHZ (FLOOR)	AT1J1
31	X-BAND	J41026	MAIN DIODE SW (FLOOR)	J37002
34	VCO	J48004	MECH CARD CAGE ITEM NO. 7	J49001
35	VCO NO. 2	J48001	HET. BLOCK	J25003
36	HET BLK	J25002	VIDEO BOARD	J17008
40	HET BLK	J25004	REAR PANEL VCO	P11004
41	COUPLER/SPLIT	J18004	BUFFER AMP	J56001

WIRE RUNNING LIST				
TERMINAL	NOTE	TERMINAL	AWG	COLOR
L56001		FL25002	26	RED

THIRD ANGLE PROJECTION

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK TO IFR EWS-140

DRAWING STANDARD TO IFR EWS-140

THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY OFFER THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.

AEROFLEX
10200 WEST YORK STREET
WICHITA, KANSAS 67215

PROPRIETARY AND CONFIDENTIAL PROPERTY OF AEROFLEX WICHITA DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT AEROFLEX APPROVAL

TITLE: MECH ASSY, FLOOR

DRAWN: R.HARRIS DATE: 11/08/00

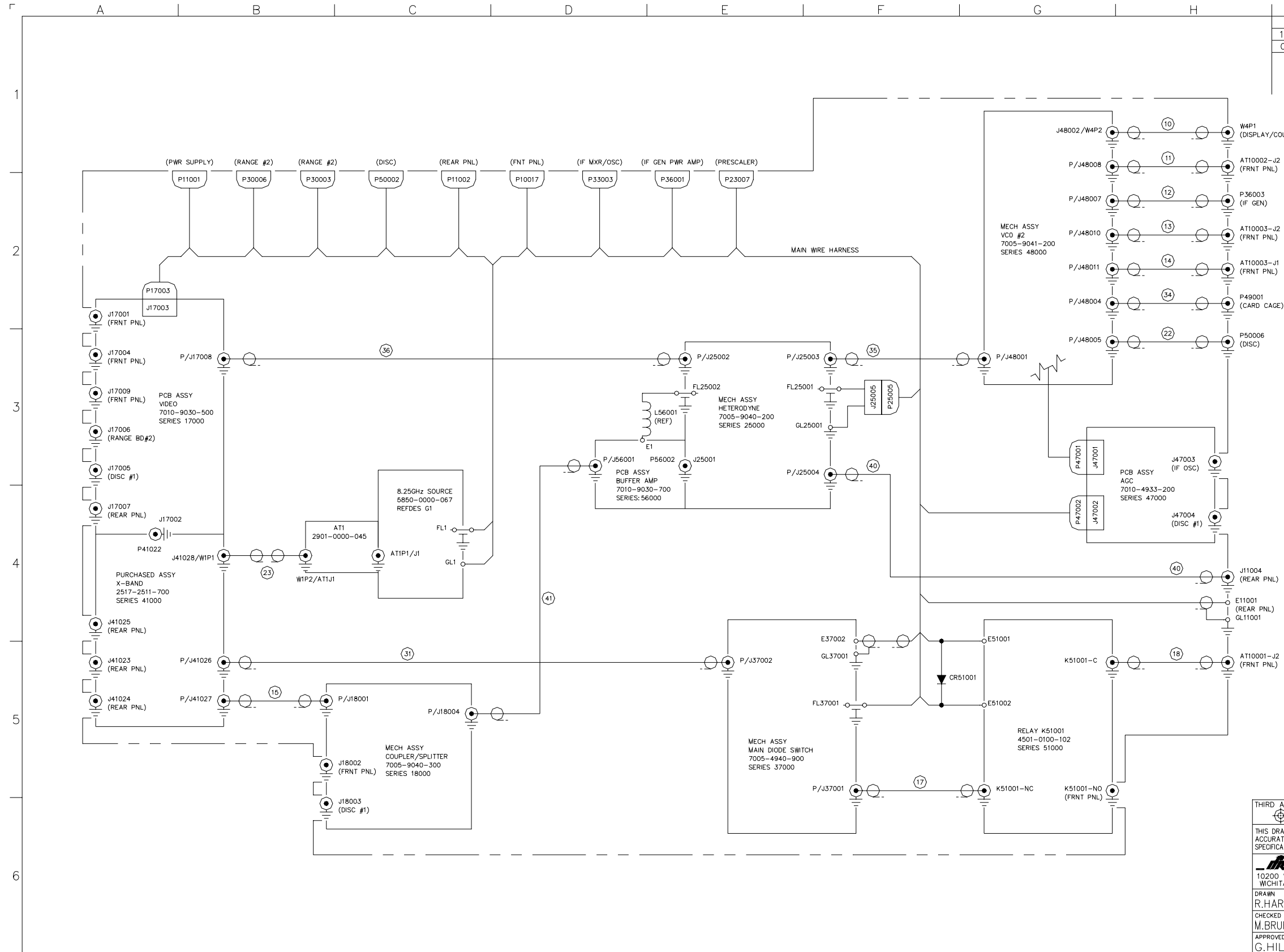
CHECKED: M.BRUFFETT DATE: 11/15/00

APPROVED: G.HILL DATE: 11/21/00

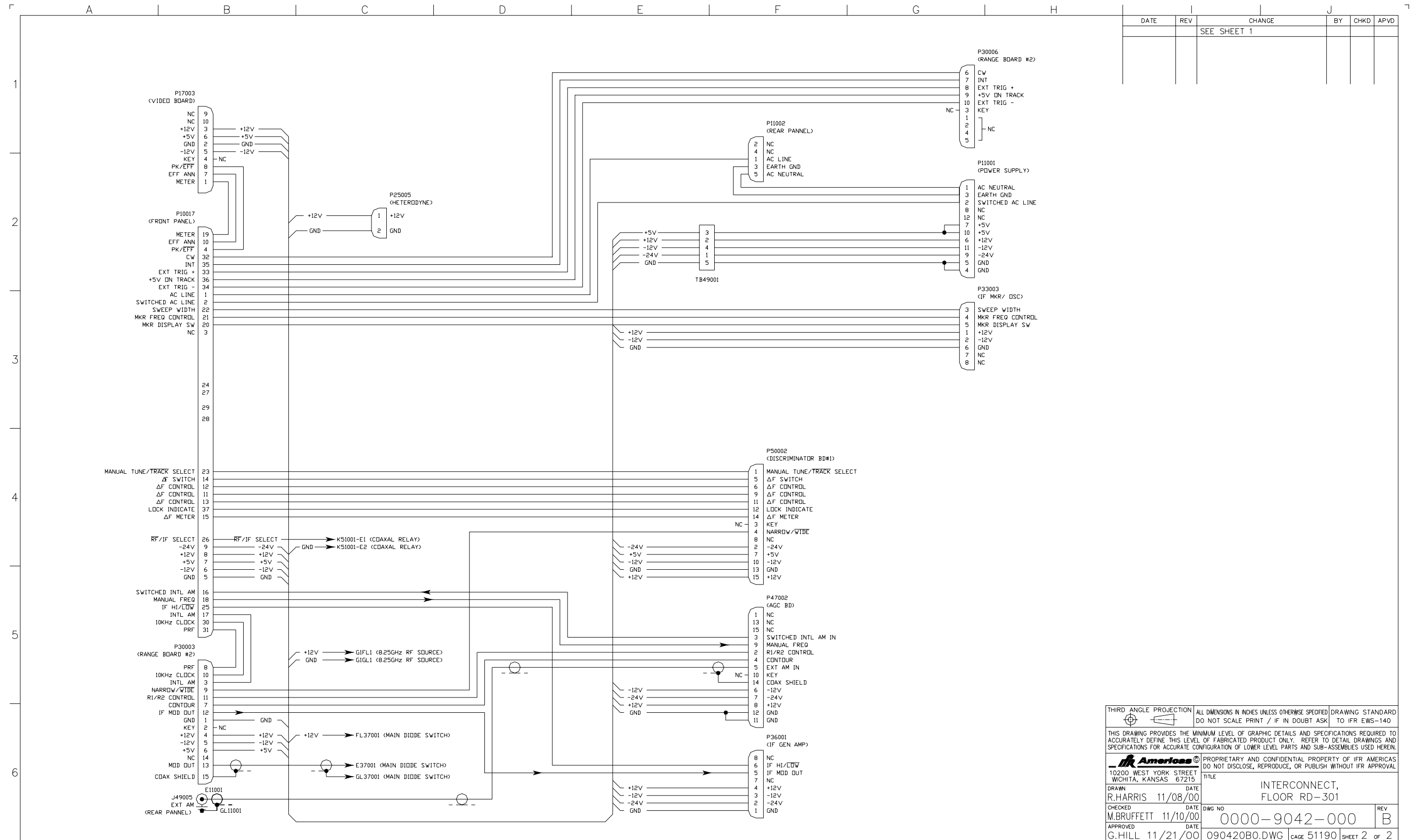
DWG NO: 7005-9042-000 REV: D

7005-9042-0000.DWG CAGE 51190 SHEET 2 OF 2

DATE	REV	CHANGE	BY	CHKD	APVD
11/28/00	A	REL 19248	REH	MB	GMH
01/09/01	B	REL 19219	REH	MB	GMH

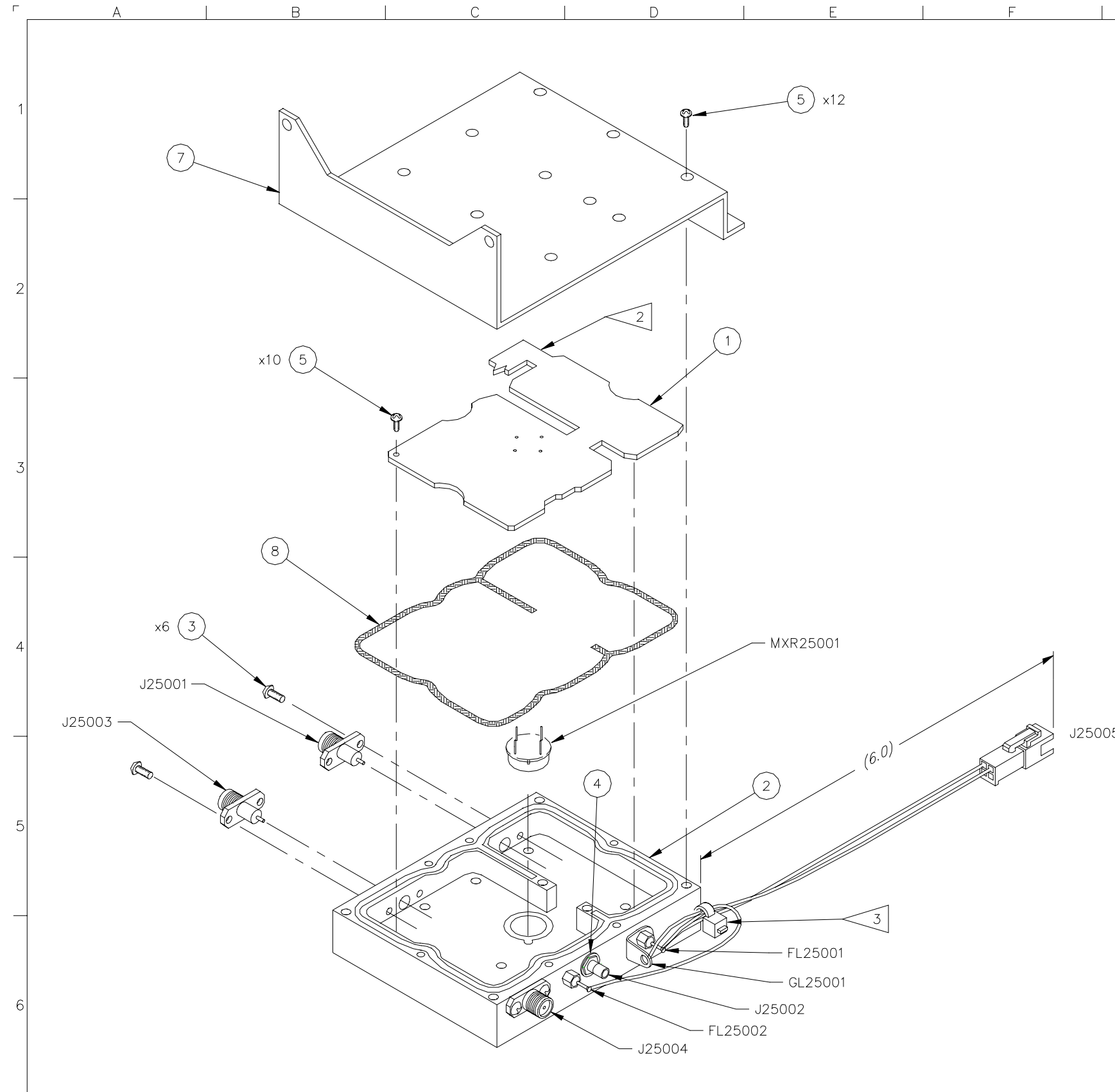


THIRD ANGLE PROJECTION		ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED		DRAWING STANDARD TO IFR EWS-140	
DO NOT SCALE PRINT / IF IN DOUBT ASK					
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.					
		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL			
10200 WEST YORK STREET WICHITA, KANSAS 67215		TITLE INTERCONNECT, FLOOR RD-301			
DRAWN R.HARRIS	DATE 11/08/00	DATE 11/10/00	DWG NO 0000-9042-000	REV B	
CHECKED M.BRUFFEIT	DATE 11/21/00	DATE 11/21/00	DWG NO 090420B0.DWG	PAGE 51190	SHEET 1 OF 2



THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL
10200 WEST YORK STREET WICHITA, KANSAS 67215		TITLE INTERCONNECT, FLOOR RD-301
DRAWN R.HARRIS	DATE 11/08/00	DWG NO 0000-9042-000
CHECKED M.BRUFFETT	DATE 11/10/00	REV B
APPROVED G.HILL	DATE 11/21/00	090420B0.DWG CAGE 51190 SHEET 2 OF 2

Subject to Export Control, see Cover Page for details.

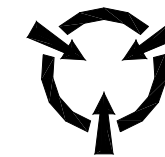


DATE	REV	CHANGE	APVD
1/12/92	A	DESIGN RELEASE	SL
3/23/92	A1	INC REF. #L121	SL
4/23/92	B	INC REF. #L128	RH SL
5/14/92	B1	INC REF. #L134	RH SL
9/2/92	B2	INC REF. #L143	AO SL
2/17/93	B2	PROD. REL. PER ECN 15488	SL
9/8/98	C	INC ECN 18295	RH MLB

NOTES:

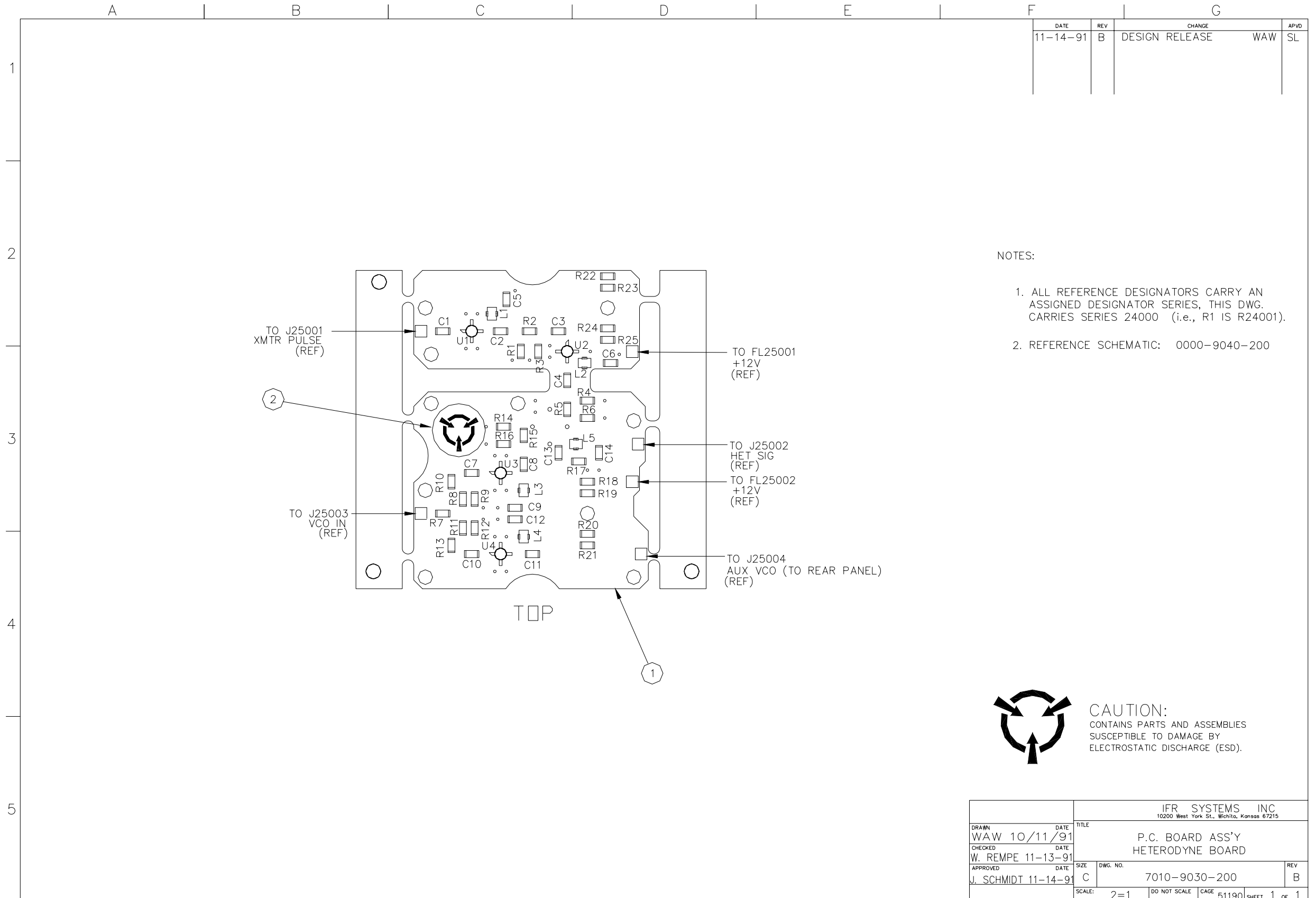
1. BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
2. CUT AWAY BORDER AS INDICATED, 6 PLCS BEFORE INSTALLING PCB ASSY.
3. INSTALLED AT NEXT MECHANICAL LEVEL.

DESG	FROM	TO	COLOR	AWG
W1	FL25001	FL25002	RED	22
W2	J25005-1	J25001	RED	26
W3	J25005-2	GL25001	BLK	26



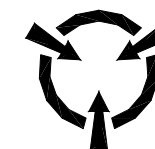
CAUTION:
CONTAINS PARTS AND ASSEMBLIES
SUSCEPTIBLE TO DAMAGE BY
ELECTROSTATIC DISCHARGE (ESD).

THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.	
IFR SYSTEMS, INC. 10200 WEST YORK STREET WICHITA, KANSAS 67215	PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR SYSTEMS, INC. DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL
DRAWN WAW 10/11/91	DATE 10/11/91
CHECKED J.SCHMIDT 12/20/91	DATE 12/20/91
APPROVED P.HARRIS 1/11/92	DATE 1/11/92
TITLE MECH ASSY, HETERODYNE BLOCK	
DWG NO 7005-9040-200	REV C
090402C0.DWG	CAGE 51190 SHEET 1 OF 1



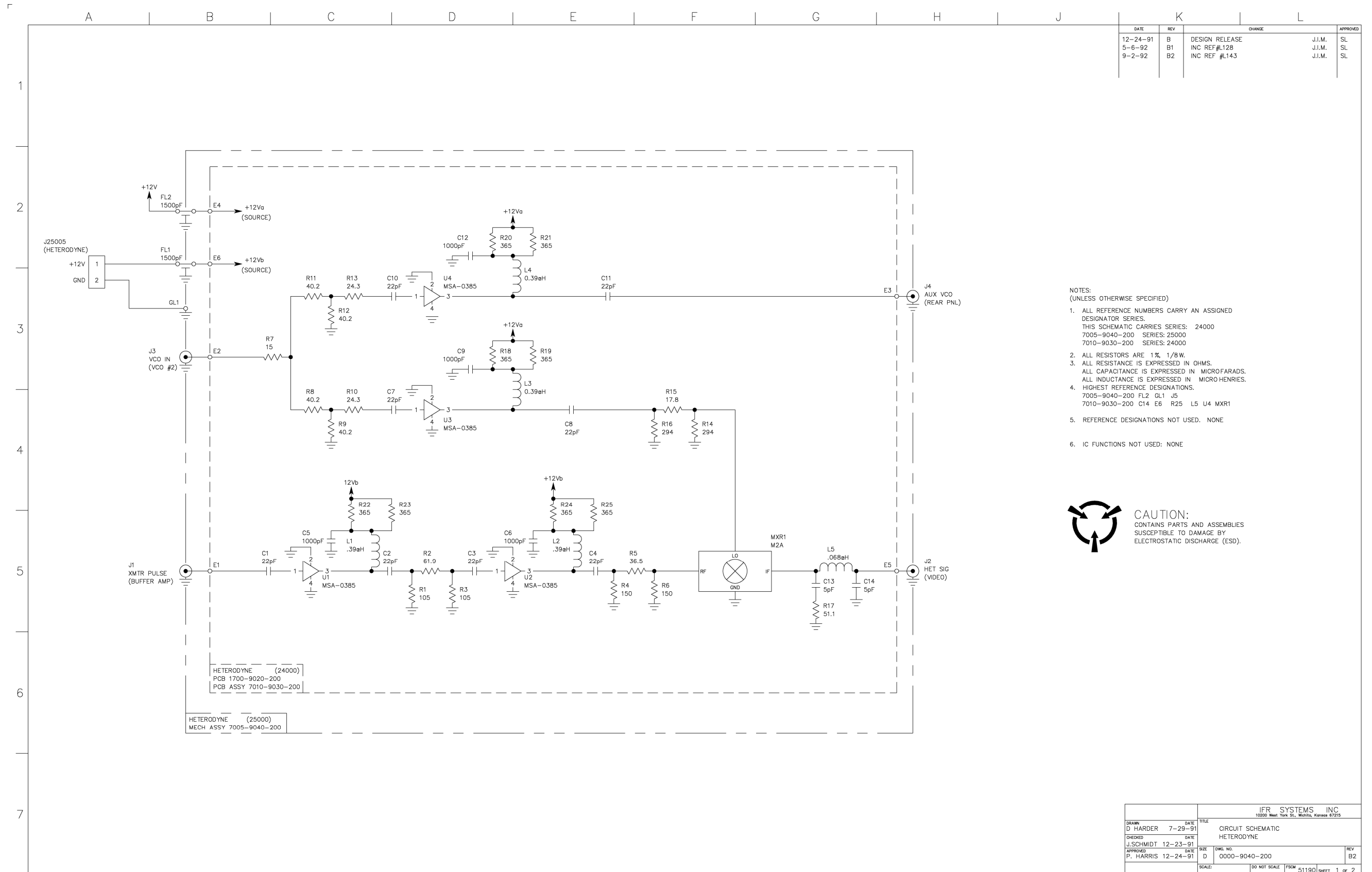
NOTES:

1. ALL REFERENCE DESIGNATORS CARRY AN ASSIGNED DESIGNATOR SERIES, THIS DWG. CARRIES SERIES 24000 (i.e., R1 IS R24001).
2. REFERENCE SCHEMATIC: 0000-9040-200

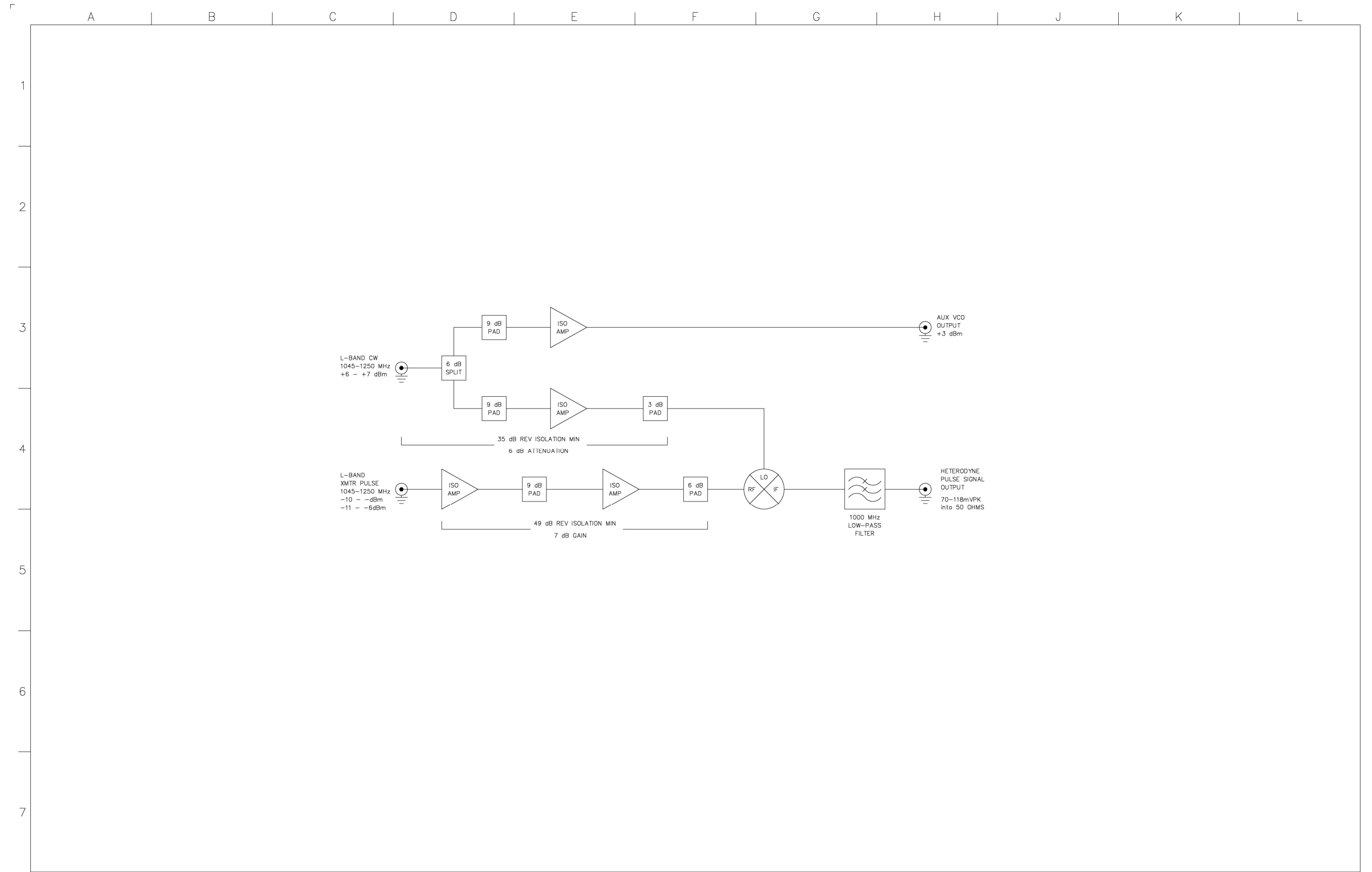


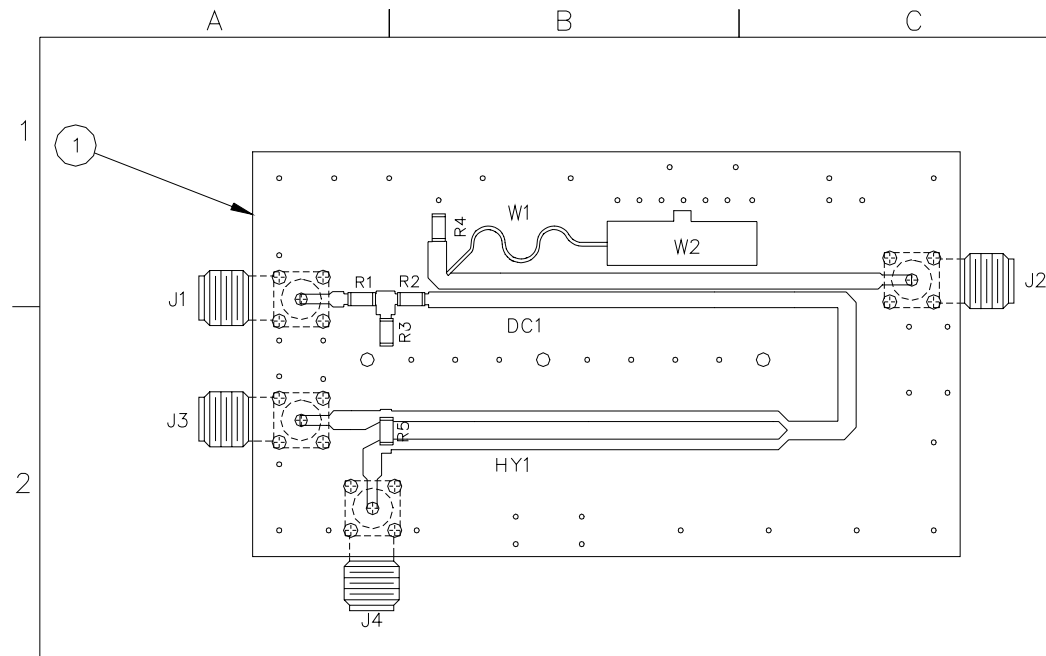
CAUTION:
CONTAINS PARTS AND ASSEMBLIES
SUSCEPTIBLE TO DAMAGE BY
ELECTROSTATIC DISCHARGE (ESD).

IFR SYSTEMS INC 10200 West York St., Wichita, Kansas 67215		TITLE P.C. BOARD ASS'Y HETERODYNE BOARD	
DRAWN WAW 10/11/91	DATE 10/11/91	CHECKED W. REMPE 11-13-91	DATE 11-13-91
APPROVED J. SCHMIDT 11-14-91	DATE 11-14-91	SIZE C	DWG. NO. 7010-9030-200
SCALE: 2=1		DO NOT SCALE	CAGE 51190 SHEET 1 OF 1

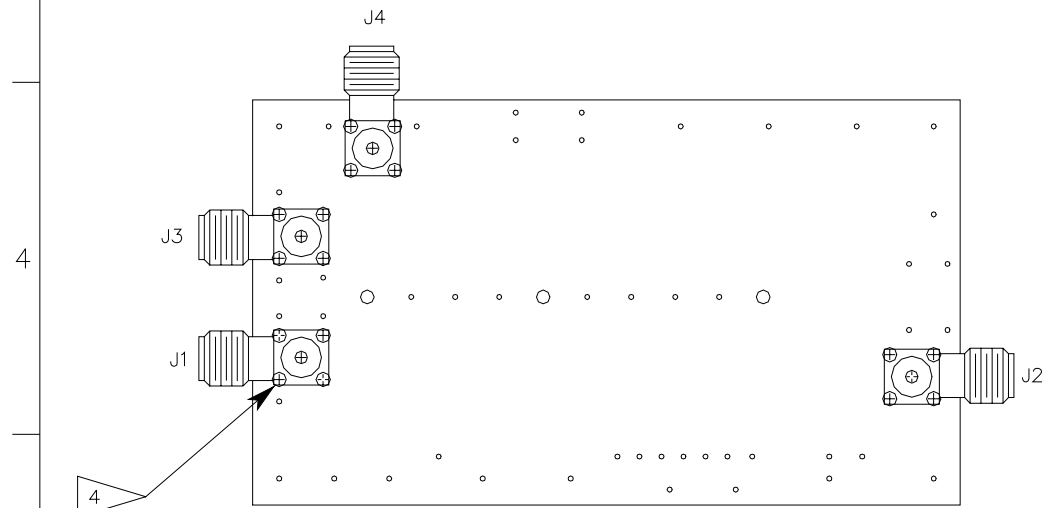


Subject to Export Control, see Cover Page for details.

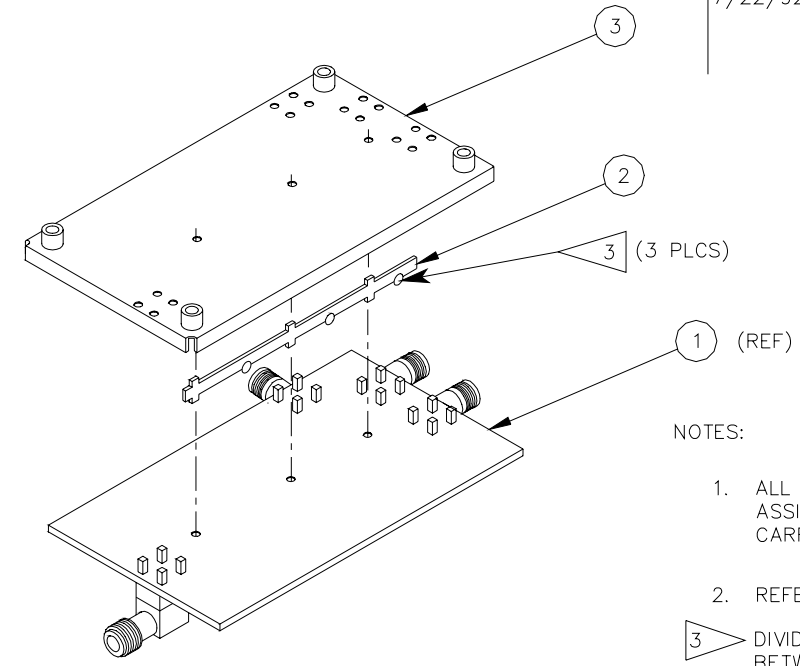




TOP SIDE



BOTTOM SIDE



DETAIL "A"

DATE	REV	CHANGE	APVD
1-11-92	B	DESIGN RELEASE	SL
7/22/92	B1	INC REF # L139	RH SL

NOTES:

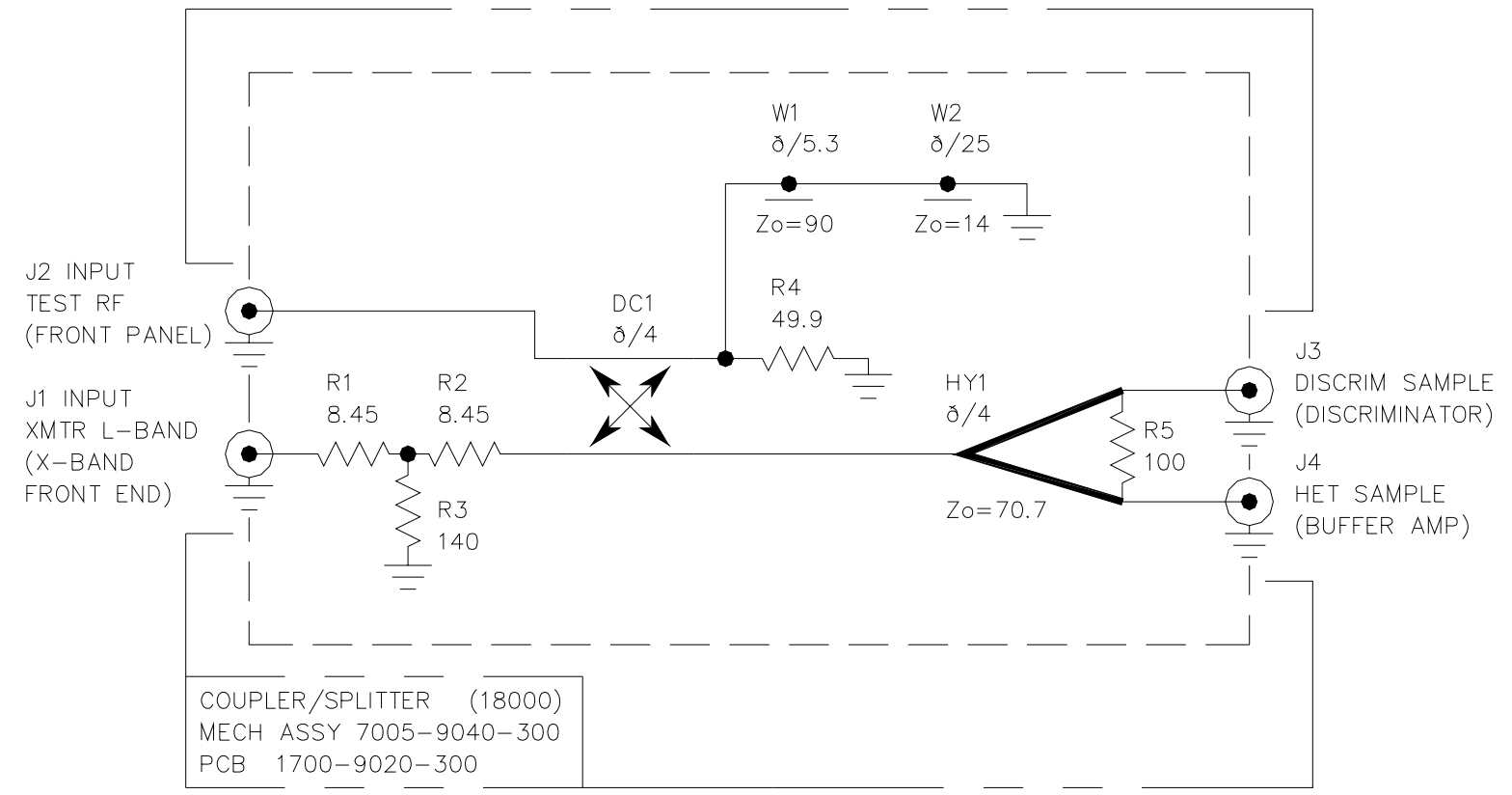
1. ALL REFERENCE DESIGNATORS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS DWG CARRIES SERIES 18000. (i.e. R1 IS 18001)
2. REFERENCE SCHEMATIC IS 0000-9040-300.
3. DIVIDER SHOULD BE TACKED 3 PLACES, BETWEEN EACH TAB ON PC BOARD.
4. SOLDER SHOULD FLOW THROUGH TO THE TOP SIDE OF CONNECTORS.

TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		MATERIAL	
ALL DIMENSIONS	SURFACE FINISH:	N/A	
APPLY AFTER FINISH	REMOVE ALL BURRS	FINISH	
DECIMALS: .XXX= ±	.XXXX= ±	N/A	
ANGLES: ± 1/2DEG.			
IFR SYSTEMS, INC 10200 West York St., Wichita, Kansas 67215			
DRAWN WAW 10/7/91	DATE	TITLE	
CHECKED J. SCHMIDT 12-20-91	DATE	MECH ASS'Y COUPLER / SPLITTER	
APPROVED P. HARRIS 12-21-91	DATE	SIZE C	DWG. NO. 7005-9040-300
		REV B1	
SCALE: 2=1		DO NOT SCALE	CAGE 51190 SHEET 1 OF 1

A | B | C | D | E | F | G | H

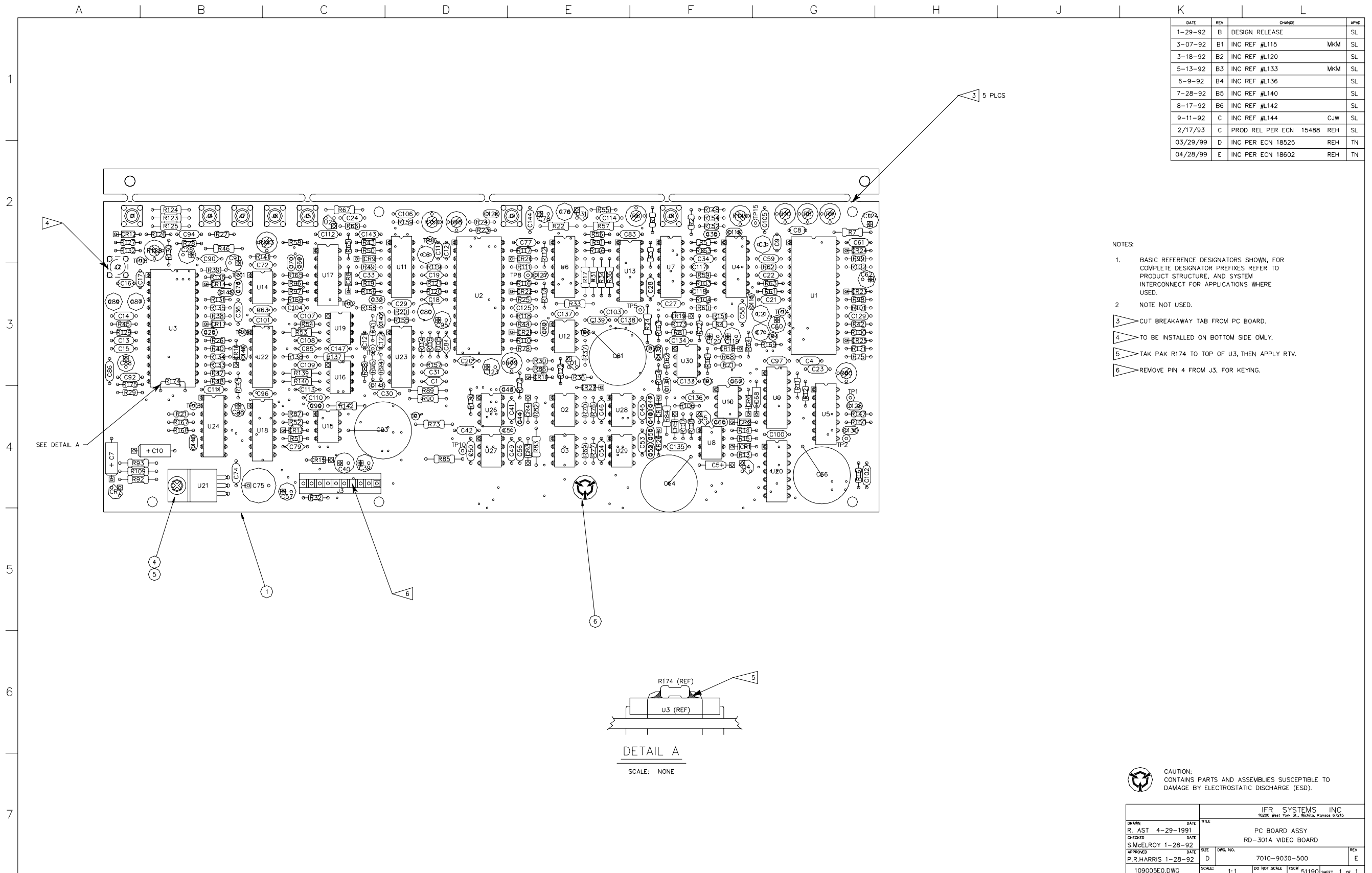
DATE	REV	CHANGE	APPROVED
12-6-91	B	DESIGN RELEASE	J.I.M. SL
DATE	REV	CHANGE	APPROVED
2-17-93	B1	PROD. REL. PER ECN #15488	J.I.M. SL

1
2
3
4
5



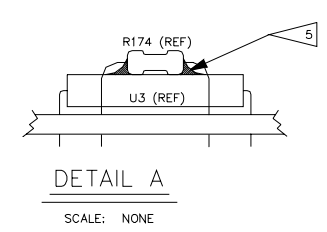
- NOTES:
(UNLESS OTHERWISE SPECIFIED)
1. ALL REFERENCE NUMBERS CARRY AN ASSIGNED DESIGNATOR SERIES.
THIS SCHEMATIC CARRIES SERIES: (18000)
 2. ALL RESISTORS ARE 1%, 1/8 W.
 3. ALL RESISTANCE IS EXPRESSED IN OHMS.
ALL CAPACITANCE IS EXPRESSED IN MICRO FARADS.
ALL INDUCTANCE IS EXPRESSED IN MICRO HENRIES.
 4. HIGHEST REFERENCE DESIGNATIONS.
DC1, R5, HY1, W2
 5. CENTER FREQUENCY FOR WAVELENGTH IS 1143 MHz.

DRAWN R.CHAPMAN		DATE 4-16-91	TITLE CIRCUIT SCHEMATIC COUPLER/SPLITTER	
CHECKED A.KRAUSKA		DATE 12-2-91	SIZE B	DWG. NO. 0000-9040-300
APPROVED P.R.HARRIS		DATE 12-2-91	SCALE:	REV B1
		DO NOT SCALE	FSCM 51190	SHEET 1 OF 1



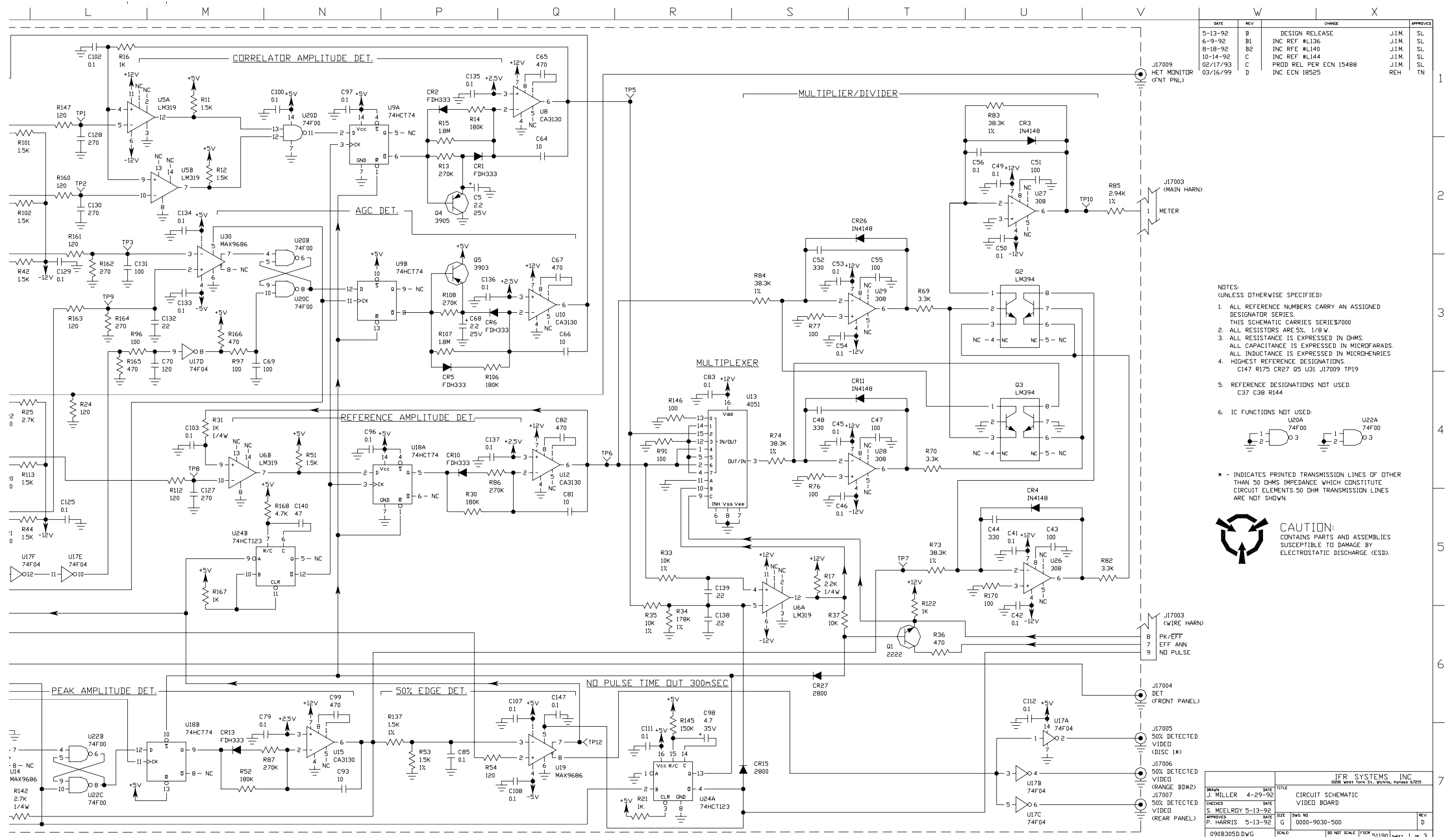
DATE	REV	CHANGE	APPROV
1-29-92	B	DESIGN RELEASE	SL
3-07-92	B1	INC REF #1115	MkM SL
3-18-92	B2	INC REF #1120	SL
5-13-92	B3	INC REF #1133	MkM SL
6-9-92	B4	INC REF #1136	SL
7-28-92	B5	INC REF #1140	SL
8-17-92	B6	INC REF #1142	SL
9-11-92	C	INC REF #1144	CJW SL
2/17/93	C	PROD REL PER ECN 15488	REH SL
03/29/99	D	INC PER ECN 18525	REH TN
04/28/99	E	INC PER ECN 18602	REH TN

- NOTES:
- BASIC REFERENCE DESIGNATORS SHOWN. FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
 - NOTE NOT USED.
 - CUT BREAKAWAY TAB FROM PC BOARD.
 - TO BE INSTALLED ON BOTTOM SIDE OMLY.
 - TAK PAK R174 TO TOP OF U3, THEN APPLY RTV.
 - REMOVE PIN 4 FROM J3, FOR KEYING.



CAUTION:
CONTAINS PARTS AND ASSEMBLIES SUSCEPTIBLE TO
DAMAGE BY ELECTROSTATIC DISCHARGE (ESD).

DRAWN		DATE		TITLE	
R. AST	4-29-1991	IFR SYSTEMS, INC 10200 West York St., Wichita, Kansas 67215			
CHECKED		DATE		PC BOARD ASSY	
S. McELROY	1-28-92	RD-301A VIDEO BOARD			
APPROVED		SIZE	DWG. NO.	REV	
P. R. HARRIS	1-28-92	D	7010-9030-500	E	
109005E0.DWG	SCALE:	1:1	DO NOT SCALE	FSCM 51190	SHEET 1 of 1

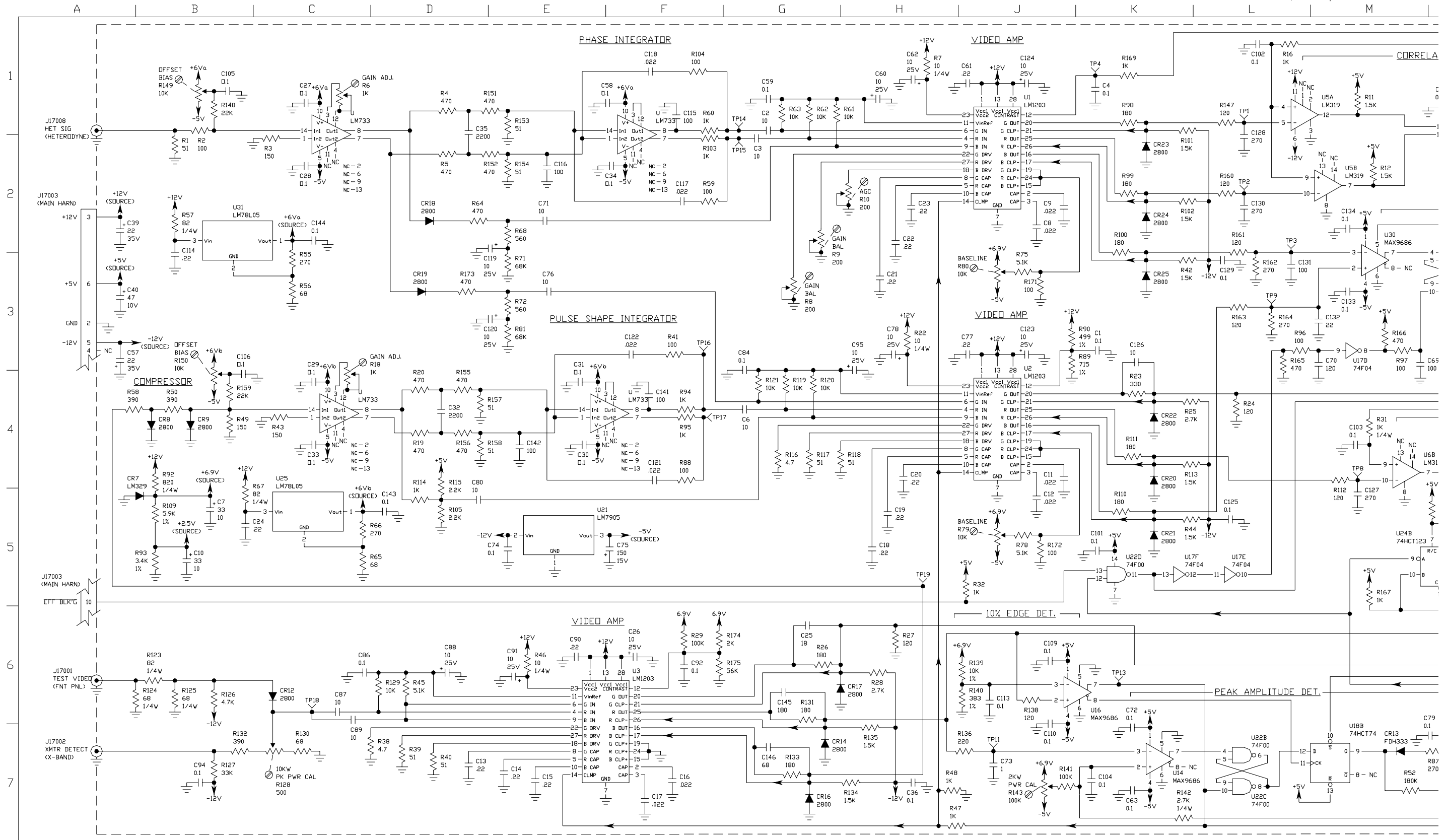


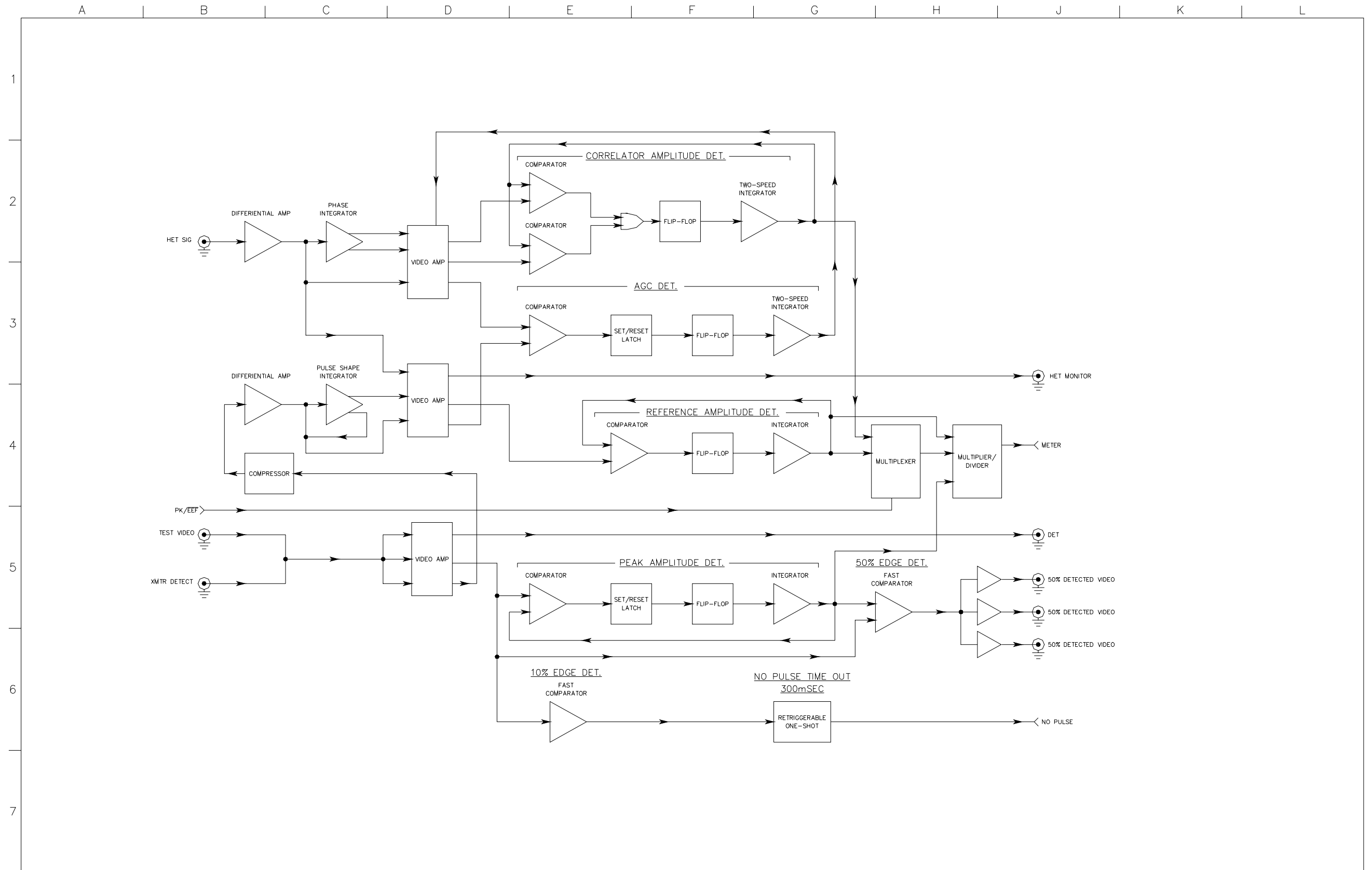
DATE	REV	CHANGE	APPROVED
5-13-92	B	DESIGN RELEASE	JIM SL
6-9-92	B1	INC REF #L136	JIM SL
8-18-92	B2	INC RFE #L140	JIM SL
10-14-92	C	INC REF #L144	JIM SL
02/17/93	C	PROD REL PER ECN 15488	JIM SL
03/16/99	D	INC ECN 18525	REH TN

- NOTES:
(UNLESS OTHERWISE SPECIFIED)
- ALL REFERENCE NUMBERS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES 7000
 - ALL RESISTORS ARE 5%, 1/8 W.
 - ALL RESISTANCE IS EXPRESSED IN OHMS. ALL CAPACITANCE IS EXPRESSED IN MICROFARADS. ALL INDUCTANCE IS EXPRESSED IN MICROHENRIES
 - HIGHEST REFERENCE DESIGNATIONS:
C147 R175 CR27 Q5 U31 J17009 TP19
 - REFERENCE DESIGNATIONS NOT USED:
C37 C38 R144
 - IC FUNCTIONS NOT USED:
U20A 74F00 U22A 74F00
- * - INDICATES PRINTED TRANSMISSION LINES OF OTHER THAN 50 OHMS IMPEDANCE WHICH CONSTITUTE CIRCUIT ELEMENTS. 50 OHM TRANSMISSION LINES ARE NOT SHOWN.

CAUTION:
CONTAINS PARTS AND ASSEMBLIES SUSCEPTIBLE TO DAMAGE BY ELECTROSTATIC DISCHARGE (ESD).

DRAWN J. MILLER 4-29-92		DATE 4-29-92		TITLE CIRCUIT SCHEMATIC VIDEO BOARD	
CHECKED S. MCELROY 5-13-92		DATE 5-13-92		DWS NO 0000-9030-500	
APPROVED P. HARRIS 5-13-92		DATE 5-13-92		REV D	
090B305D.DWG		SCALE		DO NOT SCALE FROM 51190 SHEET 1 OF 3	





A | B | C | D | E | F | G

DATE	REV	CHANGE	APVD
02-19-93	A	PROD. REL. PER ECN 15488	RLA SL
01-11-94	B	INC ECN 15731	SL
01-18-94	B1	INC ECN 15731A	BP BM

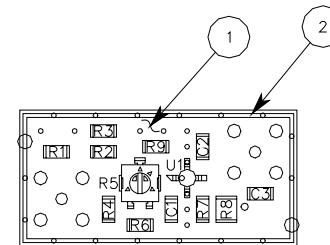
1

2

3

4

5



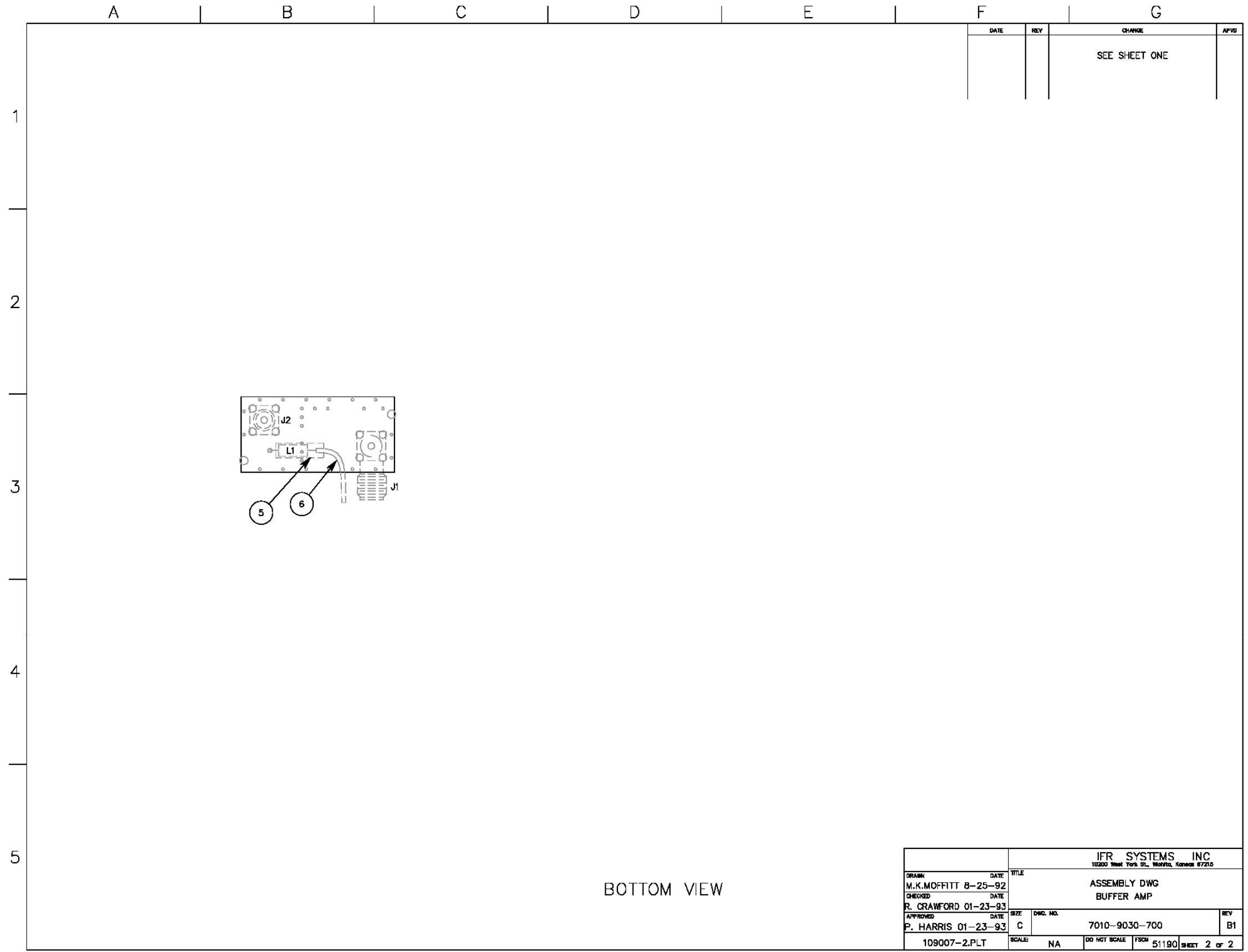
NOTES:

- 1 ALL REFERENCE DESIGNATORS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS DWG CARRIES SERIES 56000. (i.e., R1 IS R56001).



CAUTION:
CONTAINS PARTS AND ASSEMBLIES SUSCEPTIBLE TO
DAMAGE BY ELECTROSTATIC DISCHARGE (ESD).

DRAWN		DATE		TITLE	
M.K. MOFFITT		8-25-92		ASSEMBLY DWG	
CHECKED		DATE		BUFFER AMP	
R. CRAWFORD		01-23-93			
APPROVED		SIZE	DWG. NO.	REV	
P. HARRIS		C	7010-9030-700	B1	
109007B1.PLT		SCALE:	N.T.S.	DO NOT SCALE	FSCM 51190 SHEET 1 of 2

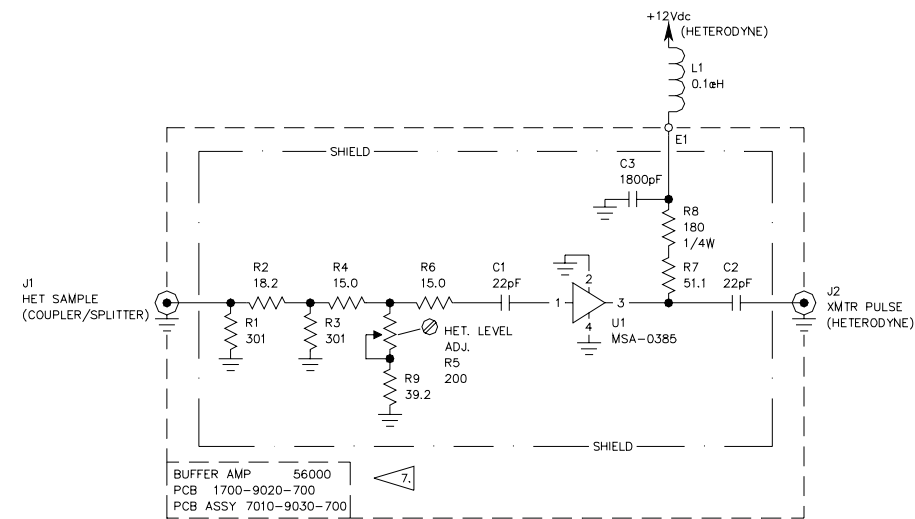


DATE	REV	CHANGE	APPROV
		SEE SHEET ONE	

BOTTOM VIEW

DRAWN		DATE		TITLE		IFR SYSTEMS INC	
M.K. MOFFITT		8-25-92		ASSEMBLY DWG		10200 West York St., Wichita, Kansas 67215	
CHECKED		DATE		BUFFER AMP			
R. CRAWFORD		01-23-93		SIZE	DWG. NO.	REV	
APPROVED		DATE		C	7010-9030-700	B1	
P. HARRIS		01-23-93		SCALE:	NA	DO NOT SCALE	FROM 51190 SHEET 2 of 2

DATE	REV	CHANGE	APPROVED
2-19-93	A	PROD. REL. PER ECN #15488	J.I.M.
01-14-94	B	INC ECN 15731	BP



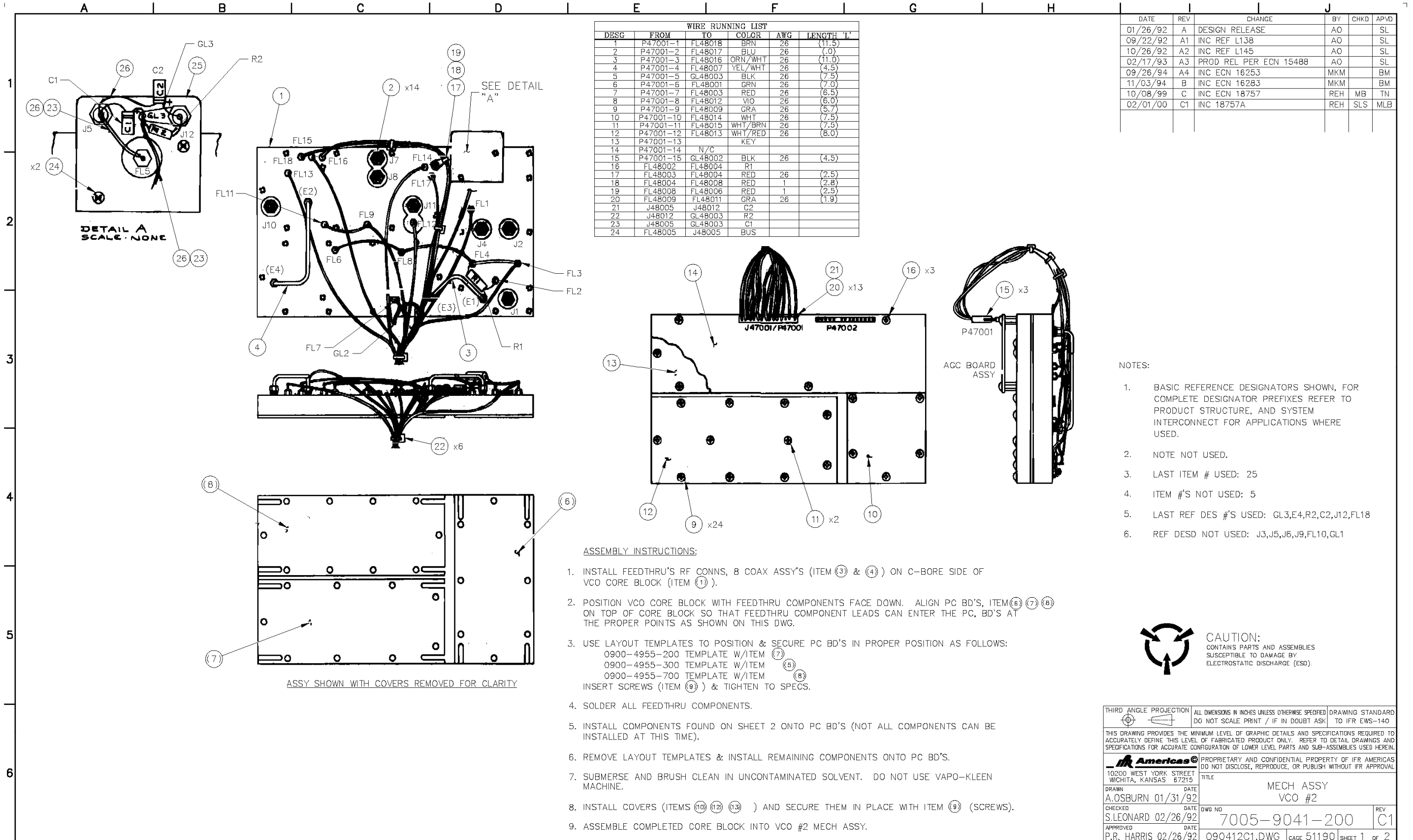
- NOTES:
(UNLESS OTHERWISE SPECIFIED)
- ALL REFERENCE NUMBERS CARRY AN ASSIGNED DESIGNATOR SERIES.
THIS SCHEMATIC CARRIES SERIES: 56000
 - ALL RESISTORS ARE 1%, 1/8W.
 - ALL RESISTANCE IS EXPRESSED IN OHMS.
ALL CAPACITANCE IS EXPRESSED IN MICROFARADS.
ALL INDUCTANCE IS EXPRESSED IN MICROHENRIES
 - HIGHEST REFERENCE DESIGNATIONS.
C3, E1, J2, L1, R9, U1.
 - REFERENCE DESIGNATIONS NOT USED.
NONE
 - IC FUNCTIONS NOT USED: NONE
 - AMP HAS APPROXIMATELY 0 TO 5dB GAIN, AND 24dB REVERSE ISOLATION FROM 1045 TO 1245MHz.
- * - INDICATES PRINTED TRANSMISSION LINES OF OTHER THAN 50 OHMS IMPEDANCE WHICH CONSTITUTE CIRCUIT ELEMENTS. 50 OHM TRANSMISSION LINES ARE NOT SHOWN.



CAUTION:
CONTAINS PARTS AND ASSEMBLIES
SUSCEPTIBLE TO DAMAGE BY
ELECTROSTATIC DISCHARGE (ESD).

BUFFER AMP 56000
PCB 1700-9020-700
PCB ASSY 7010-9030-700

DRAWN		DATE		TITLE	
J. MILLER	10-14-92	CIRCUIT SCHEMATIC BUFFER AMP			
CHECKED		DATE			
S. LEONARD	2-18-93				
APPROVED		DATE		REV	
R. CRAWFORD	2-18-93	SIZE	DWG. NO.		
		D	0000-9030-700	B	
090B307A.DWG		SCALE	DO NOT SCALE	PSCM 51190	SHEET 1 of 1



- NOTES:
- BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
 - NOTE NOT USED.
 - LAST ITEM # USED: 25
 - ITEM #S NOT USED: 5
 - LAST REF DES #S USED: GL3,E4,R2,C2,J12,FL18
 - REF DESD NOT USED: J3,J5,J6,J9,FL10,GL1

ASSEMBLY INSTRUCTIONS:

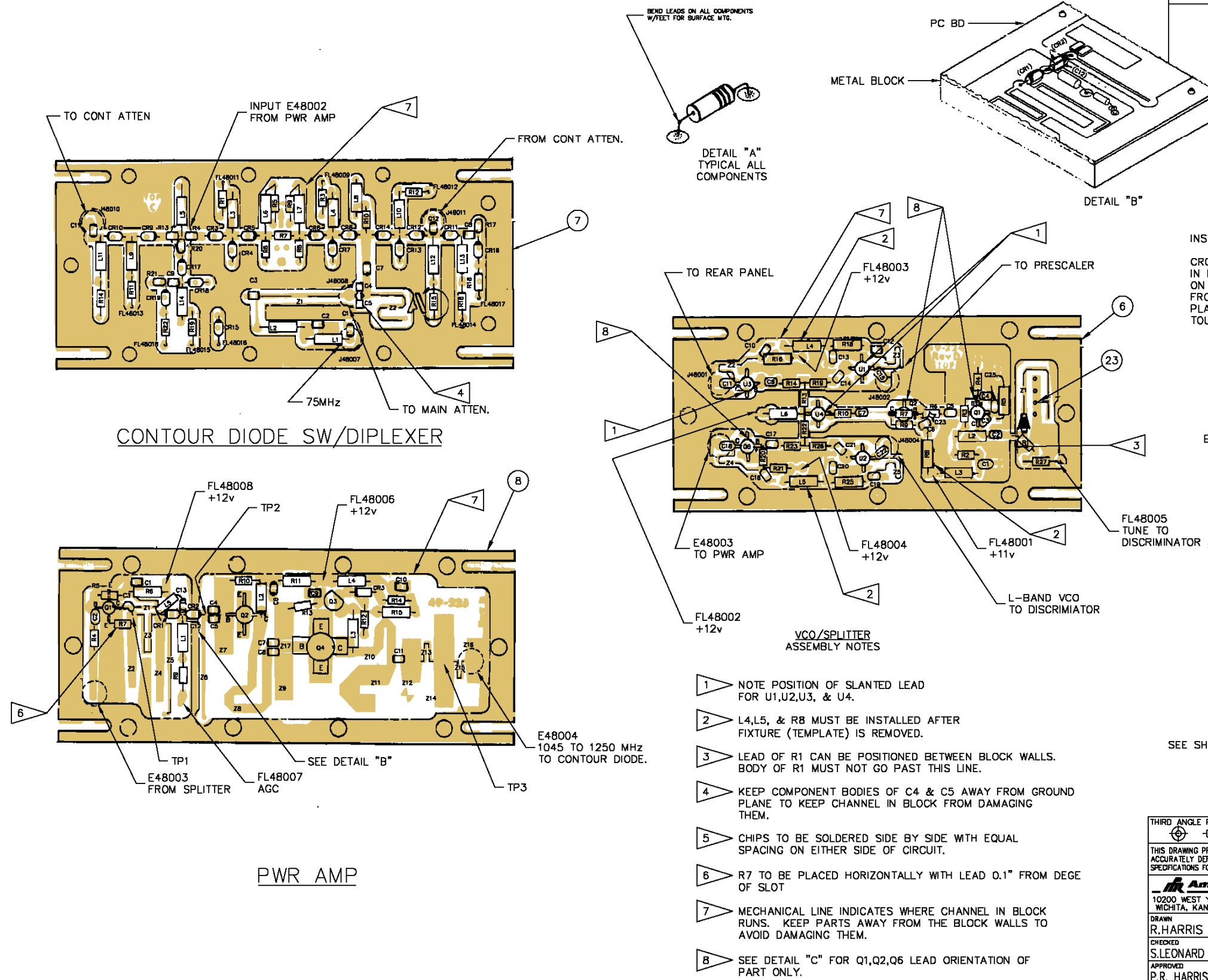
- INSTALL FEEDTHRU'S RF CONNS, 8 COAX ASSY'S (ITEM (3) & (4)) ON C-BORE SIDE OF VCO CORE BLOCK (ITEM (1)).
- POSITION VCO CORE BLOCK WITH FEEDTHRU COMPONENTS FACE DOWN. ALIGN PC BD'S, ITEM (6) (7) (8) ON TOP OF CORE BLOCK SO THAT FEEDTHRU COMPONENT LEADS CAN ENTER THE PC, BD'S AT THE PROPER POINTS AS SHOWN ON THIS DWG.
- USE LAYOUT TEMPLATES TO POSITION & SECURE PC BD'S IN PROPER POSITION AS FOLLOWS:
0900-4955-200 TEMPLATE W/ITEM (7)
0900-4955-300 TEMPLATE W/ITEM (9)
0900-4955-700 TEMPLATE W/ITEM (8)
INSERT SCREWS (ITEM (9)) & TIGHTEN TO SPECS.
- SOLDER ALL FEEDTHRU COMPONENTS.
- INSTALL COMPONENTS FOUND ON SHEET 2 ONTO PC BD'S (NOT ALL COMPONENTS CAN BE INSTALLED AT THIS TIME).
- REMOVE LAYOUT TEMPLATES & INSTALL REMAINING COMPONENTS ONTO PC BD'S.
- SUBMERSE AND BRUSH CLEAN IN UNCONTAMINATED SOLVENT. DO NOT USE VAPO-KLEEN MACHINE.
- INSTALL COVERS (ITEMS (10) (12) (13)) AND SECURE THEM IN PLACE WITH ITEM (9) (SCREWS).
- ASSEMBLE COMPLETED CORE BLOCK INTO VCO #2 MECH ASSY.



CAUTION:
CONTAINS PARTS AND ASSEMBLIES
SUSCEPTIBLE TO DAMAGE BY
ELECTROSTATIC DISCHARGE (ESD).

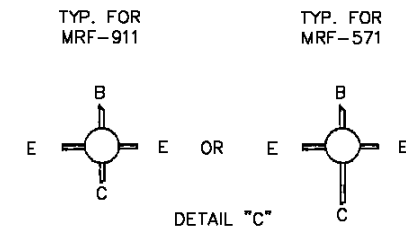
THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
10200 WEST YORK STREET WICHITA, KANSAS 67215		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL
DRAWN DATE A.OSBURN 01/31/92		TITLE MECH ASSY VCO #2
CHECKED DATE S.LEONARD 02/26/92	DWG NO 7005-9041-200	REV C1
APPROVED DATE P.R. HARRIS 02/26/92	090412C1.DWG	CAGE 51190 SHEET 1 OF 2

DATE	REV	CHANGE	BY	CHKD	APVD
		SEE SHEET 1			



INSTRUCTIONS:

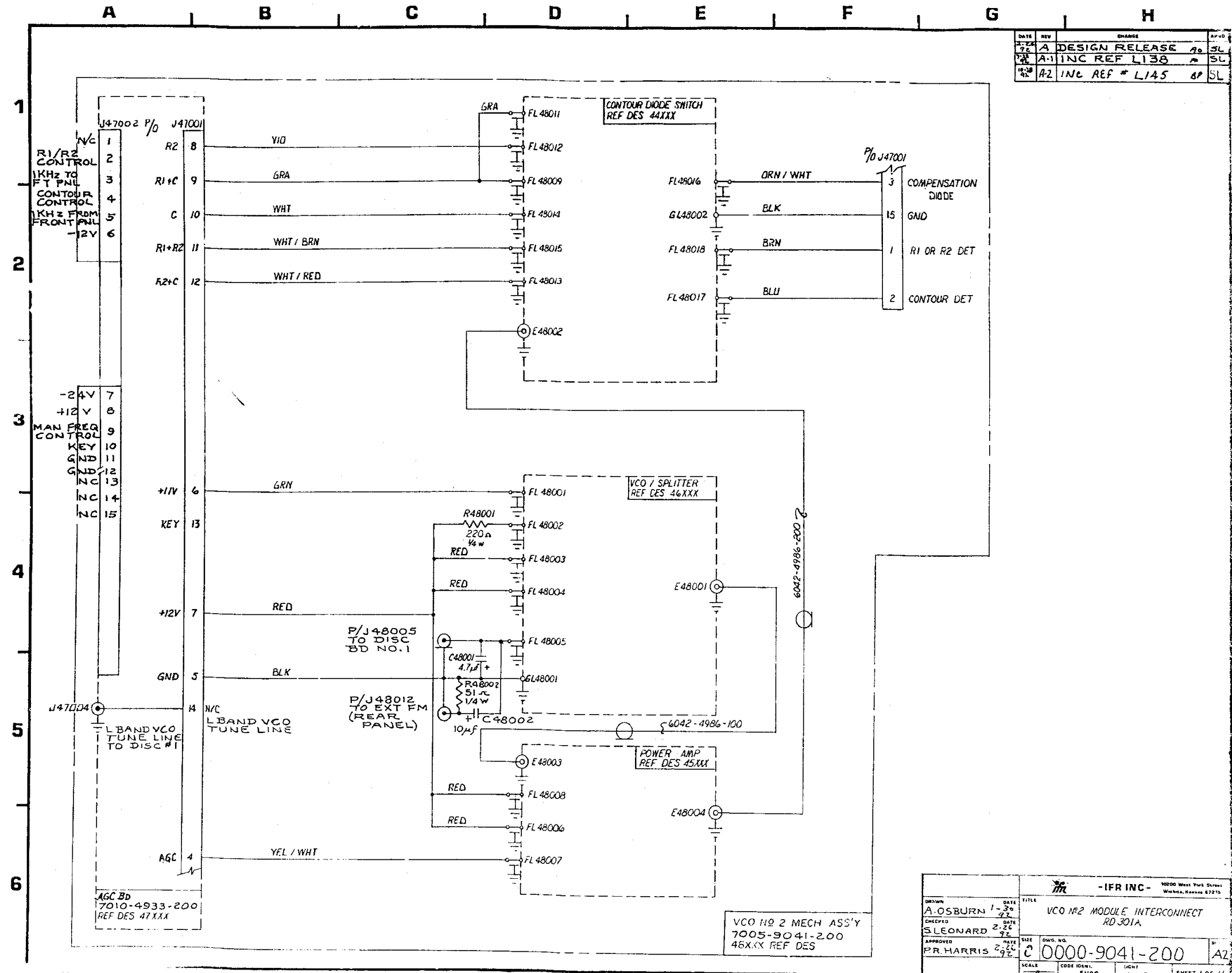
CROWD CR2 TOWARD REAR OF HOLE IN PC BOARD. SET CHIP CAP, C12, ON SIDE AND SLIP INTO OPENING IN FRONT OF CR2. SOLDER C12 IN PLACE MAKING SURE IT DOES NOT TOUCH THE METAL BLOCK BELOW.



- 1 NOTE POSITION OF SLANTED LEAD FOR U1,U2,U3, & U4.
- 2 L4,L5, & R8 MUST BE INSTALLED AFTER FIXTURE (TEMPLATE) IS REMOVED.
- 3 LEAD OF R1 CAN BE POSITIONED BETWEEN BLOCK WALLS. BODY OF R1 MUST NOT GO PAST THIS LINE.
- 4 KEEP COMPONENT BODIES OF C4 & C5 AWAY FROM GROUND PLANE TO KEEP CHANNEL IN BLOCK FROM DAMAGING THEM.
- 5 CHIPS TO BE SOLDERED SIDE BY SIDE WITH EQUAL SPACING ON EITHER SIDE OF CIRCUIT.
- 6 R7 TO BE PLACED HORIZONTALLY WITH LEAD 0.1" FROM DEGE OF SLOT
- 7 MECHANICAL LINE INDICATES WHERE CHANNEL IN BLOCK RUNS. KEEP PARTS AWAY FROM THE BLOCK WALLS TO AVOID DAMAGING THEM.
- 8 SEE DETAIL "C" FOR Q1,Q2,Q6 LEAD ORIENTATION OF PART ONLY.

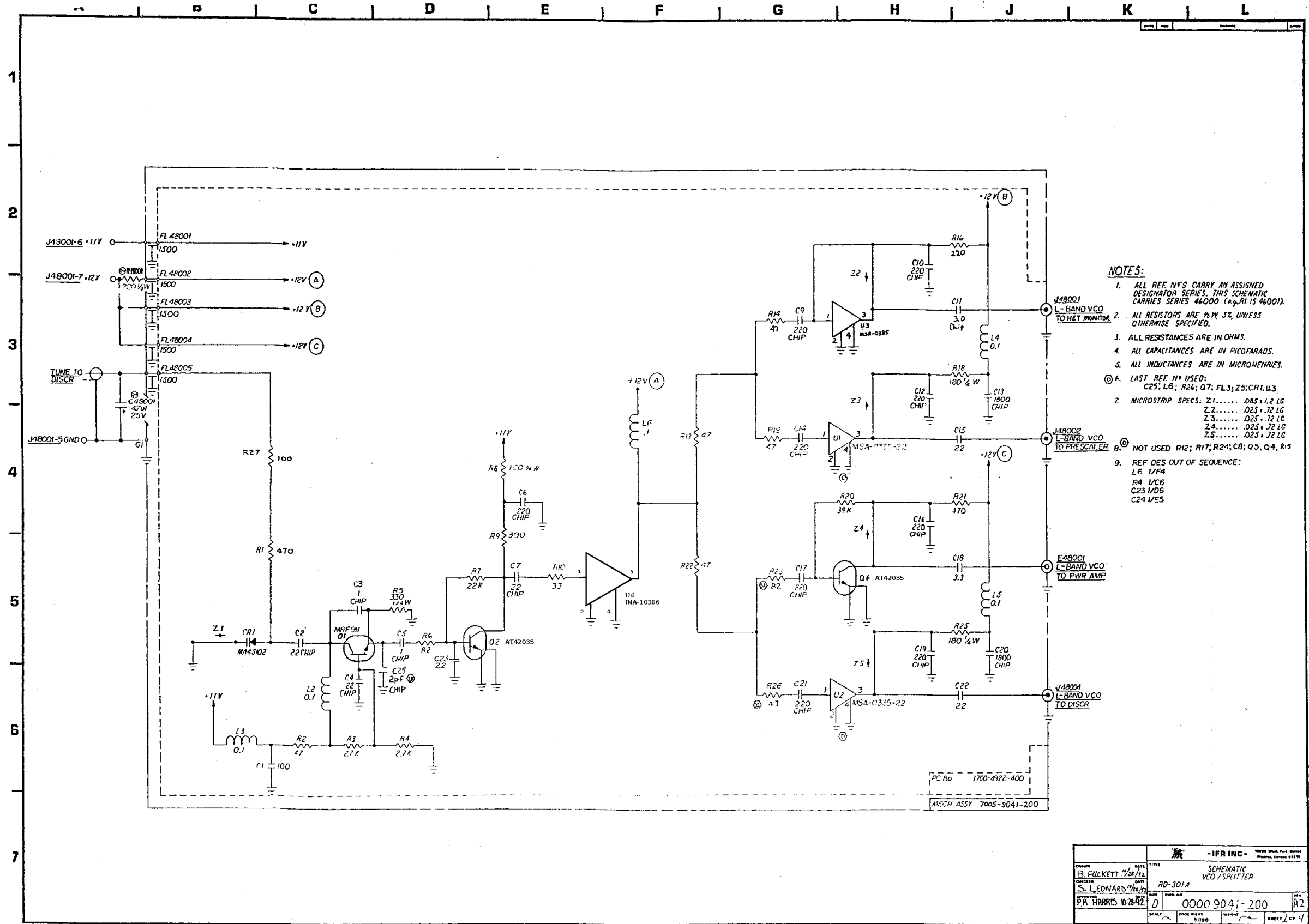
SEE SHEET 1 FOR NOTES AND SPECIFICATIONS.

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HERDIN.		
Aeroflex PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL		
10200 WEST YORK STREET WICHITA, KANSAS 67215	TITLE MECH ASSY, VCO #2	REV C1
DRAWN R.HARRIS 9/29/99	DATE 02/26/92	DWG NO 7005-9041-200
CHECKED S.LEONARD 02/26/92	DATE 02/26/92	REV C1
APPROVED P.R. HARRIS 02/26/92	DATE 02/26/92	CAGE 51190 SHEET 2 OF 2



DATE	REV	CHANGE	APPROV
7-24-72	A	DESIGN RELEASE	SL
7-24-72	A-1	INC REF L138	SL
7-24-72	A-2	INC REF # L145	SL

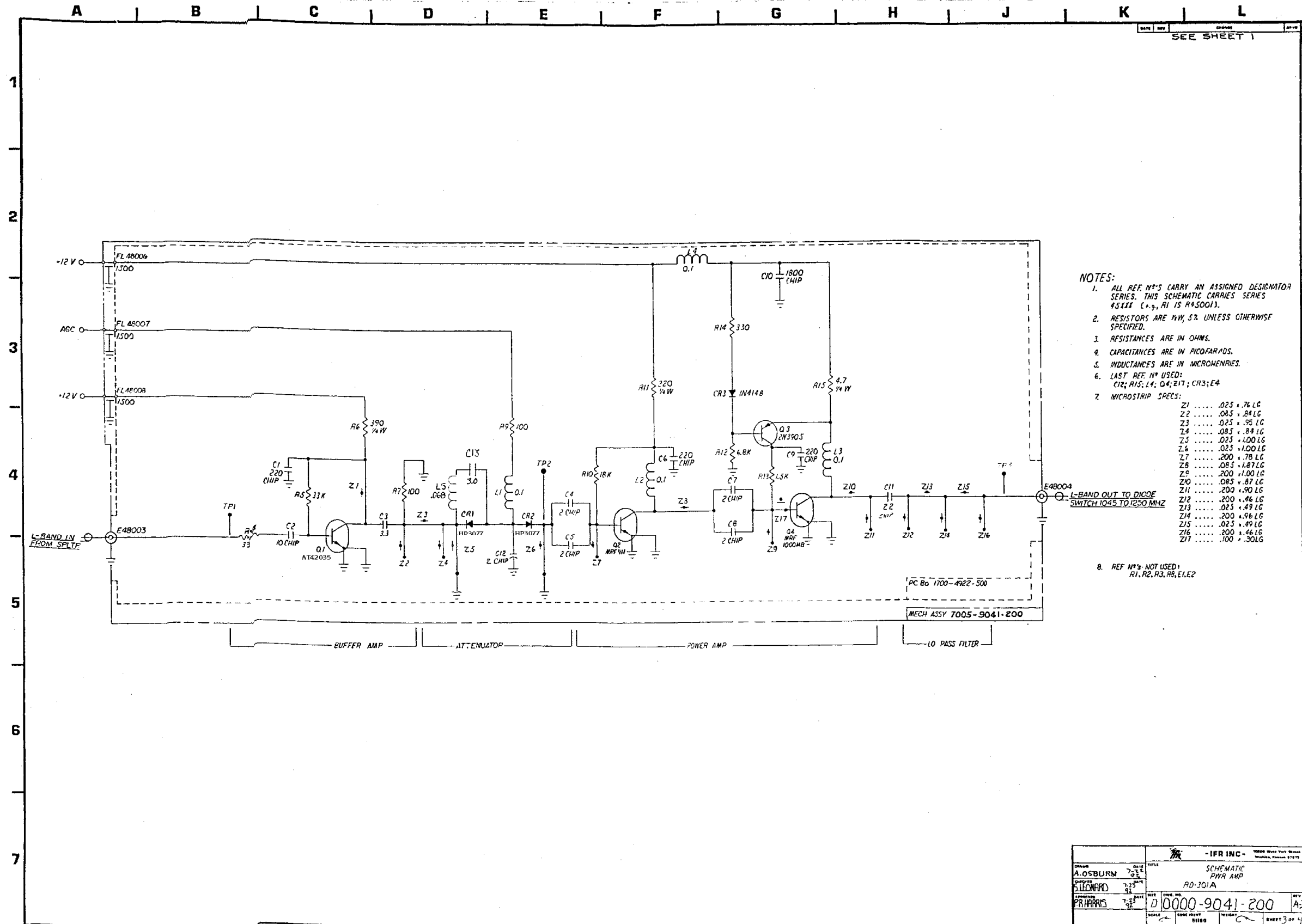
DRAWN		DATE		TITLE	
A. OSBURN	1-30-72	VCO #2 MODULE INTERCONNECT RD 301A			
CHECKED	DATE				
SLEONARD	2-26-72				
APPROVED	DATE				
PR. HARRIS	2-26-72				
SCALE		CODE		SHEET	
		51190		1 OF 4	



- NOTES:**
1. ALL REF. N°S CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES 46000 (e.g. R1 IS 46001).
 2. ALL RESISTORS ARE 1/4W, 5%, UNLESS OTHERWISE SPECIFIED.
 3. ALL RESISTANCES ARE IN OHMS.
 4. ALL CAPACITANCES ARE IN PICOFARADS.
 5. ALL INDUCTANCES ARE IN MICROHENRIES.
 6. LAST REF. N° USED:
C25: L6; R26; Q7; FL3; Z5; C11; U3
 7. MICROSTRIP SPECS: Z1..... .085 x 1.2 LG
Z2..... .025 x .72 LG
Z3..... .025 x .72 LG
Z4..... .025 x .72 LG
Z5..... .025 x .72 LG
 8. NOT USED: R12; R17; R24; C8; Q5; Q4; R15
 9. REF DES OUT OF SEQUENCE:
L6 1/4
R4 1/6
C23 1/6
C24 1/5

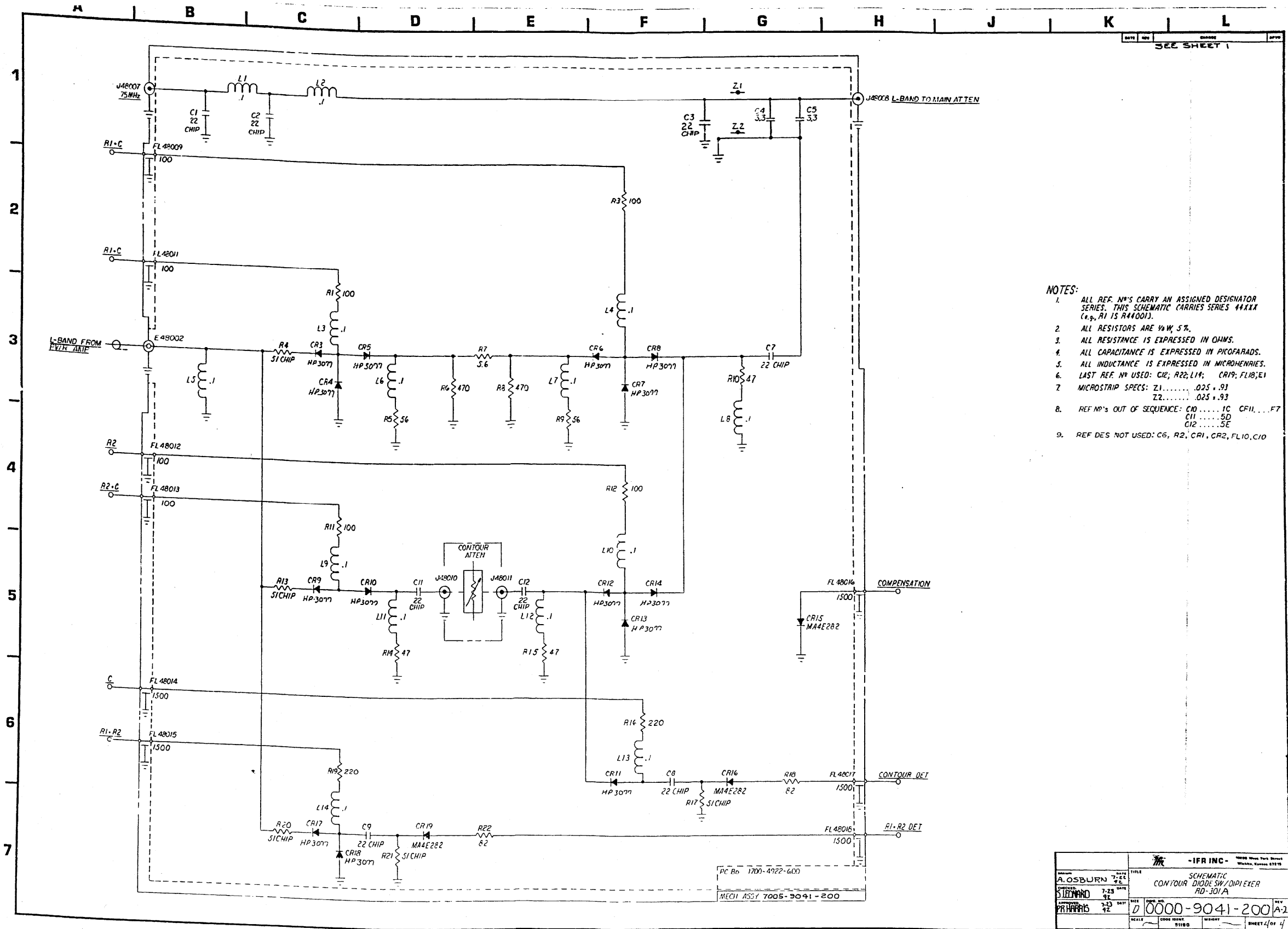
-IFR INC-		DATE	
DESIGNED BY	DATE	REVISED BY	DATE
B. RUCKETT	7/2/72	S. LEONARD	7/2/72
APPROVED BY	DATE	SCALE	CODE SHEET
P.A. HARRIS	10/2/72	D	0000 9041-200
TITLE		SHEET NO.	
SCHEMATIC VCO/SPLITTER		AD-301A	
DRAWING NO.		SHEET 2 OF 4	

Subject to Export Control, see Cover Page for details.



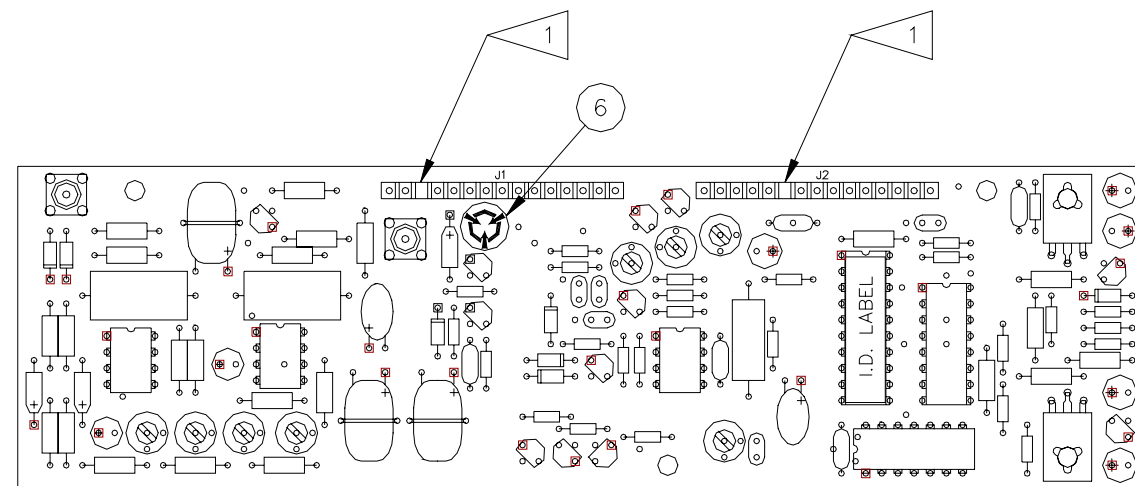
- NOTES:**
- ALL REF. N°S CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES 4511X (e.g., R1 IS RA5001).
 - RESISTORS ARE 1/4W, 5% UNLESS OTHERWISE SPECIFIED.
 - RESISTANCES ARE IN OHMS.
 - CAPACITANCES ARE IN PICOFARADS.
 - INDUCTANCES ARE IN MICROHENRIES.
 - LAST REF. N° USED:
C12; R15; L4; Q4; Z17; CR3; E4
 - MICROSTRIP SPEEDS:
8. REF N°S NOT USED:
R1, R2, R3, R8, E1, E2

Subject to Export Control, see Cover Page for details.



- NOTES:**
1. ALL REF. NOS. CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES 44XX (e.g., R1 IS R44001).
 2. ALL RESISTORS ARE 1/4W, 5%.
 3. ALL RESISTANCE IS EXPRESSED IN OHMS.
 4. ALL CAPACITANCE IS EXPRESSED IN PICOFARADS.
 5. ALL INDUCTANCE IS EXPRESSED IN MICROHENRIES.
 6. LAST REF. NO. USED: CR2, R22, L14; CR19, FL18, E1
 7. MICROSTRIP SPECS: Z1..... 0.25 + .93
Z2..... 0.25 + .93
 8. REF NOS. OUT OF SEQUENCE: C10..... 10 C11..... F7
C11..... 50
C12..... 5E
 9. REF DES NOT USED: C6, R2, CR1, CR2, FL10, C10

		TITLE SCHEMATIC CONTOUR DIODE SW/DIVIDER RD-301A	
A. OSBURN 7-23 91	S. LEONARD 7-23 91	D 0000-9041-200	A-2 SHEET 4 of 4





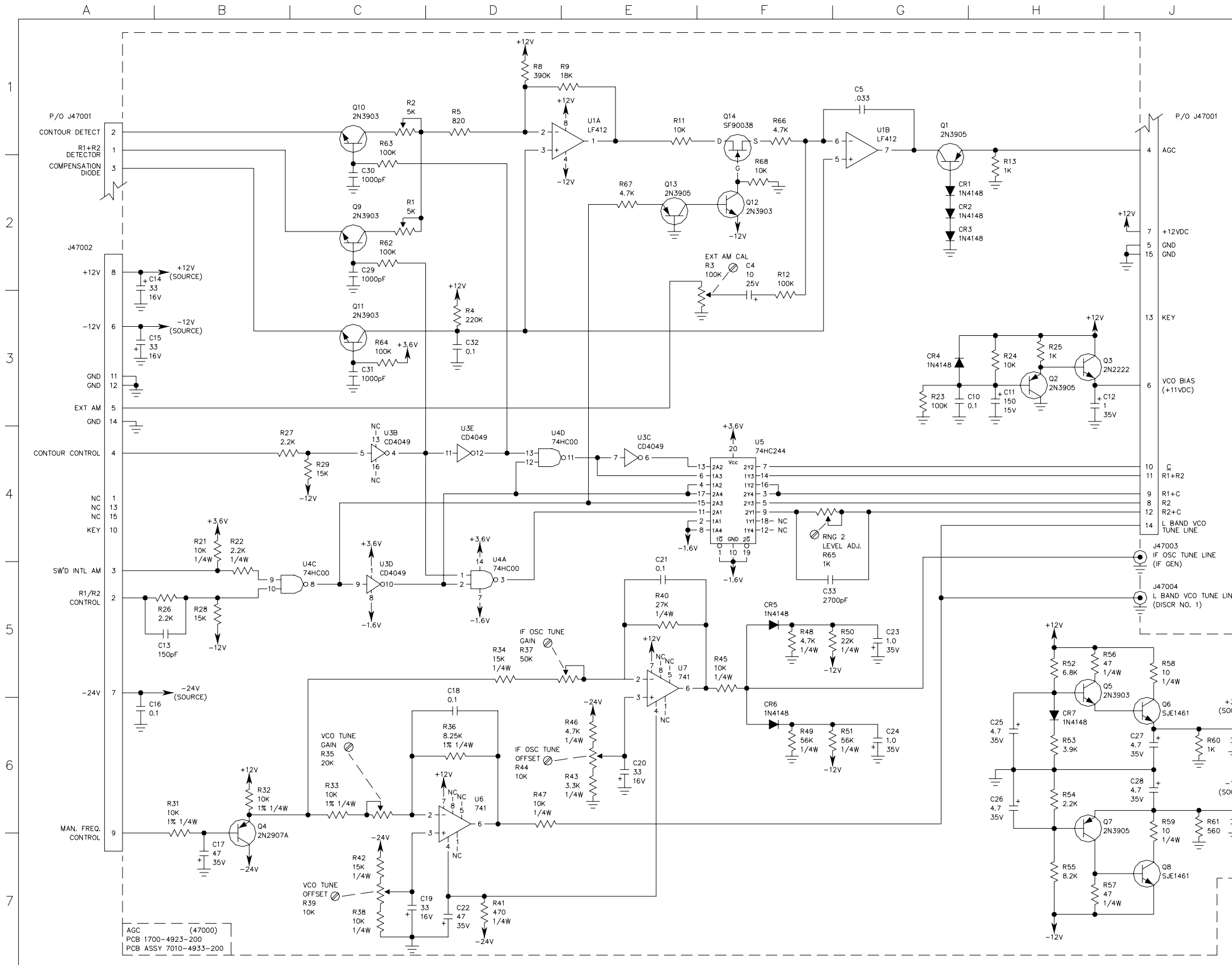
FINISH NOTES:

1 REMOVE PIN #13 OF J1 AND PIN #10 OF J2 BEFORE INSTALLING.



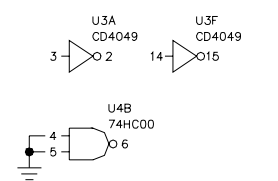
CAUTION:
CONTAINS PARTS AND ASSEMBLIES SUSCEPTIBLE TO
DAMAGE BY ELECTROSTATIC DISCHARGE (ESD).

IFR Systems Inc. Assembly Process Print	PROC. CHG BY:	Last ECN:	Prepared By: 12/23/98 R. BURNETT	Check By:	Description PCB ASS'Y, AGC	Assembly #  *7010-4933-200*	Revision  *B*	Operation 2 of 2 Sheet 1 of 1
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DATE	REV	CHANGE	ILLUS
4/11/90	A	FIRST GENERATION	DAH
7/3/90	B	DELETE C1, CHANGE R65	DAH
			APPROVED
1-28-91	B	DESIGN RELEASE	SL
			APPROVED
2-17-93	B1	PROD. REL. PER ECN #15488	J.I.M. SL

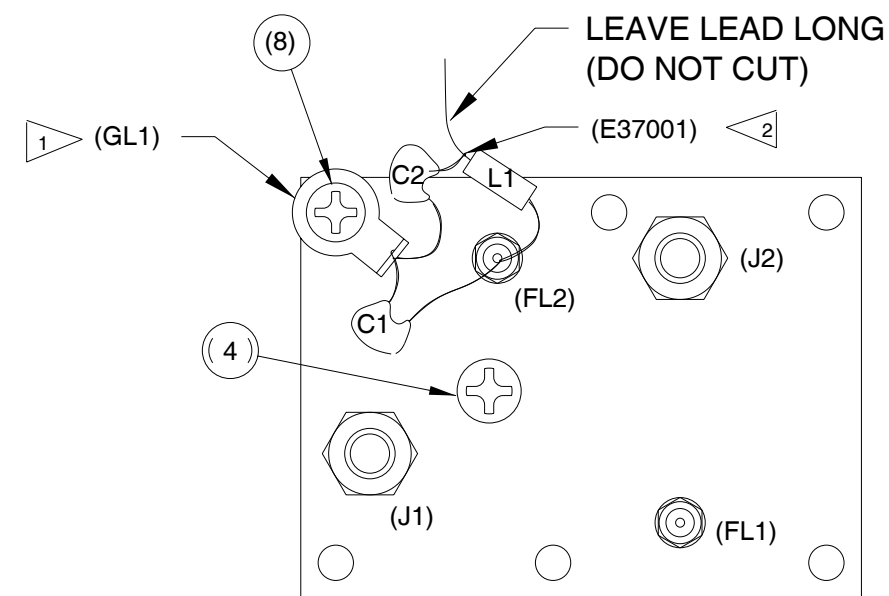
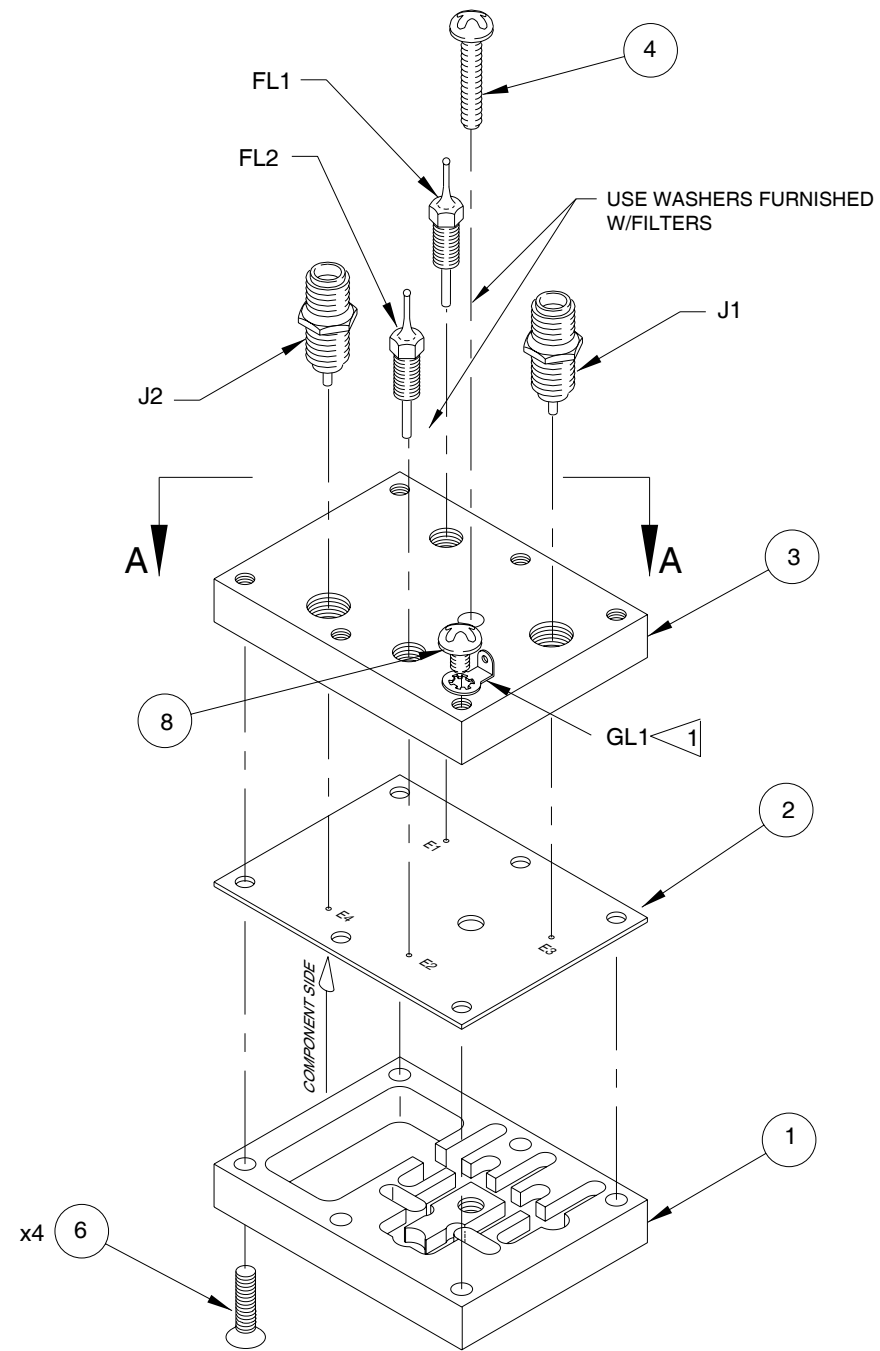
- NOTES:
(UNLESS OTHERWISE SPECIFIED)
1. ALL REFERENCE NUMBERS CARRY AN ASSIGNED DESIGNATOR SERIES.
THIS SCHEMATIC CARRIES SERIES: 47000
 2. ALL RESISTORS ARE 5% 1/8W.
 3. ALL RESISTANCE IS EXPRESSED IN OHMS.
ALL CAPACITANCE IS EXPRESSED IN MICRO FARADS.
 4. HIGHEST REFERENCE DESIGNATIONS.
C35, CR7, J47004, Q14, R68, U7.
 5. REFERENCE DESIGNATIONS NOT USED.
C1-C3, C6-C9, R6, R7, R10, R14-R20, R30, U2.
 6. IC FUNCTIONS NOT USED:



AGC (47000)
PCB 1700-4923-200
PCB ASSY 7010-4933-200

DRAWN		DATE		TITLE	
D.HAYNES	4-11-90	CIRCUIT SCHEMATIC			
L.GREENBANK	1-28-91	AGC			
J.SCHMIDT	1-28-91	SCALE:	DO NOT SCALE	FSCM 51190	SHEET 1 OF 1

Subject to Export Control, see Cover Page for details.



DETAIL A-A
ROTATED 180°

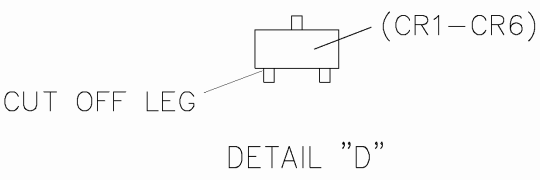
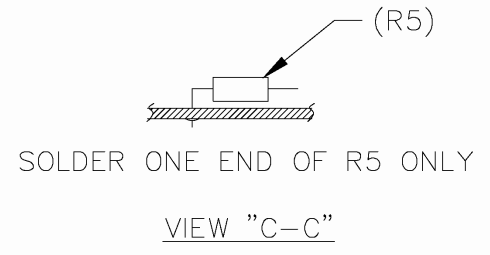
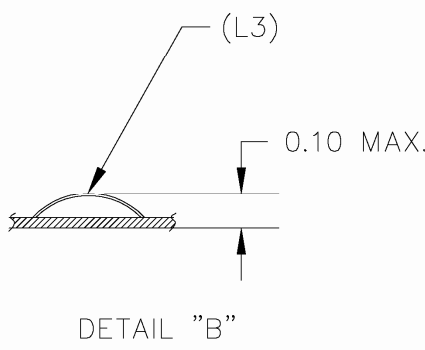
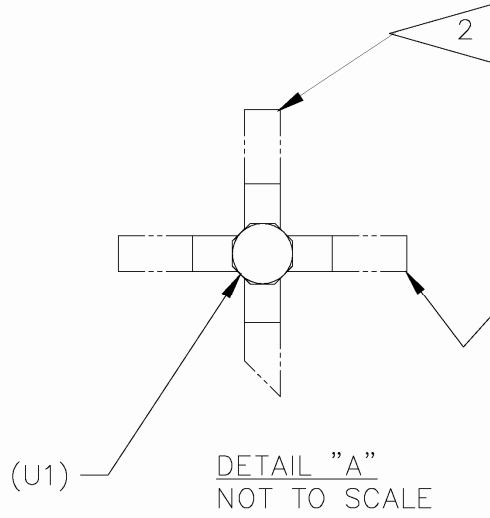
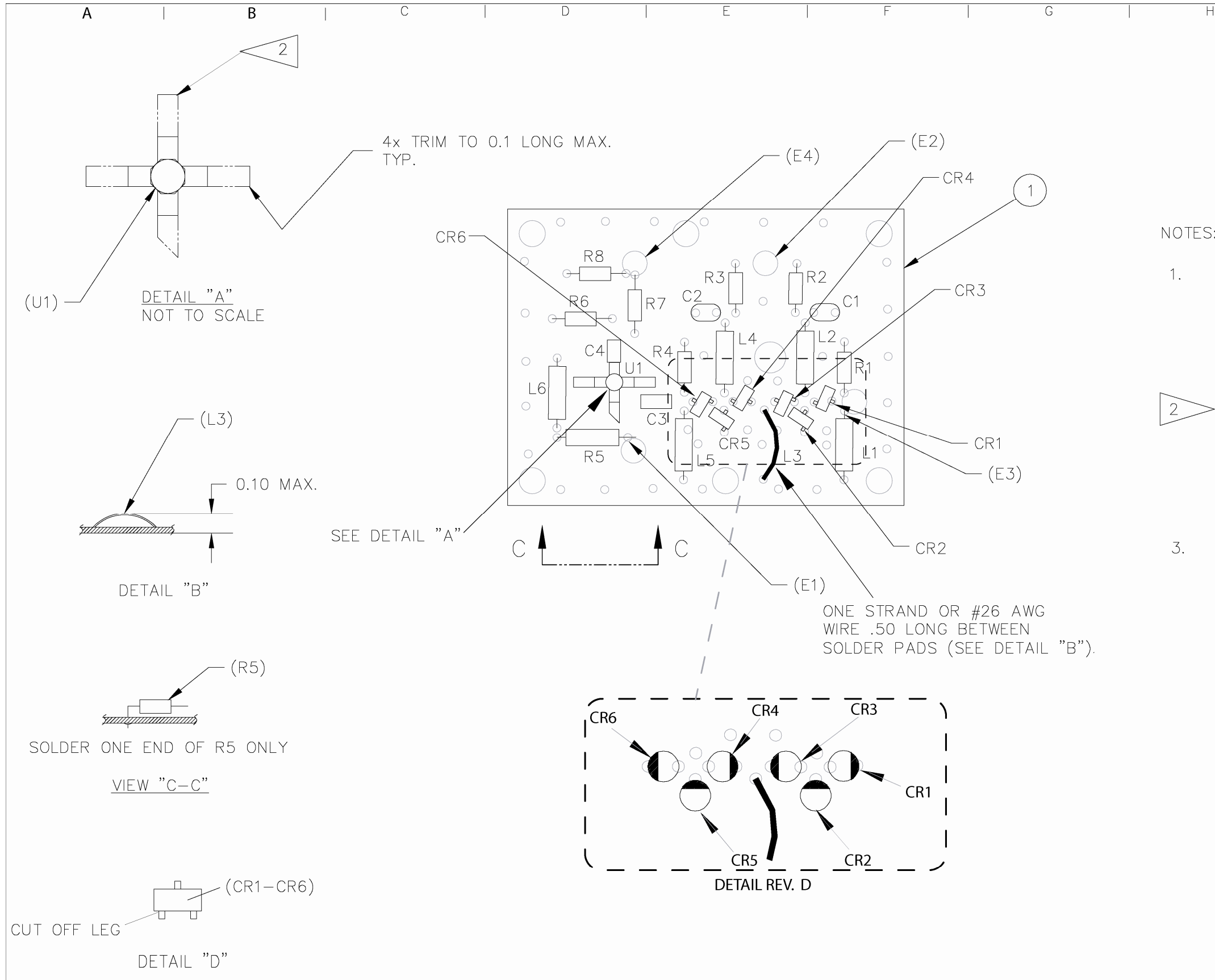
1 Rev. K reference designator was 7.
2 Added on Rev. K1

49409K1

MECH ASSY, MAIN DIODE SWITCH
7005-4940-900-K1

Subject to Export Control, see Cover Page for details.

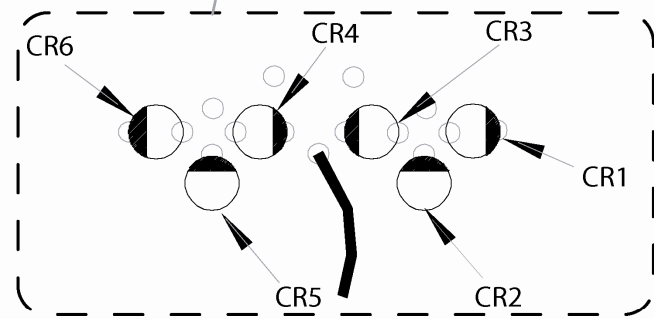
DATE	REV	CHANGE	BY	CHKD	APVD
		REDRWN TO NEW FORMAT			
10/28/98	C9	INC RC 18350	REH	RLD	MLB
07/02/01	D	INC 19553	REH	CJM	TCN
7-22-04	E	INC 20245	RLA		RC



4x TRIM TO 0.1 LONG MAX. TYP.

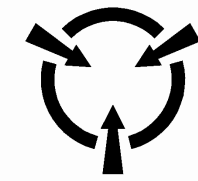
SEE DETAIL "A"

ONE STRAND OR #26 AWG WIRE .50 LONG BETWEEN SOLDER PADS (SEE DETAIL "B").



NOTES:

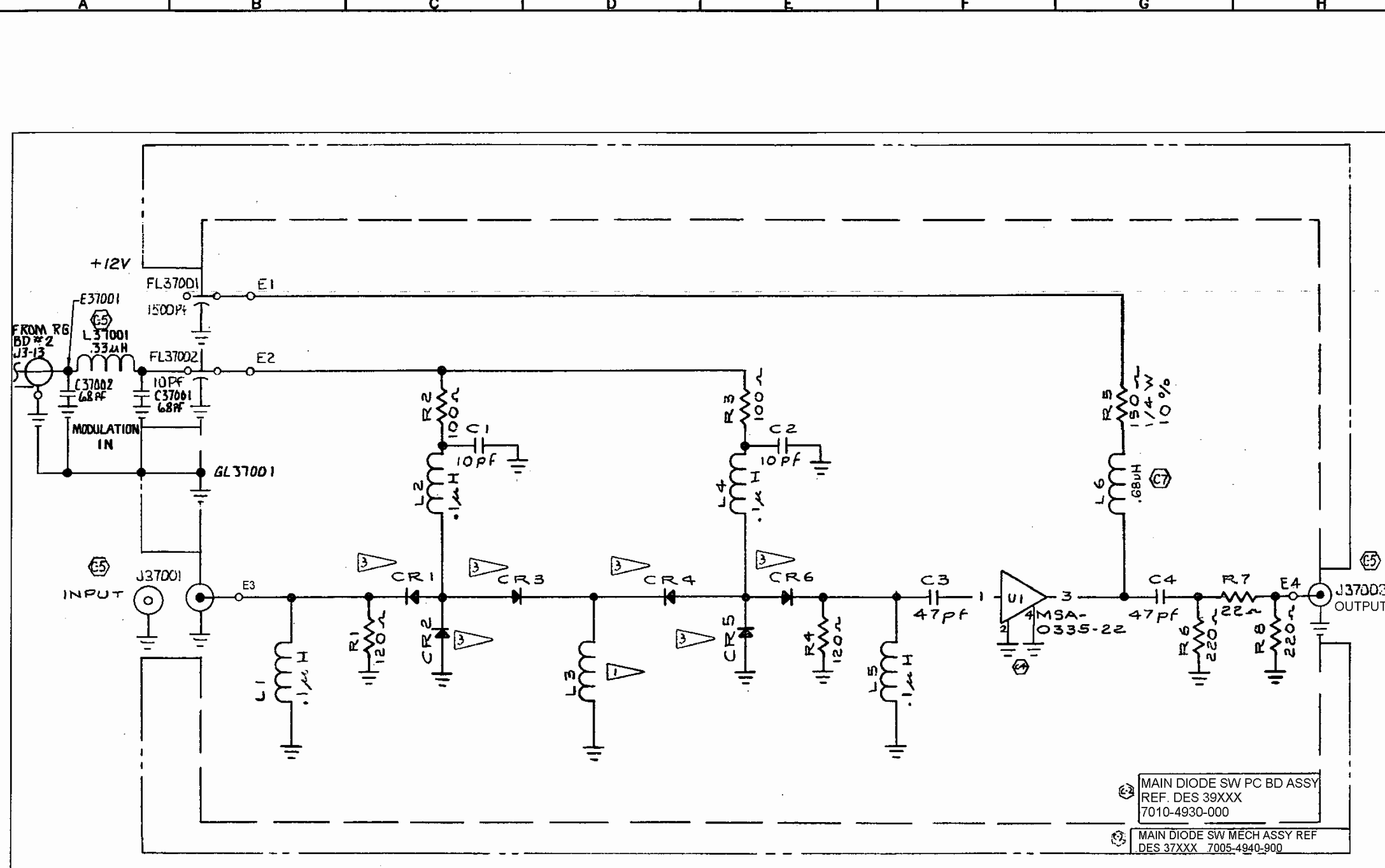
1. BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
2. REFER TO SPECIAL SOLDERING INSTRUCTIONS. THIS PART IS HEAT SENSITIVE. APPLY HEAT (250°C, 482°F) FOR LESS THAN 2 SECONDS PER LEAD TO AVOID DEGRADATION. SOLDER ENTIRE LEAD UP TO BODY OF PART.
3. CUT OFF ONE LEG OF CR1-CR6 AS SHOWN IN DETAIL "D". USE TF-1281 TO ALIGN AND INSTALL CR1-CR6.



CAUTION:
CONTAINS PARTS AND ASSEMBLIES SUSCEPTIBLE TO DAMAGE BY ELECTROSTATIC DISCHARGE (ESD).

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
10200 WEST YORK STREET WICHITA, KANSAS 67215		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL.
DRAWN A. OSBURN	DATE 10/10/84	TITLE PC BOARD ASSY, MAIN DIODE SWITCH
CHECKED WB	DATE 10/12/84	DWG NO. 7010-4930-000
APPROVED B. YOUNG	DATE 10/18/84	REV. E
049300D0.DWG		CAGE 51190 SHEET 1 OF 1

DATE	REV	CHANGE	BY	CHKD	APVD
10 OCT. 84	B	PRODUCTION REL 6490			VH
2-8-85	C	INC ECN 6678	MTH		VH
10-1-85	C1	INC RC 7744	SLR		VH
10-29-85	C2	INC RC 7831	DAH		VH
12-19-85	C3	INC RC 8045	DAH		VH
1-4-86	C4	INC RC 8168	JS		DAH
1-4-86	C5	INC RC 8134	DAH		OJ
11-10-87	C6	INC ECN 10457A	RB		VLH
11-9-88	C7	INC ECN 11434	PL		BP
9-26-90	C8	INC RC 13661	BP		TE
7-13-01	D	INC 19553			TCN
7-22-04	E	INC 20245	RLA		RC



- STANDARDS:
- BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
- NOTES:
- L3 IS A SINGLE STRAND FROM A 26GA STRANDED WIRE, .50 LONG BETWEEN SOLDER JOINTS.
 - LAST REF DES USED:
C39004, J37002, R39008, CR39006, L39006, U39001, FL37002
 - CR1 THRU CR6 ARE SUBJECT TO DAMAGE DUE TO ELECTROSTATIC CHARGES. PROPER PRECAUTIONS MUST BE USED WHEN HANDLING.

MAIN DIODE SW PC BD ASSY
REF. DES 39XXX
7010-4930-000

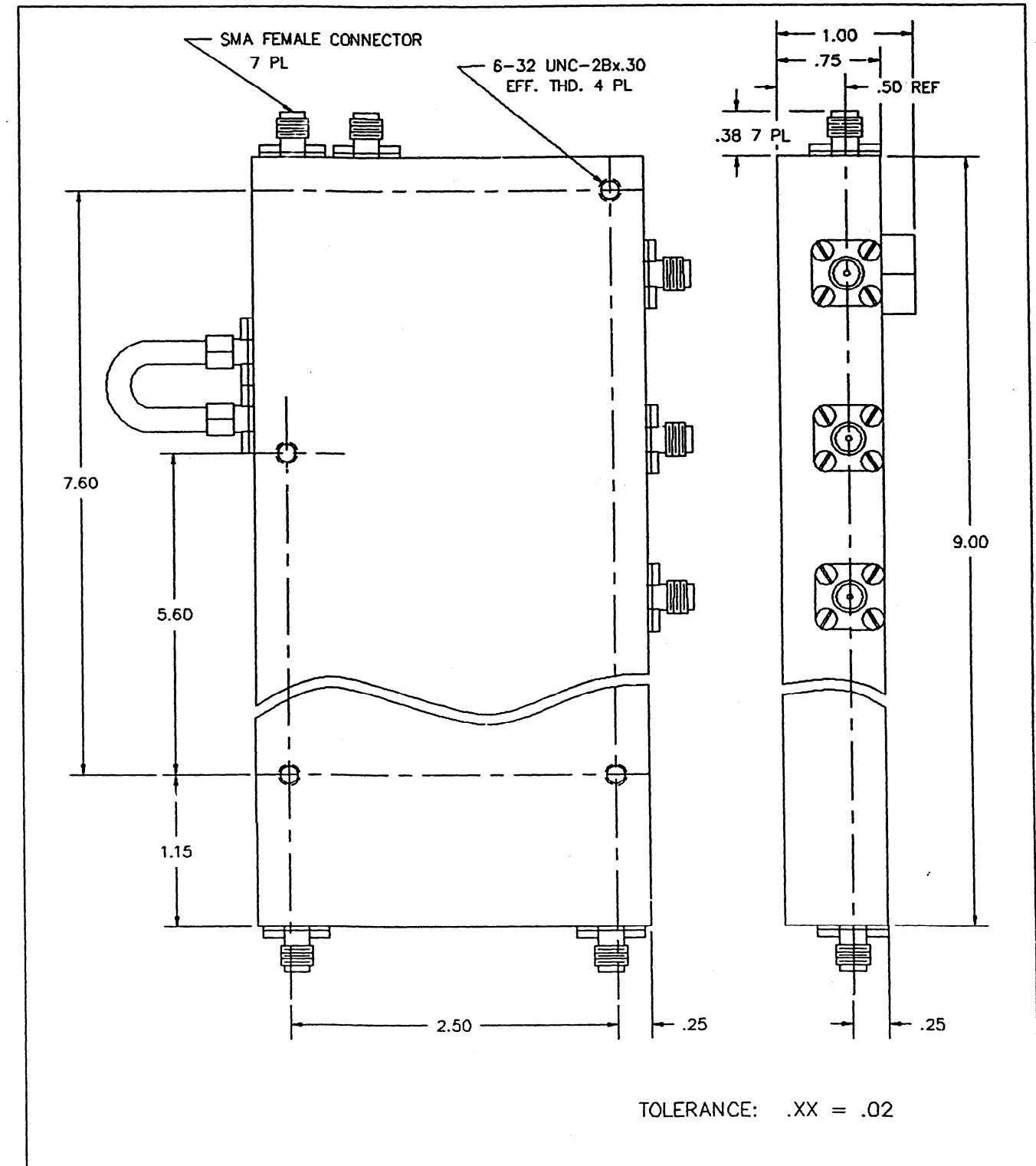
MAIN DIODE SW MECH ASSY REF
DES 37XXX 7005-4940-900

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT, ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR SYSTEMS, INC. DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL.		
10200 WEST YORK STREET WICHITA, KANSAS 67215 DRAWN A.OSBURN 10 OCT. 84	DATE 10 OCT. 84 DATE 10 OCT. 84 DATE 10 OCT. 84	TITLE CIRCUIT SCHEMATIC MAIN DIODE SWITCH DWG NO 0000-4910-000 REV E
CHECKED WB 10-12-84 APPROVED B.YOUNG 10-18-84	DATE 10-12-84 DATE 10-18-84	SHEET 1 OF 1 CADE 51190

REVISIONS				
REV	DATE	DESCRIPTION	DRAWN BY	OK APPR/DATE
A	2-5-92	Production Rel. Per ECN 14369	B. Arnett	BP 2/5/92

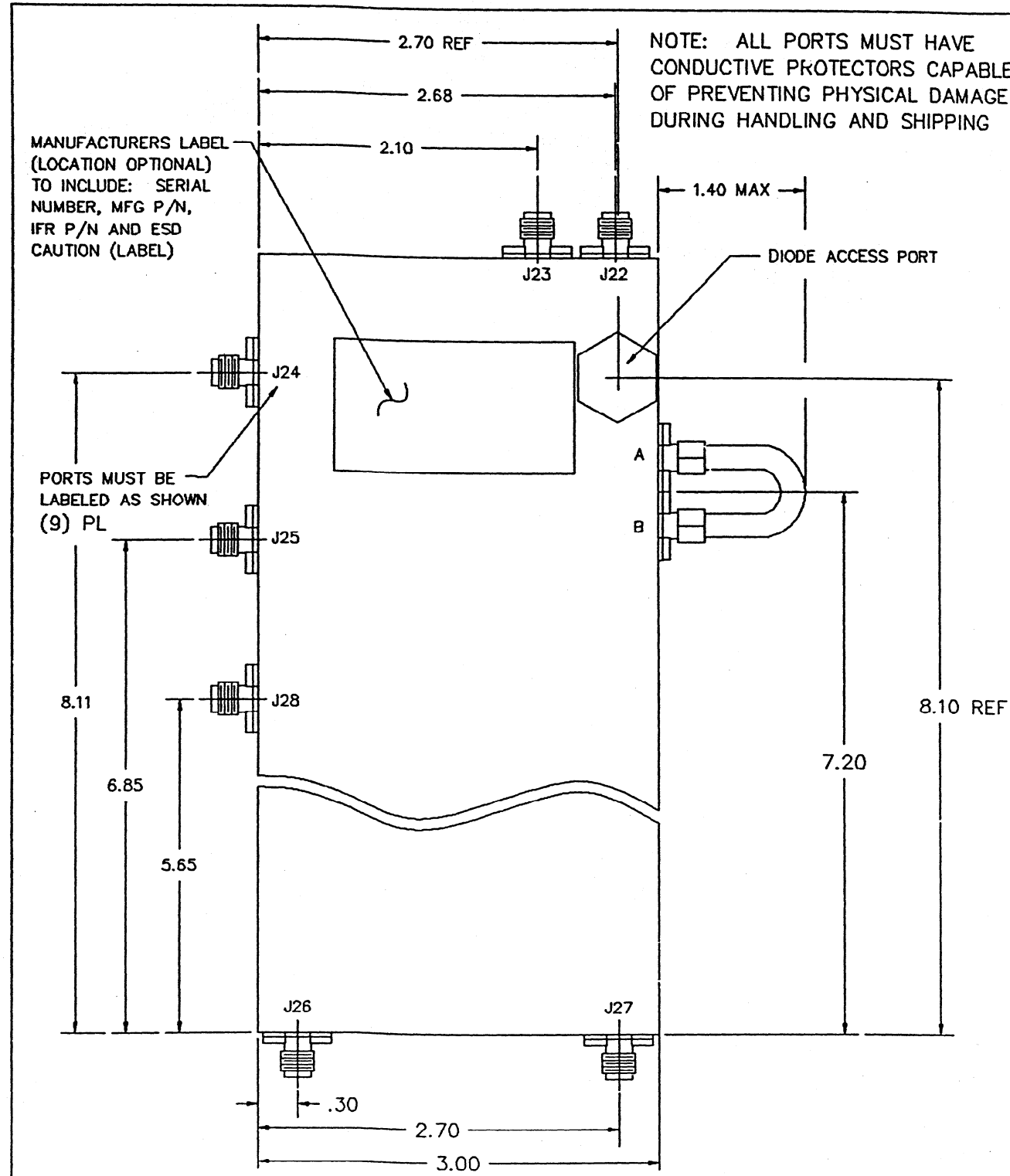
CUSTOM ITEM DRAWING

OK & APPROV FOR REV A LEVEL		OK & APPROV REV A LEVEL		 IFR SYSTEMS, INC	
NAME	DATE	NAME	DATE		
DRAWN BY	B. Arnett	SCDC	B. Arnett	TITLE X BAND FRONT END	
MECH CK	P COBB	APPROVED	M BACHMAN		
PURCH CK1		PURCH CK2			
ELEC CK	JIM UNRUH				
Q A CK					
FSCM 51190		SCALE NONE	REV A	DRAWING NO 2517-2511-700	SHEET 1 OF 6



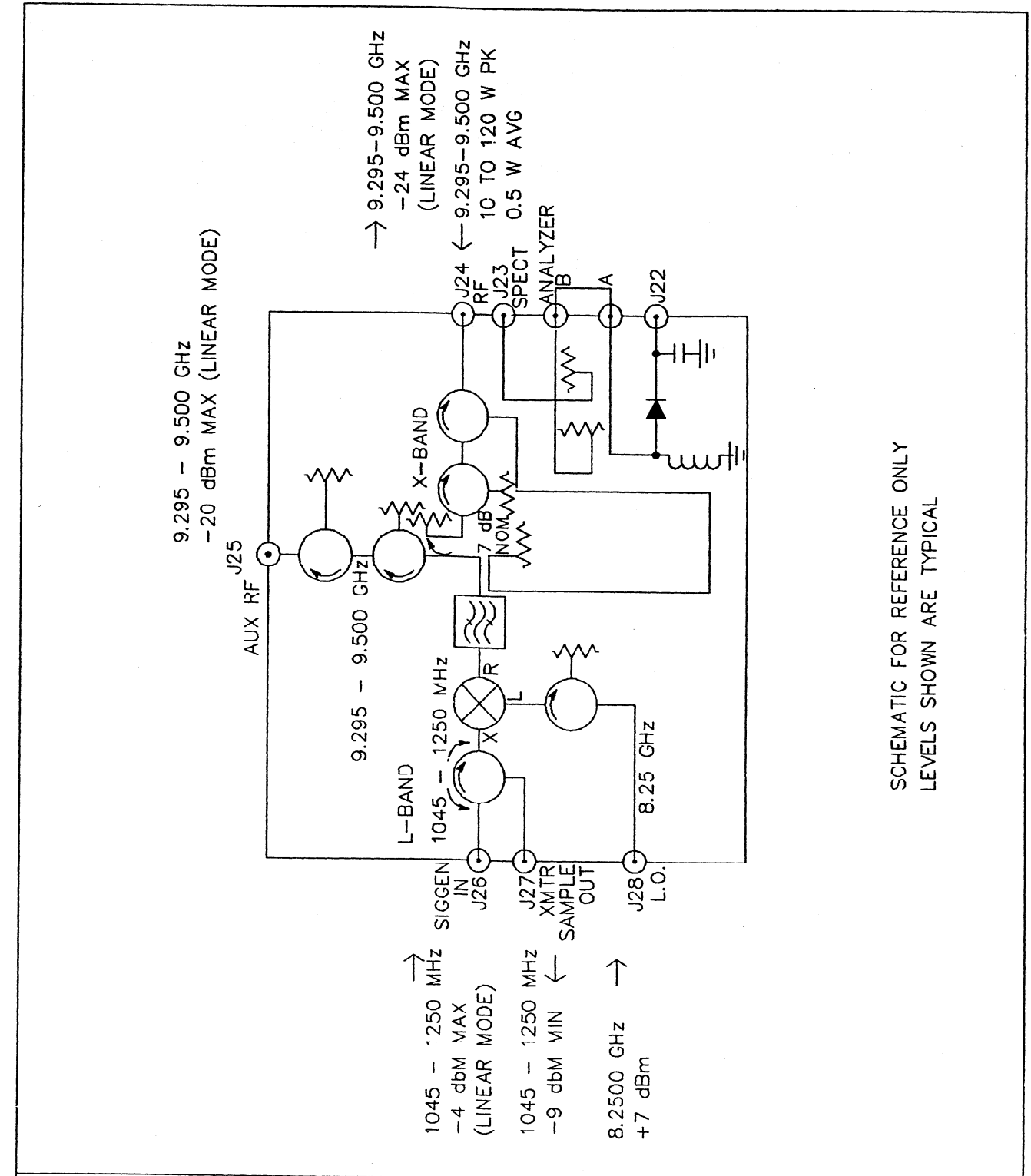
CUSTOM ITEM DRAWING

IFR SYSTEMS, INC	FSCM 51190	REV A	DRAWING NO 2517-2511-700	SHEET 2 OF 6
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CUSTOM ITEM DRAWING

IFR SYSTEMS, INC	FSCM 51190	REV A	DRAWING NO 2517-2511-700	SHEET 3 OF 6
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CUSTOM ITEM DRAWING

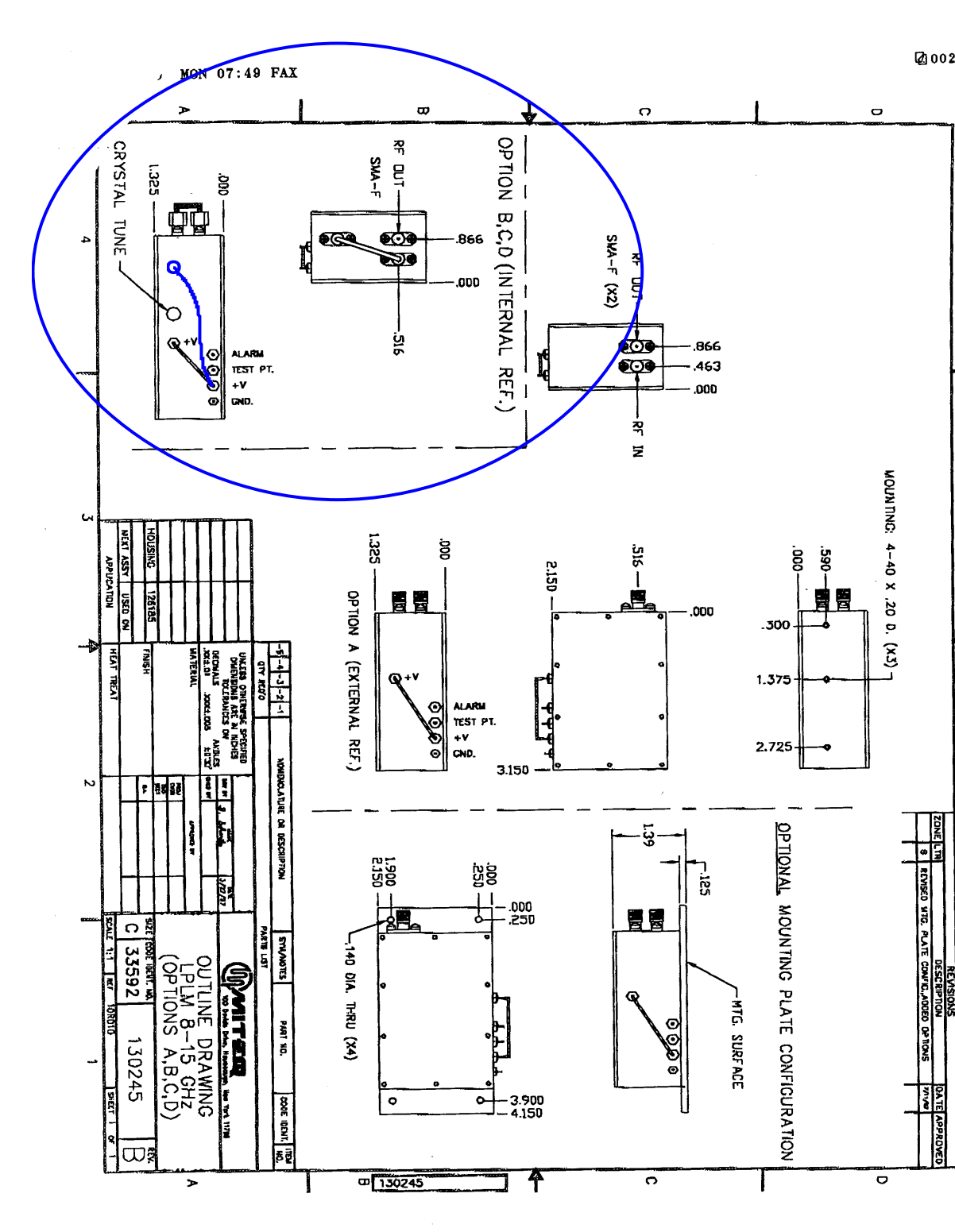
IFR SYSTEMS, INC	FSCM 51190	REV A	DRAWING NO 2517-2511-700	SHEET 4 OF 6
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I. PORT 26			
SIGNAL GENERATOR INPUT			
A.	PORT 26 - PORT 24 INSERTION LOSS		21.0 dB MAXIMUM
B.	PORT 26 - PORT 25 INSERTION LOSS		16.0 dB MAXIMUM
C.	FREQUENCY SENSITIVITY		
	L-BAND INPUT AT J-26 (MHz)	X-BAND OUTPUT AT J-24 (GHz)	SENSITIVITY (dB)
	1045 - 1250	9.295 - 9.500	±.5
II. PORT 27			
XMTR SAMPLE OUT			
A.	SATURATED PEAK POWER AT PORT 27 DUE TO 5 W TO 120 W PEAK PULSES AT PORT 24		-9 dBm MINIMUM
III. PORT 28			
LOCAL OSCILLATOR INPUT			
A.	POWER		+7 dBm ±3 dB
B.	FREQUENCY		8.250 GHz
C.	PORT 28 VSWR		1.3:1 MAXIMUM
IV. PORT 25			
AUXILIARY RF OUTPUT			
A.	VSWR (9.295 - 9.500 GHz)		1.5:1 MAXIMUM
B.	RF INPUT POWER (AT PRF - 400 Hz, PULSE WIDTH = 3.5 μS)		250 W PEAK MAXIMUM WITH NO DAMAGE TO UNIT
V. PORT 24			
A.	RF INPUT POWER (AT PRF - 400 Hz, PULSE WIDTH = 3.5 μS)		250 W PEAK MAXIMUM WITH NO DAMAGE TO UNIT
B.	VSWR		1.4:1 MAXIMUM
C.	PORT 26 - PORT 24 1 dB COMPRESSION POINT		-24 dBm MINIMUM
VI. PORT 23			
SPECTRUM ANALYZER OUTPUT			
A.	INSERTION LOSS PORT 24 - PORT 23		62 ±6 dB
B.	PORT 23 TO DETECTOR REVERSE ISOLATION*		14 dB MINIMUM
*NOTE: PORT WILL BE OPEN EXCEPT WHEN TEST SET OPERATOR IS USING A SPECTRUM ANALYZER. AN OPEN CIRCUIT SHOULD NOT INFLUENCE SIGNAL TO THE DETECTOR			
CUSTOM ITEM DRAWING			
IFR SYSTEMS, INC	FSCM 51190	REV A	DRAWING NO 2517-2511-700
			SHEET 5 OF 6

V11. PORT 22			
DETECTOR OUTPUT			
A.	PORT 24 - PORT 22 DETECTOR FLATNESS		FLAT WITHIN ±0.3 dB AT 9.295 - 9.500 GHz
B.	LINEARITY PORT 24 TO PORT 22 AT J 24		±0.3 dB FROM 10 W TO 120 W
C.	PORT 22 OUTPUT VOLTAGE		1.1 TO 2.5 V WITH 20 W AT J 24
V111. MISCELLANEOUS			
A.	L. O. FEEDTHRU AT J 24		-38 dBm MAXIMUM
B.	SPURIOUS OUTPUTS AT PORT 24 DUE TO -4 dBm SIGNAL AT PORT 26		-30 dBc MAXIMUM
1.	PASSBAND IS 9.295 - 9.500 GHz. STOPBAND IS SUFFICIENT TO ATTENUATE L.O. FEEDTHRU AND THE IMAGE FREQUENCIES (7.0 TO 7.205 GHz)		
C.	L-BAND CIRCULATOR ISOLATION PORT 26 - PORT 27 (1045 - 1250 MHz)		12 dB MINIMUM
D.	CONNECTORS		SMA FEMALE
E.	TEMPERATURE RANGE		0°C TO 50°C
F.	L-BAND RFI ISOLATION, ANTENNA TO J24		-90 dBc
NOTE: 1. MANUFACTURER TO PROVIDE A COPY OF THEIR TEST PROCEEDURE TO IFR. 2. MANUFACTURER TO INCLUDE A COPY OF THE PRODUCTION TEST ACCEPTANCE DATA WITH EACH UNIT			
CUSTOM ITEM DRAWING			
IFR SYSTEMS, INC	FSCM 51190	REV A	DRAWING NO 2517-2511-700
			SHEET 6 OF 6

SPECIFICATIONS

Frequency:	8.25GHz
Frequency Stability:	±20ppm
Power Output:	+13dBm min.
Single Side Band Phase Noise:	
Offset	Level
10Hz	-48dBc/Hz
100Hz	-78dBc/Hz
1KHz	-98dBc/Hz
10KHz	-110dBc/Hz
100KHz	-110dBc/Hz
1MHz	-130dBc/Hz
Spurious:	<-80dBc
Harmonics:	<-55dBc
Source VSWR:	2.0:1 Max from 7 to 9.4 GHz
Load VSWR:	3.0:1 Max
Isolation from External Radiation:	90dB Min
D.C. Supply:	+12V @ 425mA
Operating Temperature range:	0° to 75° C
Physical Dimensions:	See attached drawing (option B)
Output Connector:	SMA Female, captivated connector
	Note: All SMA connectors must be captivated to support the Isolation requirement. The connector body must be electrically free from voids due to tooling holes, etc.

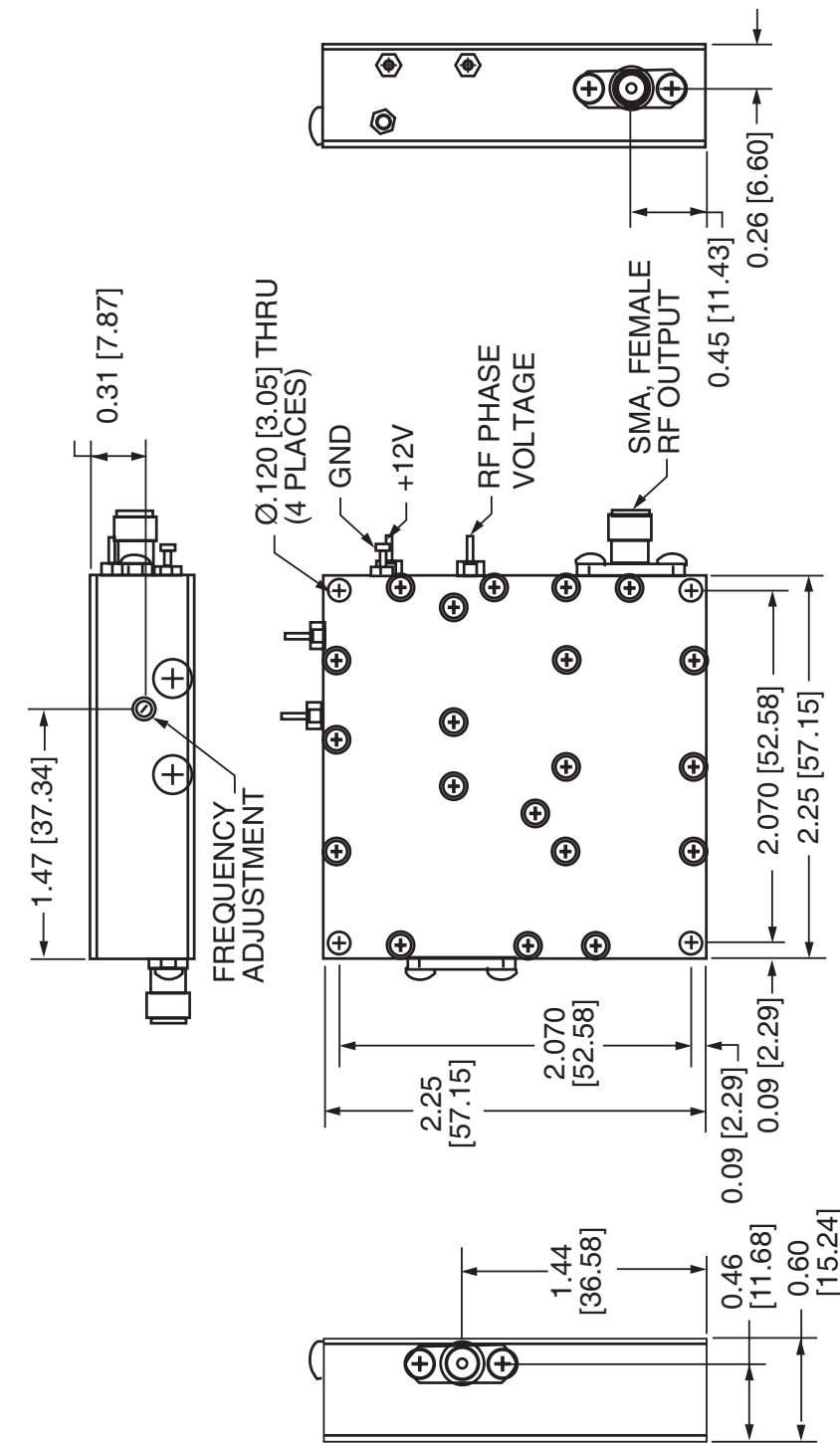


OSC, PL, 8.25GHZ, +12V, +13DBM

5850-0000-067

SPECIFICATIONS

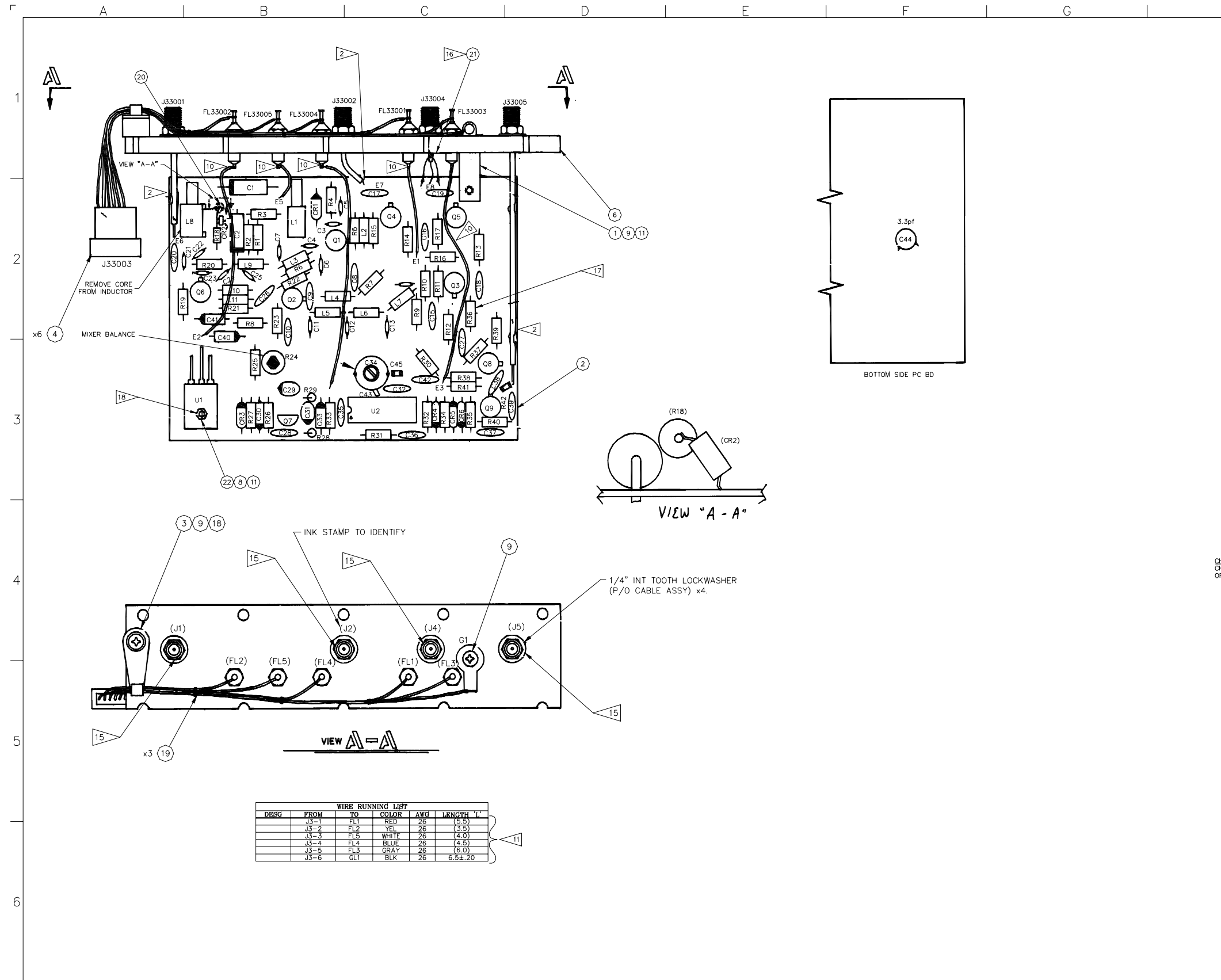
Frequency:	8.25GHz
Frequency Stability:	±20ppm
Power Output:	+13dBm min.
Single Side Band Phase Noise:	
Offset	Level
10Hz	-65dBc/Hz
100Hz	-78dBc/Hz
1KHz	-108dBc/Hz
10KHz	-115dBc/Hz
100KHz	-115dBc/Hz
1MHz	-135dBc/Hz
Spurious:	<-70dBc
Harmonics:	<-50dBc
Load VSWR:	1.5:1 Max
D.C. Supply:	+12V @ 300mA
Operating Temperature range:	-10° to +60° C
Physical Dimensions:	See attached drawing
Output Connector:	SMA Female, captivated connector
	Note: All SMA connectors must be captivated to support the Isolation requirement. The connector body must be electrically free from voids due to tooling holes, etc.



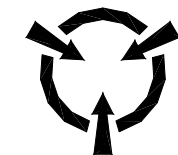
OSC, PL, 8.25GHZ, +12V

5850-0000-069

DATE	REV	CHANGE	J	BY	CHKD	APVD
		DRAWN TO NEW FORMAT FOR PREV REV SEE HISTORY				
12/23/99	D	INC ECN 18659		REH	CJM	TCN
02/09/00	D1	INC RC 18928		REH	CJM	TCN

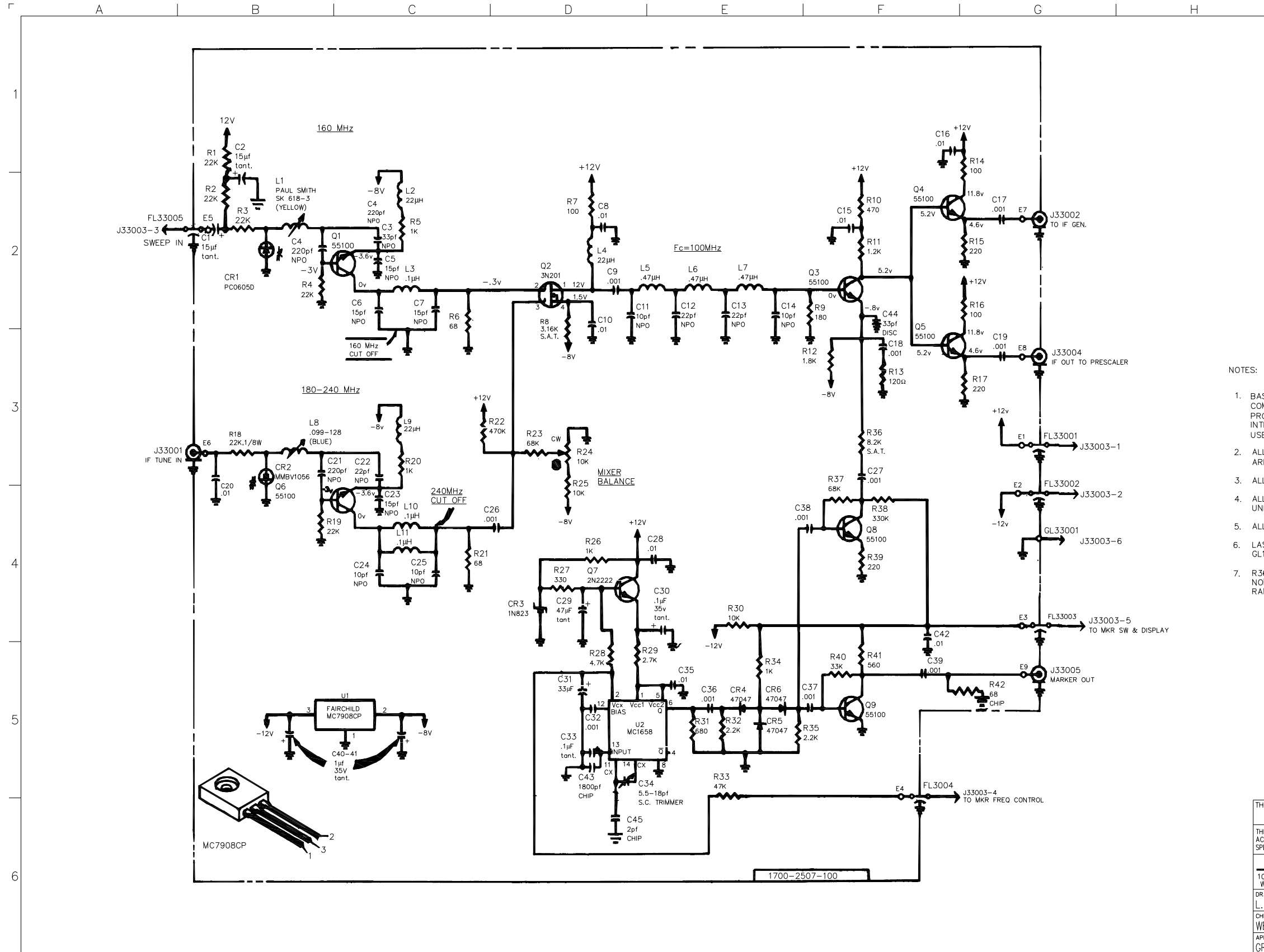


- NOTES:**
- NOTE NOT USED.
 - ATTACH RIGID COAX ASS'YS TO PC BD AS FOLLOWS:
 - LIGHTLY SAND OUTER JACKET OF COAX WITH 400 GRIT SANDPAPER TO REMOVE OXIDATION AND OTHER CONTAMINATES.
 - SOLDER COAX JACKET TO PC BD USING NO MORE THAN ABOUT A 40W SOLDERING IRON AND HEAT COAX FOR AS SHORT A PERIOD OF TIME AS POSSIBLE. LIQUID FLUX MAY BE USED IF NECESSARY. (DO NOT USE SOLDERING PASTE.)
 - ALL RESISTORS ARE 1/4W, 5% TOL., UNLESS OTHERWISE SPECIFIED.
 - ALL CAPACITORS ARE IN μ UNLESS OTHERWISE SPECIFIED.
 - COMPONENT LEADS MAY EXTEND .04-.06 BEYOND BOTTOM OF BOARD AFTER SOLDERING.
 - MAX HT OF COMPONENTS TO BE .60 FROM COMPONENTS SIDE OF BOARD.
 - NOTE NOT USED.
 - NOTE NOT USED.
 - BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
 - ALL ANNOTATED WIRE LENGTHS TO BE 26 ω g.
 - ALL ANNOTATED WIRE LENGTHS TO BE 26 ω g TEFLON COVERED WIRE.
 - C43 CONNECTS FROM PIN 13 OF U2 TO GND.
 - LAST REF # USED: J3305, C45, U2, L1, CR6, R42, Q9, FL5, GL1.
 - TORQUE TO 15 INCH LBS., J1, J2, J4, J5.
 - SHAPE GROUND STRAP FROM .6" 22GA. BUSS WIRE. DPN 1050-0000-073, ITEM #21 SOLDER 3 PLCS.
 - R36 IS SELECTED AT TEST (SAT) NOMINAL VALUE 8.2K, RANGE VALUE 4.7K-12K.
 - INSTALL ITEM 22 FROM BOTTOM OF BOARD.
- CHECKOUT PROCEDURE**
CHECK FOR PROPER COAX CONTINUITY AFTER COMPLETION OF THE BOARD AS FOLLOWS:
- USE A "MIDLAND" VOM MODEL 23-107 OR EQUIVALENT.
 - SELECT THE "R X 1" SCALE SETTING ON THE METER & CHECK TO SEE THAT THE METER IS PROPERLY ZEROED AT BOTH ENDS.
 - PLACE THE POSITIVE (RED) LEAD ON THE CENTER CONDUCTOR OF THE CONNECTOR & THE COMMON (BLACK) LEAD ON THE CENTER CONDUCTOR OF THE COAX WHERE IT ENTERS THE BOARD. THIS SHOULD OBTAIN A READING OF 0 OHMS ON BOTH COAX CABLES.
 - PLACE THE POSITIVE (RED) LEAD ON THE CENTER CONDUCTOR OF THE CONNECTOR & THE COMMON (BLACK) LEAD ON THE LARGE COPPER AREA ON TOP OF THE BOARD (GROUND). THIS SHOULD OBTAIN NO READING AT ALL ON BOTH COAX CABLES.



CAUTION:
CONTAINS PARTS AND ASSEMBLIES
SUSCEPTIBLE TO DAMAGE BY
ELECTROSTATIC DISCHARGE (ESD).

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL		
10200 WEST YORK STREET WICHITA, KANSAS 67215	TITLE PCB ASSY, IF MARKER/OSCILLATOR, RD-301	
DRAWN R.HARRIS	DATE 11/18/99	DWG NO 7010-4931-400
CHECKED WB	DATE 1/11/85	REV D1
APPROVED B.YOUNG	DATE 1/14/85	049314D1.DWG
	CAGE 51190	SHEET 1 OF 1



DATE	REV	CHANGE	BY	CHKD	APVD
02/01/85	A	PRODUCTION RELEASE	L.A.		VA
01/10/86	A1	INC RC 8097 & 8212	DAH		JS
04/01/86	A2	INC ECN 8464	DAH		VLH
02/19/90	A3	INC ECN 13134	AO		BP
09/13/90	A4	INC ECN 13637	AO		BP
04/03/96	B	INC ECN 16793	BP		BM
11/29/99	C	INC ECN 18659	REH	SCP	TN

NOTES:

- BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
- ALL RESISTORS ARE 1/4W, 5% PRECISION RESISTORS (1% ARE DESIGNATED BY AN ASTERISK (*)).
- ALL RESISTANCE IS EXPRESSED IN OHMS.
- ALL CAPACITANCE IS EXPRESSED IN MICROFARADS, UNLESS OTHERWISE SPECIFIED.
- ALL INDUCTANCE IS EXPRESSED IN MICROHENRYS.
- LAST REFERENCE NUMBER USED: Q9,U2,CR6,L11,R42,C45, GL1,FL5,J5.
- R36 IS A SELECTED AT TEST (SAT) COMPONENT. NOMINAL VALUE IS 8.2K. RANGE VALUE IS 4.7K TO 12K.

THIRD ANGLE PROJECTION
 ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED
 DO NOT SCALE PRINT / IF IN DOUBT ASK
 DRAWING STANDARD
 TO IFR EWS-140

THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.

Americas PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS
 DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL

10200 WEST YORK STREET
 WICHITA, KANSAS 67215
 TITLE
 SCHEMATIC,
 IF MKR/OSC

DRAWN DATE
 L.A. MEIS 01/23/85

CHECKED DATE
 WB 01/29/85

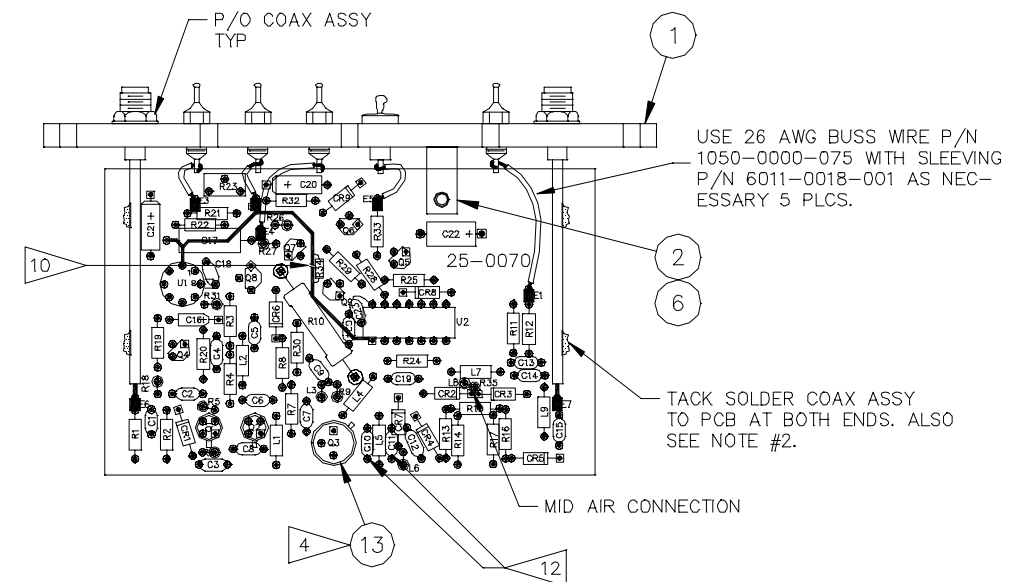
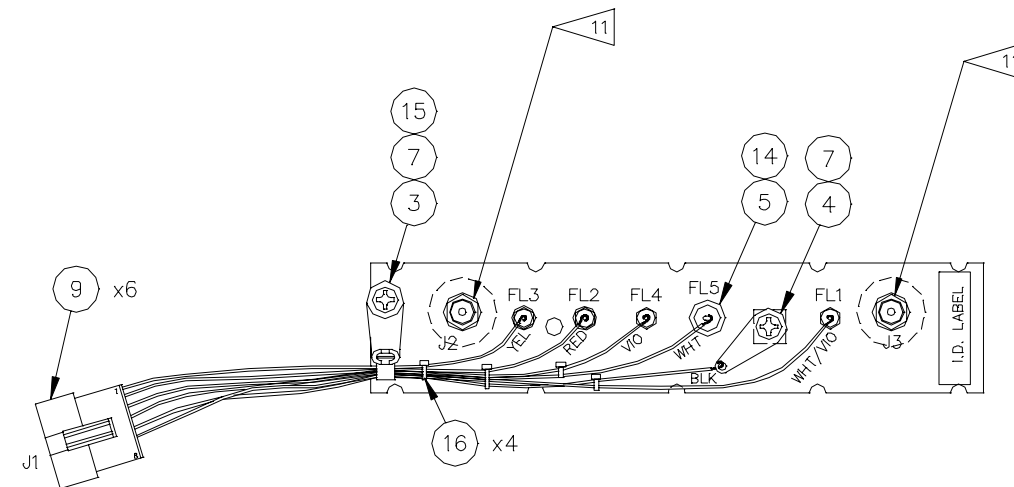
APPROVED DATE
 GREENBANK 01/29/85

DWG NO
 0000-4911-400

REV
 C

049114C0.DWG | PAGE 51190 | SHEET 1 OF 1

DATE	REV	CHANGE	BY	CHKD	APVD
		DRAWN TO NEW FORMAT			
		SEE HIST FOR PREV REV.			
3/15/00	B	INC ECN 18886	REH	SLS	TCN



CHECKOUT PROCEDURE

CHECK FOR PROPER COAX CONTINUITY AFTER COMPLETION OF THE BOARDS AS FOLLOWS:

- USE A "MIDLAND" VOM MODEL 23-107 OR SIMILAR.
- SELECT THE "Rx1" SETTING ON THE METER & CHECK TO SEE THAT THE METER IS PROPERLY ZEROED ON BOTH ENDS OF THE SCALE.
- PLACE THE + (RED) LEAD ON THE CENTER CONDUCTOR OF THE CONNECTOR & THE COMMON (BLACK) LEAD ON THE COAX CENTER CONDUCTOR WHERE IT ENTERS THE PC BD. THIS SHOULD OBTAIN A READING OF 0Ω W/BOTH COAX CABLES.
- PLACE THE +(RED) LEAD ON THE CENTER CONDUCTOR OF THE CONNECTOR & THE COMMON (BLACK) LEAD ON THE LARGE COPPER AREA ON TOP OF THE BD (GND). WITH COAX "B", THIS SHOULD OBTAIN A READING OF $85-115\Omega$. WITH COAX "C", THIS SHOULD OBTAIN NO READING AT ALL.

NOTES:

- REFER TO ASSY PROCEDURE #1-34-0100-2 FOR PROPER RIGID COAX ASSY INSTRUCTIONS. INSPECT PER CHECKOUT PROCEDURE LISTED ELSEWHERE ON THIS DWG.
- ATTACH RIGID COAX ASSY'S TO PC BD AS FOLLOWS:
LIGHTLY SAND OUTER JACKET OF COAX W/400 GRIT SANDPAPER TO REMOVE OXIDATION & OTHER CONTAMINATES.

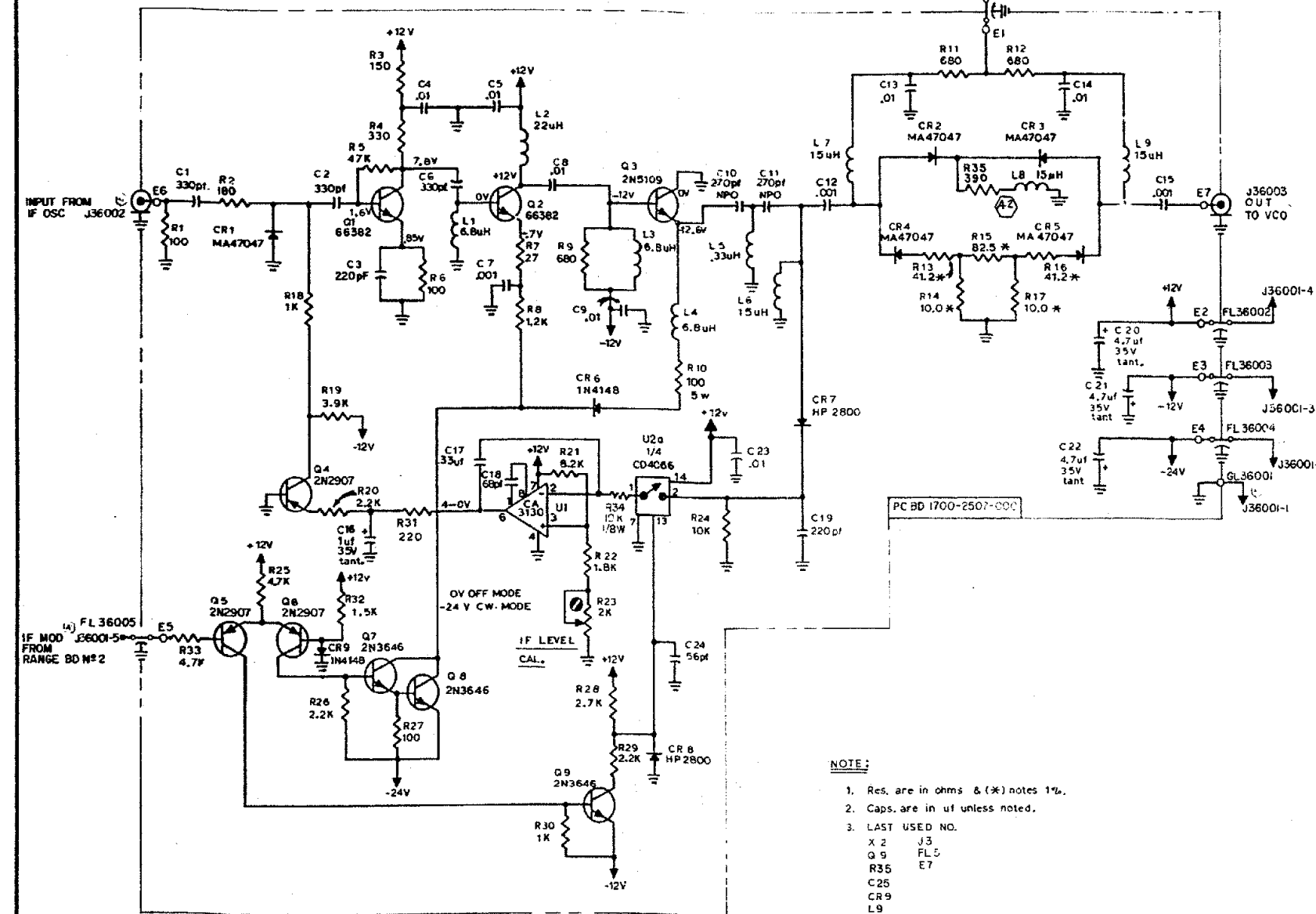
SOLDER COAX JACKET TO PC BD USING NO MORE THAN ABOUT A 40w SOLDERING IRON & HEAT COAX FOR AS SHORT A PERIOD OF TIME AS POSSIBLE. LIQUID FLUX MAY BE USED IF NECESSARY. DO NOT USE SOLDERING PASTE.

- 3 NOT USED
- 4 ANNOTATED PART TO HAVE HEAT SINK (ITEM 13).
- 5 NOT USED.
- 6 ALL RESISTORS ARE 1/4W, 5% UNLESS OTHERWISE NOTED.
- 7 ALL CAPACITOR VALUES ARE IN μF UNLESS OTHERWISE NOTED.
- 8 LEADS TO EXTEND .040 -.060 BEYOND BTM OF BD AFTER SOLDERING
- 9 MAX HT OF COMPONENTS TO BE .375 FROM COMPONENT SIDE OF BD.
- 10 CUT PATH THEN ADD R34, 10K 1/8W TO PATH.
- 11 TORQUE TO 15 INCH LBS., J2 & J3.
- 12 INVERT CAPS BEFORE INSTALLATION TO PREVENT SHORT TO GND PLANE.

WIRE RUNNING LIST				
FROM	TO	COLOR	AWG	LNTH
J1-1	GNDLUG	BLK	26	5.5"
J1-2	FL-4	VIO	26	4.5"
J1-3	FL-3	YEL	26	3.5"
J1-4	FL-2	RED	26	4.0"
J1-5	FL-5	WHT	26	5.0"
J1-6	FL-1	WHT/VIO	26	6.0"
J1-7	NC			
J1-8	NC			

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
10200 WEST YORK STREET WICHITA, KANSAS 67215		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL
DRAWN RW&LM 03/10/00	DATE 03/10/00	TITLE PCB ASSY, IF GEN PWR AMP
CHECKED VLH 03/25/85	DATE 03/25/85	DWG NO 7010-4931-500
APPROVED T. EVERHART 03/26/85	DATE 03/26/85	REV B
049315B0.DWG		CAGE 51190 SHEET 1 OF 1

DATE	REV	CHANGE	APPD
3-58	A	PRODUCTION RELEASE	VY
5-58	A-2	INC ECN 9450	AO
7-58	A-3	INC ECN 9616	TH

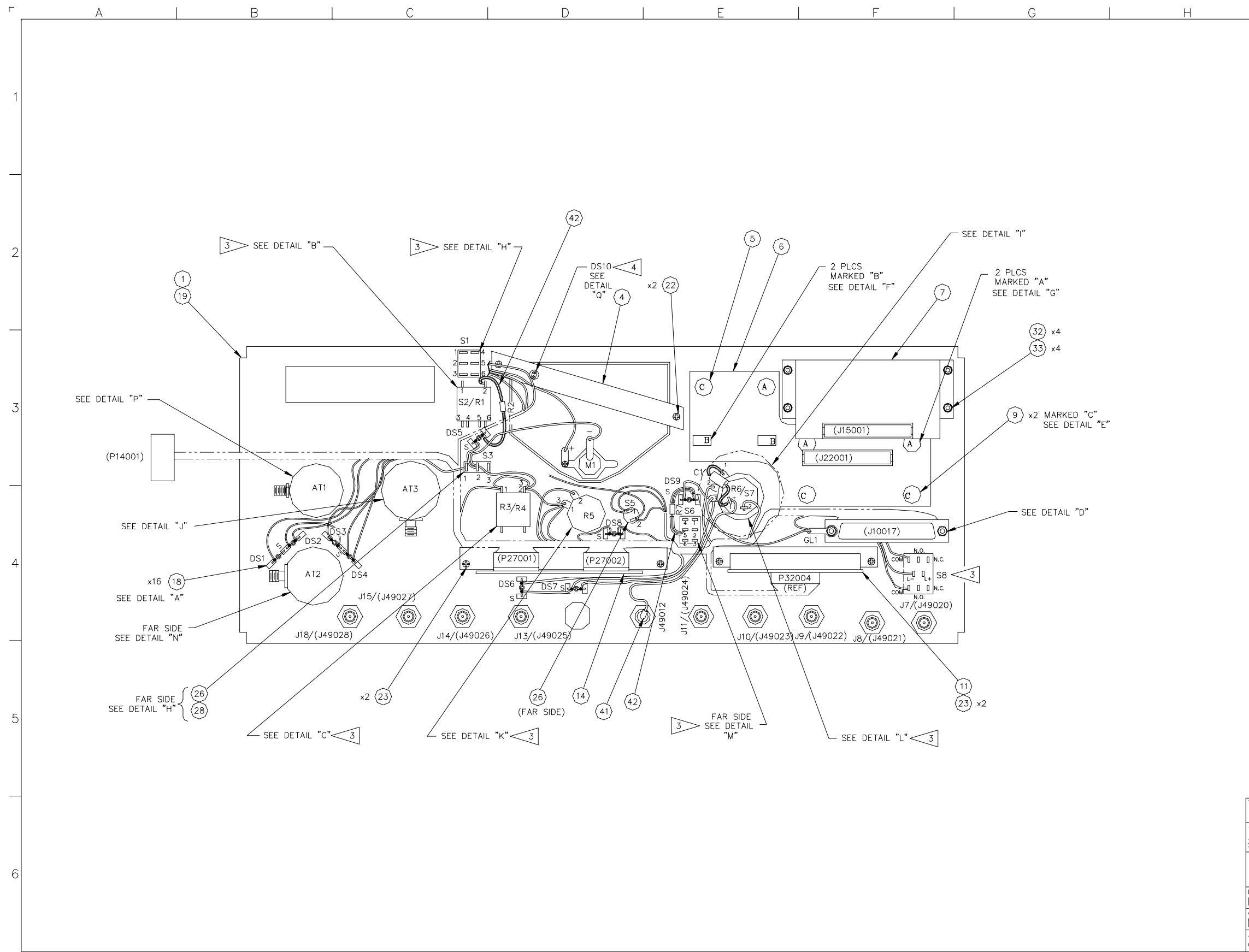


- NOTE:**
1. Res. are in ohms & (*) notes 1%.
 2. Caps. are in uf unless noted.
 3. LAST USED NO.
X 2 J3
Q 9 FL5
R35 E7
C25
CR9
L9
 4. ALL COMPONENTS HAVE THE REFERENCE DESIGNATOR SERIES 36XXX (i.e. R1=R36001, C12=C36012, etc.).
 5. ALL FEEDTHRU CAPACITORS ARE TO BE 1500pf UNLESS OTHERWISE SPECIFIED.
 6. REF DES. NOT USED
C25

DRAWN: L. A. Meis, Jr.	DATE: 12-25-58	CR/Job:	TITLE: SCHEMATIC
CHECKED: VY	DATE:		IF GEN POWER AMP
APPROVED: [Signature]	DATE: 12-25-58		RD 301
RELEASED:	DATE:	PART NO. 0000-4911-500	
MODEL: RD 301	SCALE:	SHEET 1 OF 1	REV: A 3

Subject to Export Control, see Cover Page for details.

DATE	REV	CHANGE	BY	CHKD	APVD
02/09/01	A	REL 19219	REH	MB	GMH



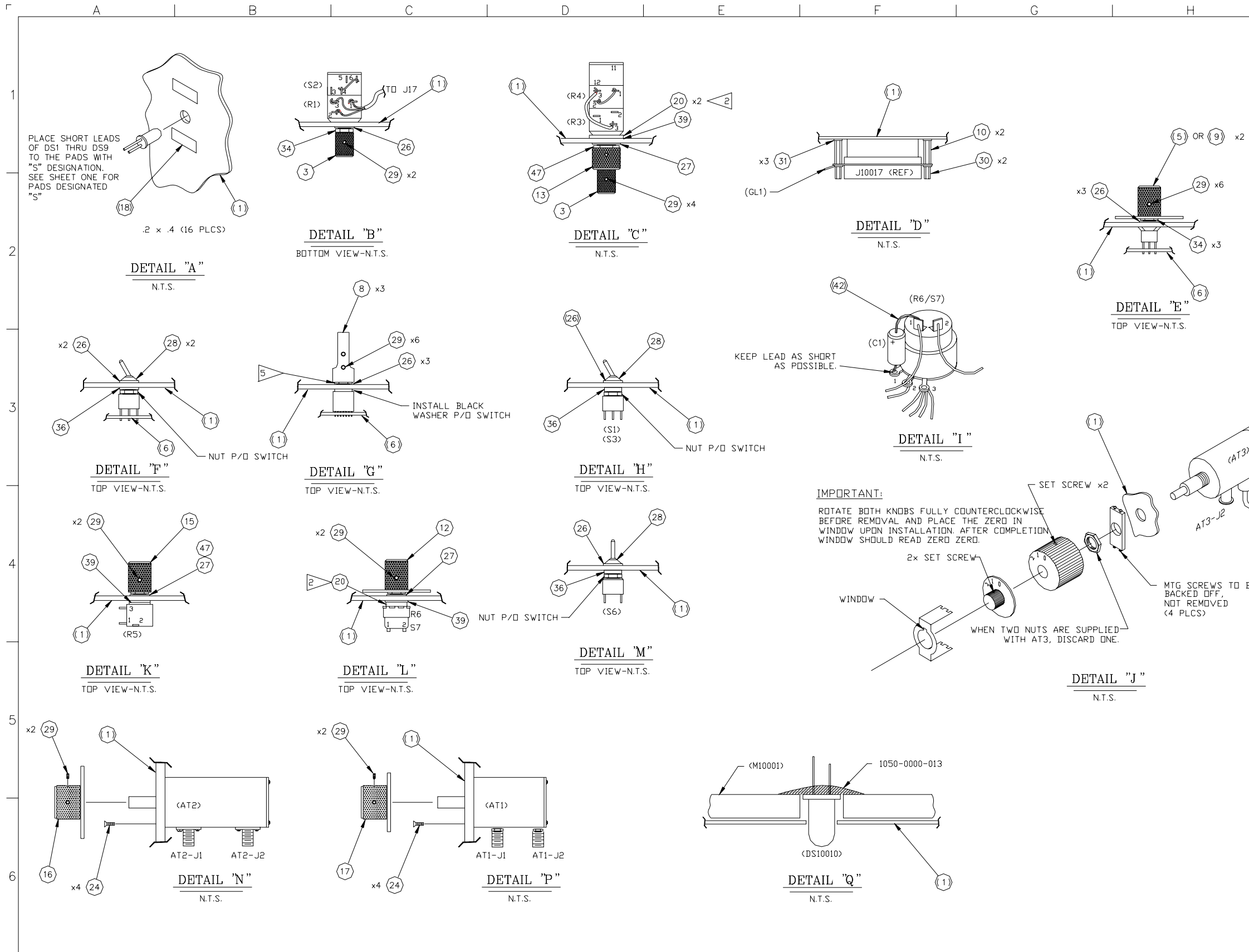
NOTES:

1. ALL REFERENCE DESIGNATORS CARRY AN ASSIGNED DESIGNATOR SERIES, THIS ASS'Y CARRIES SERIES 10000 (i.e., R1 IS R10001).
2. ITEM 20. (SPACER) MAY REQUIRE SELECTIVE "FITTING".
3. REFERENCE SHT 3 (WIRE RUNNING LIST) FOR CONNECTIONS.
4. BEFORE INSTALLING M10001 TO ITEM 1, MOUNT LED FLUSH WITH BACK SIDE OF METER AND ADHERE AS SHOWN (DETAIL "Q").
5. USE HARDWARE SUPPLIED AS FREE STOCK
6. TO CHECK DS1 THRU DS9 INSTALLATION, PLACE RED PROBE OF RINGER TO THE LEAD MARKED "S". PLACE BLACK PROBE OF RINGER TO THE OPPOSITE LEAD. IF THE LED IS INSTALLED CORRECTLY, IT WILL LIGHT UP AS PROBES ARE ATTACHED.
7. W# REFERENCE DESIGNATORS ARE USED TO FACILITATE THE BUILD PROCESS ONLY AND DO NOT TRACK BOM OR TO SCHEMATICS.

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL		
DRAWN R.HARRIS DATE 01/09/01	DATE 01/09/01	TITLE MECH ASSY, FRONT PANEL
CHECKED M.BRUFFETT DATE 02/02/01	DATE 02/02/01	DWG NO 7005-9047-100
APPROVED G.HILL DATE 02/09/01	DATE 02/09/01	REV A
090471A0.DWG		CAGE 51190 SHEET 1 OF 4

Subject to Export Control, see Cover Page for details.

DATE	REV	CHANGE	BY	CHKD	APVD
		SEE SHEET 1			



THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
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10200 WEST YORK STREET WICHITA, KANSAS 67215		
DRAWN R.HARRIS 01/09/01	DATE 01/09/01	TITLE MECH ASSY, FRONT PANEL
CHECKED M.BRUFFETT 02/02/01	DATE 02/02/01	DWG NO 7005-9047-100
APPROVED G.HILL 02/09/01	DATE 02/09/01	REV A
090471A0.DWG CAGE 51190		SHEET 2 OF 4

F A B C D E F G H I J

DATE	REV	CHANGE	BY	CHKD	APVD
		SEE SHEET 1			

WIRE RUNNING LIST

LINE No	FROM	TO	WIRE
	TERMINAL	TERMINAL	COLOR AWG DESG
1	DS10002-SHORT	DS10003-SHORT	BLK 26 (W1)
2	DS10004-SHORT	R10005-3 (3)	BLK 26 (W2)
3	DS10005-LONG	R10002 390 OHM	SLEEVE
4	DS10005-SHORT (2)	S10003-2 (3)	BLK 26 (W3)
5	DS10005-SHORT (2)	S10001-5	BLK 26 (W4)
6	DS10006-SHORT	DS10007-SHORT (2)	BLK 26 (W5)
7	DS10007-SHORT (2)	R10006-3 (4)	BLK 26 (W6)
8	DS10009-SHORT (2)	R10006-3 (4)	BLK 26 (W7)
9	DS10009-SHORT (2)	R10005-3 (3)	BLK 26 (W8)
10	DS10009-LONG	R10007 390 OHM	SLEEVE
11	R10007	S10006-5	
12	DS10010-LONG	S10002-6 (2)	RED 26 (W9)
13	M10001 +	S10001-2	WHT 26 (W10)
14	M10001 -	S10003-2 (3)	BLK 26 (W11)
15	S10001-4	NC	
16	S10002-2	R10002	SLEEVE
17	S10002-3	NC	
18	S10002-4 (3)	S10005-2 (3)	RED 26 (W12)
19	S10002-4 (3)	S10002-6 (2)	RED 26 (W13)
20	S10002-5	NC	
21	S10003-2 (3)	R10004-2 (3)	BLK 26 (W14)
22	S10003-3	NC	
23	S10005-2 (3)	S10006-6 (2)	RED 26 (W15)
24	S10006-1	NC	
25	S10006-4	NC	
26	S10007-1 (2)	C10001 + 33UF 20V	SLEEVE
27	S10007-1 (2)	J49012	WHT 26 (W16)
28	NDT USED		
29	NDT USED		
30	NDT USED		
31	S10008-2b	NC	
32	S10008-2	NC	
33	NDT USED		
34	R10003-1	R10005-1 (3)	VID 26 (W17)
35	R10003-3	R10004-3	WHT 26 (W18)
36	R10004-1 (2)	R10004-2 (3)	BLK 26 (W19)
37	R10004-2 (3)	R10005-3 (3)	BLK 26 (W20)
38	R10006-1	C10001 - 33UF 20V	
39	R10006-3 (4)	GL10001 (2)	BLK 26 (W21)
40	J10017-1	S10008-1b (TDP)	GRY 22 (W22)
41	J10017-2	S10008-1 (TDP)	WHT 22 (W23)
42	J10017-3	NC	
43	J10017-4	DS10010-SHORT	WHT/BLK 26 (W24)
44	J10017-5	GL10001 (2)	BLK 22 (W25)
45	J10017-6	P27001-8	YEL 26 (W26)
46	J10017-7	P32004-4 (2)	DRN 22 (W27)
47	J10017-8	+12V S10005-2 (3)	RED 26 (W28)
48	J10017-9	R10005-1 (3)	VID 26 (W29)
49	J10017-10	S10001-6	WHT/GRN 26 (W30)
50	J10017-11	R10001-3	WHT 26 (W31)
51	J10017-12	R10001-2	WHT/BLU 26 (W32)
52	J10017-13	R10001-1	WHT/GRY 26 (W33)
53	J10017-14	S10002-1	WHT/VID 26 (W34)
54	J10017-15	S10001-1	WHT/YEL 26 (W35)
55	J10017-16	S10006-3	WHT/RED 26 (W36)
56	J10017-17	S10006-2	WHT/GRN 26 (W37)
57	J10017-18	R10003-2	WHT/GRY 26 (W38)
58	J10017-19	S10001-3	WHT/DRN 26 (W39)
59	J10017-20	S10005-1 (2)	WHT/RED 26 (W40)
60	J10017-21	R10005-2	WHT/VID 26 (W41)
61	J10017-22	R10006-2	WHT/BLU 26 (W42)
62	J10017-23	P27001-1 (2)	WHT/BRN 26 (W43)
63	J10017-24		
64	J10017-25	P27001-10	WHT/VID 26 (W45)
65	J10017-26	P27001-5	WHT/DRN 26 (W46)
66	J10017-27		
67	J10017-28		
68	J10017-28		
69	J10017-29		
70	J10017-30	P14001-1	WHT/BRN 26 (W49)
71	J10017-31	P14001-3	WHT 26 (W50)
72	J10017-32	CW SEL P32004-8	WHT/BLK 26 (W51)
73	J10017-33	P32004-6	BRN 26 (W52)
74	J10017-34	EXT TRIG- P32004-5	WHT/BLU 26 (W53)
75	J10017-35	INT SEL P32004-12	GRN 26 (W54)

WIRE RUNNING LIST

LINE No	FROM	TO	WIRE
	TERMINAL	TERMINAL	COLOR AWG DESG
76	J10017-36	+5 DN TRACK P32004-13	WHT/GRY 26 (W55)
77	J10017-37	DS10008-LONG	WHT 26 (W56)
78	P14001-1	J10017-30	*
79	P14001-2	R10004-1 (2)	BLK 26 (W57)
80			
81	P14001-3	J10017-31	*
82	P14001-4	KEY	
83	P14001-5	S10003-1	GRN 26 (W59)
84	P14001-6	S10007-2	WHT/DRN 26 (W62)
85	P14001-7	S10005-1 (2)	WHT/RED 26 (W60)
86	P14001-8	+5V P32004-4 (2)	DRN 26 (W61)
87	P14001-9	P27001-6	WHT 26 (W63)
88	P14001-10	S10002-4 (3)	RED 26 (W64)
89			
90			
91			
92			
93			
94			
95			
96			
97	P27001-1	J10017-23	*
98	P27001-1 (2)	DS10008-SHORT	WHT/BLK 26 (W65)
99	P27001-2	KEY	
100	P27001-3	P27002-10 (2)	BLK 26 (W66)
101	P27001-4	NC	
102	P27001-5	J10017-26	*
103	P27001-6	P14001-11	*
104			
105	P27001-8	J10017-6	*
106	P27001-9	R10005-1 (3)	VID 26 (W67)
107	P27001-10	J10017-25	*
108	P27002-1	S10006-6 (2)	RED 26 (W68)
109	P27002-2	NC	
110	P27002-3	KEY	
111	P27002-4	DS10002-LONG	WHT/YEL 26 (W69)
112	P27002-5	DS10007-LONG	WHT 26 (W70)
113	P27002-6	DS10001-LONG	WHT/DRN 26 (W71)
114	P27002-7	DS10004-LONG	WHT/BRN 26 (W72)
115	P27002-8	DS10003-LONG	WHT/GRN 26 (W73)
116	P27002-9	DS10006-LONG	WHT/RED 26 (W74)
117	P27002-10 (2)	R10006-3 (4)	BLK 26 (W75)
118	P27002-10 (2)	P27001-3	*
119	P32004-1	NC	
120	P32004-2	NC	
121	P32004-3	KEY	
122	P32004-4	J10017-7	*
123	P32004-4	P14001-9	*
124	P32004-5	J10017-34	*
125	P32004-6	J10017-33	*
126	P32004-7	NC	
127	P32004-8	J10017-32	*
128	P32004-9	NC	
129	P32004-10	NC	
130	P32004-11	NC	
131	P32004-12	J10017-35	*
132	P32004-13	J10017-36	*
133	P32004-14	NC	
134	P32004-15	NC	
135	P32004-16	NC	
136	P32004-17	NC	
137	P32004-18	NC	

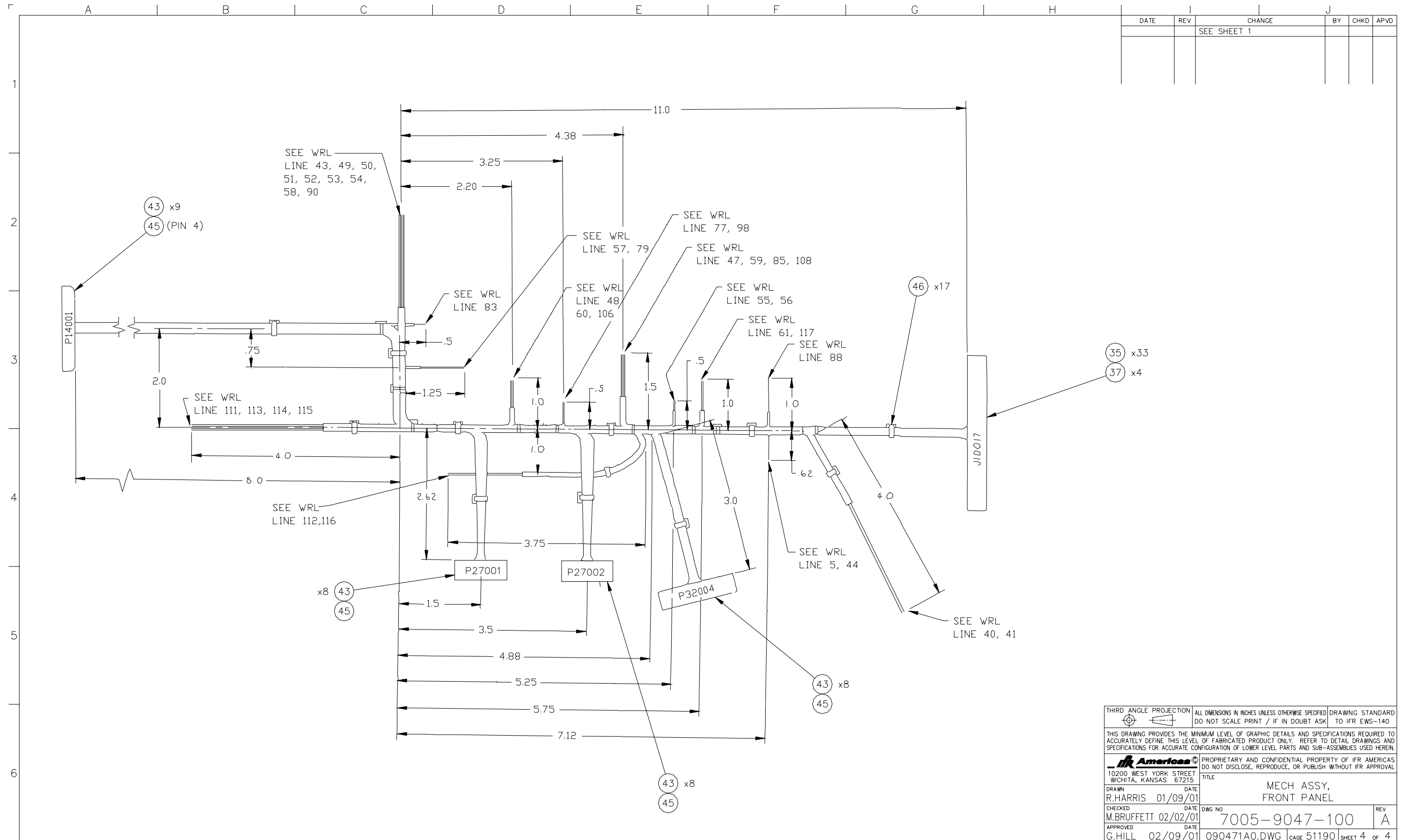
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TERMINAL	LINE NUMBERS
DS10001	113
DS10002	1, 111
DS10003	1, 115
DS10004	2, 114
DS10005	4, 5
DS10006	6, 116
DS10007	6, 7, 112
DS10008	77, 98
DS10009	8, 10
DS10010	12, 43
M10001	13, 14
S10001	5, 13, 15, 49, 54, 58
S10002	12, 16, 19, 20, 53, 90
S10003	4, 14, 21, 22, 83
S10005	18, 23, 47, 59, 85
S10006	11, 23, 25, 55, 56, 108
S10007	26, 27, 88
S10008	31, 32, 40
R10001	50 THRU 52
R10002	3, 16
R10003	34, 35
R10004	21, 35 THRU 37, 79
R10005	2, 9, 34, 37, 48, 60, 106
R10006	7, 8, 38, 39, 61, 117
R10007	10, 11
C10001	26, 38
GL10001	39, 44
J10012	27
J10017	40 THRU 78, 81, 84, 86, 102, 104, 105, 107, 122, 124, 125, 127, 131, 132
P27001	45, 62 THRU 65, 89, 97 THRU 107, 118
P27002	108 THRU 118
P32004	46, 72 THRU 76, 87, 119 THRU 137
P14001	66, 78 THRU 96, 103, 123

LEGEND:

ASTERISK (*) ----- WIRE RUN REPEATED, FOR REFERENCE ONLY
 (***) COAX SHIELDS JOINED FIRST W/167" OF BLK 26 AWG WIRE (COVER COAX SHIELD CONNECTIONS WITH HEATSHRINK TUBING A/R)
 NC ----- NO CONNECTION
 (N) ----- NUMBER (QTY) OF WIRES
 PGT ----- PIGTAIL
 SS(X) ----- SHIELDED SINGLE NO.X
 SP(X) ----- SHIELDED PAIR NO.X
 ST(X) ----- SHIELDED TRIPLE NO.X
 SQ(X) ----- SHIELDED QUAD (4) NO.X
 CX(X) ----- COAX NO.X (CENTER CONDUCTOR ONLY)
 S ----- SOLDER
 C(N) ----- CONNECTION SO INDICATED HAS MULTIPLE CONDUCTORS ATTACHED AND IS NOT COMPLETED AT THIS TIME
 M ----- MALE TERMINAL
 F ----- FEMALE TERMINAL
 T ----- TAG IDENTIFY BY TERMINAL DESIGNATION

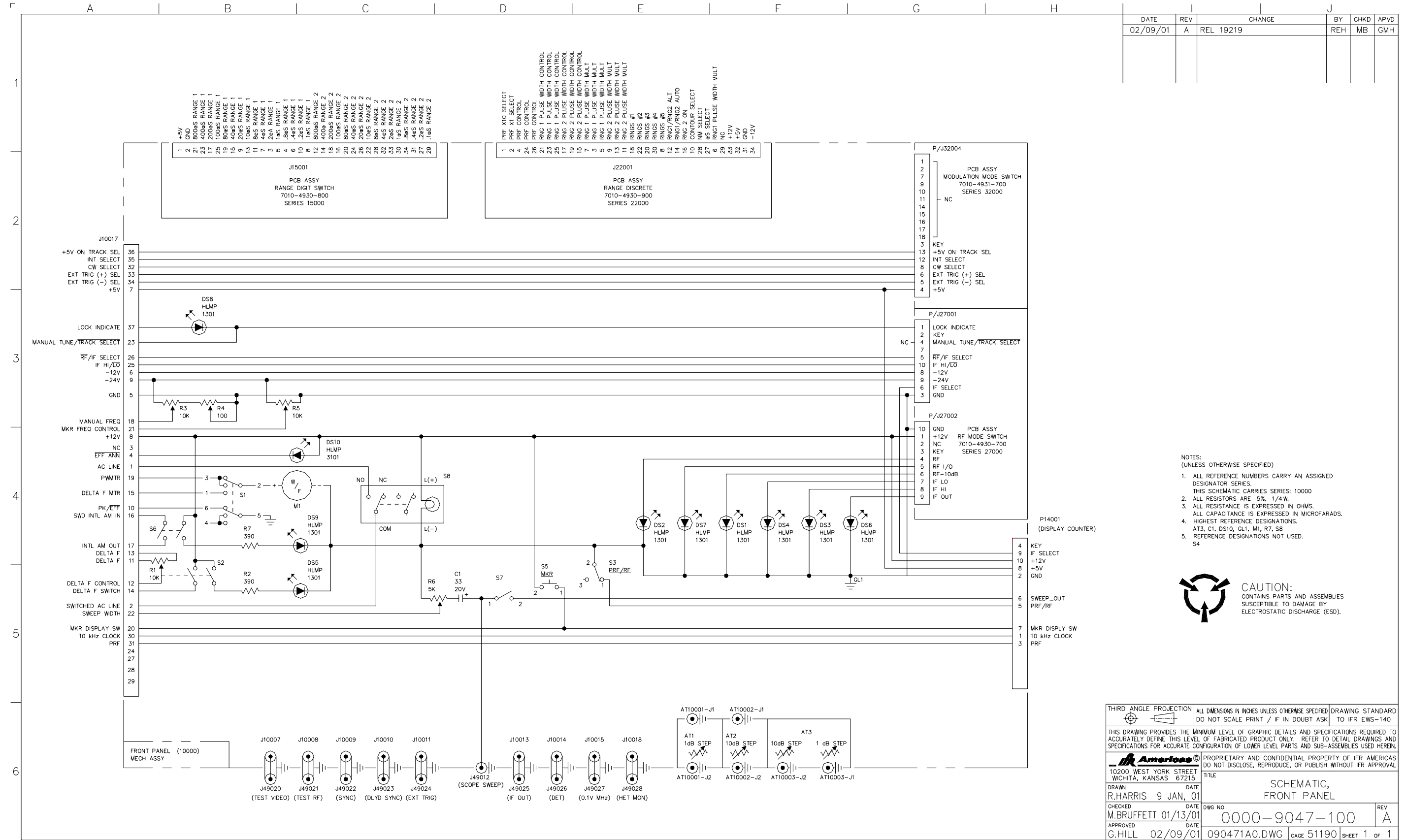
THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL
10200 WEST YORK STREET WICHITA, KANSAS 67215		TITLE
DRAWN R.HARRIS 01/09/01		MECH ASSY, FRONT PANEL
CHECKED M.BRUFFETT 02/02/01	DATE 02/02/01	DWG NO 7005-9047-100
APPROVED G.HILL 02/09/01	DATE 02/09/01	REV A
090471A0.DWG		CAGE 51190 SHEET 3 OF 4



DATE	REV	CHANGE	BY	CHKD	APVD
		SEE SHEET 1			

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
10200 WEST YORK STREET WICHITA, KANSAS 67215		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL
DRAWN R.HARRIS	DATE 01/09/01	TITLE MECH ASSY, FRONT PANEL
CHECKED M.BRUFFETT	DATE 02/02/01	DWG NO 7005-9047-100
APPROVED G.HILL	DATE 02/09/01	REV A
090471A0.DWG		CAGE 51190 SHEET 4 OF 4

Subject to Export Control, see Cover Page for details.



- NOTES:
(UNLESS OTHERWISE SPECIFIED)
1. ALL REFERENCE NUMBERS CARRY AN ASSIGNED DESIGNATOR SERIES.
 2. THIS SCHEMATIC CARRIES SERIES: 10000
 3. ALL RESISTORS ARE 5%, 1/4 W.
 4. ALL CAPACITANCE IS EXPRESSED IN MICROFARADS.
 5. HIGHEST REFERENCE DESIGNATIONS. AT3, C1, DS10, GL1, M1, R7, S8
 6. REFERENCE DESIGNATIONS NOT USED. S4



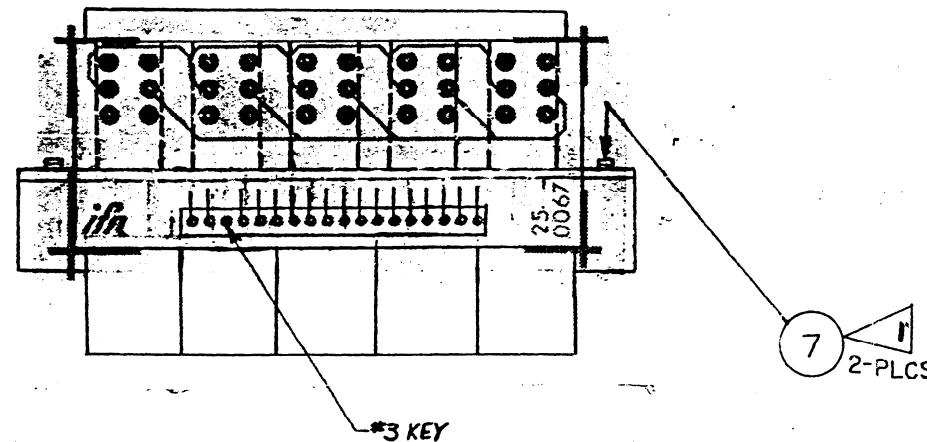
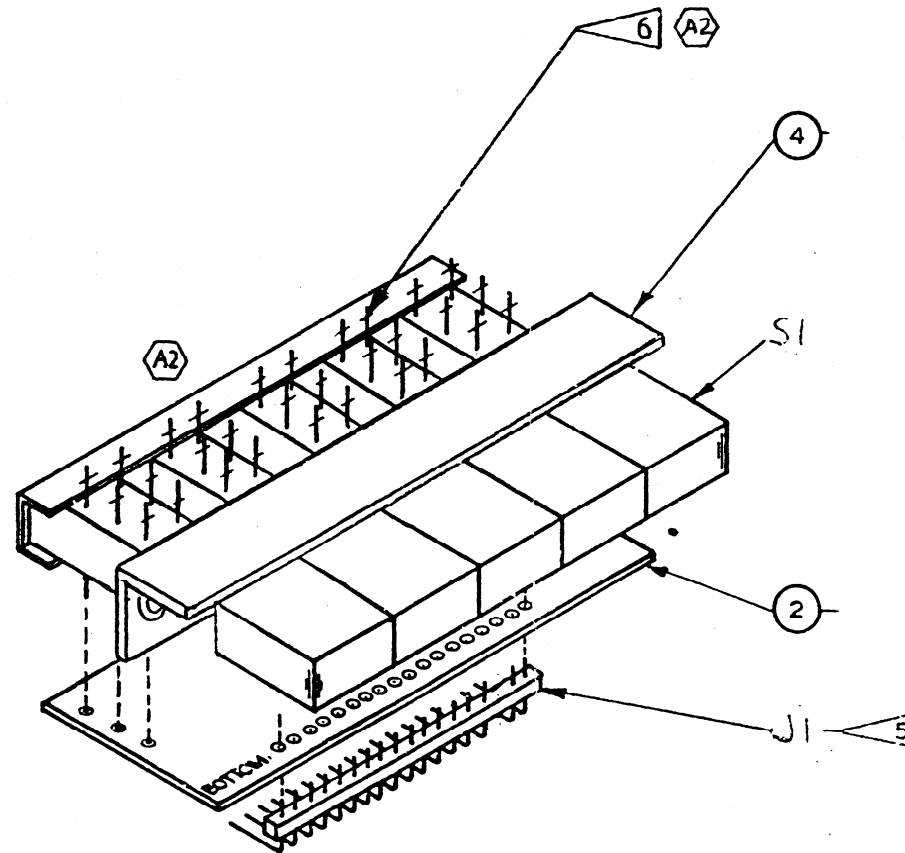
THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
10200 WEST YORK STREET WICHITA, KANSAS 67215 TITLE: SCHEMATIC, FRONT PANEL		
DRAWN R.HARRIS	DATE 9 JAN, 01	REV A
CHECKED M.BRUFFETT	DATE 01/13/01	DWG NO 0000-9047-100
APPROVED G.HILL	DATE 02/09/01	090471A0.DWG CAGE 51190 SHEET 1 OF 1

Subject to Export Control, see Cover Page for details.

DATE	REV	CHANGE	APP'D
3/20/85	A	PROD. RELEASE ECN 6490	VLH
4/1/85	A-1	INC RC 7698 SLR	VLH
6/13/86	A-2	INC RC 8696 WAW	VLH

NOTES:

- 1. TIGHTEN SCREWS TO \approx 5 IN LBS. APPLY A SMALL DROP OF "LOCTITE" #290. (DPC1051-0100-200) AROUND THE HEAD OF EACH SCREW AFTER TIGHTENING
- 2. SOLDER WITH "KESTER" 63/37 WIRE SOLDER WITH #25+ FLUX.
- 3. WASH WITH "ZEPRIDE" SOAP AND WATER.
- 4. DO NOT SUBMERGE SWITCH IN WATER.
- 5. PIN 3 REMOVED FOR KEYING PURPOSES
- 6. AFTER ITEM 2 IS INSTALLED ON SWITCH, CLIP SWITCH PINS ON OPPOSITE SIDE OF SWITCH BY AT LEAST .125 IN (APPROX HALF OF PIN). REMAINING PINS SHOULD NOT EXCEED .15 IN.



NOTE:

- 1. REF SCHEMATIC DWG N^o 0000-4911-700
- 2. REF DES SERIES ASSIGNED - 32XXX
- 3. ITEM N^o NOT USED.....1,6
- 4. LAST REF DES USED... S1, J1
- 5. LAST ITEM N^o USED... 7
- 6. ITEM N^os NOT USED... 1,3,5,6

SEE SEPARATE B.O.M

ITEM	QTY	PART NO.	DESCRIPTION
7	2	A-40x3/16	PBHMS
5	1	22-05-2181	MOLEX (18) PIN CONN.
4	1	49-816	MTG. BRKT.
3	1	2B1170	CENTRALAB (5) SECT SWITCH
2	1	25-0067	P.C. BOARD
49-401	1	RD301	SWITCH ASS'Y. (MOD. MODE)

APPLICATION	LIST OF MATERIALS
<p>49-401 1 RD301</p> <p>NEXT ASS'Y QTY MODEL ITEM REQ'D PART NO. DESCRIPTION</p>	<p>INSTRUMENT FLIGHT RESEARCH CORPORATION WICHITA, KANSAS</p> <p>TITLES MODULATION MODE SWITCH ASS'Y. 49-317</p>
<p>TOLERANCES UNLESS OTHERWISE SPECIFIED</p> <p>ALL DIMENSIONS APPLY AFTER FINISH</p> <p>DECIMALS: \pm .005</p> <p>ANGLES: \pm 1/2°</p> <p>FRACTIONS: \pm 1/64</p> <p>SURFACE ROUGHNESS 125 ✓</p> <p>REMOVE ALL BURRS</p>	<p>DATE 12-24-85</p> <p>CHECKED DATE 2-11-85</p> <p>APPROVED DATE Greenbank 2/11/85</p>
<p>MATERIAL NOTED</p> <p>TREATMENT</p> <p>FINISH</p>	<p>SIZE B</p> <p>PART NUMBER 7010-4931-700</p> <p>SCALE NONE</p> <p>WEIGHT</p> <p>REV A2</p> <p>SHEET 1 OF 1</p>

A B C D E F G H

DATE	REV	CHANGE	APVD
3/20/85	A	PROD RELEASE ECN 10470	TE

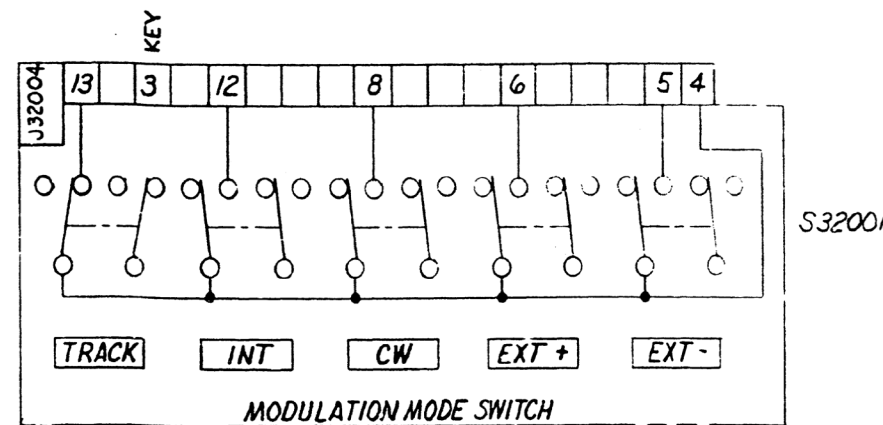
1

2

3

4

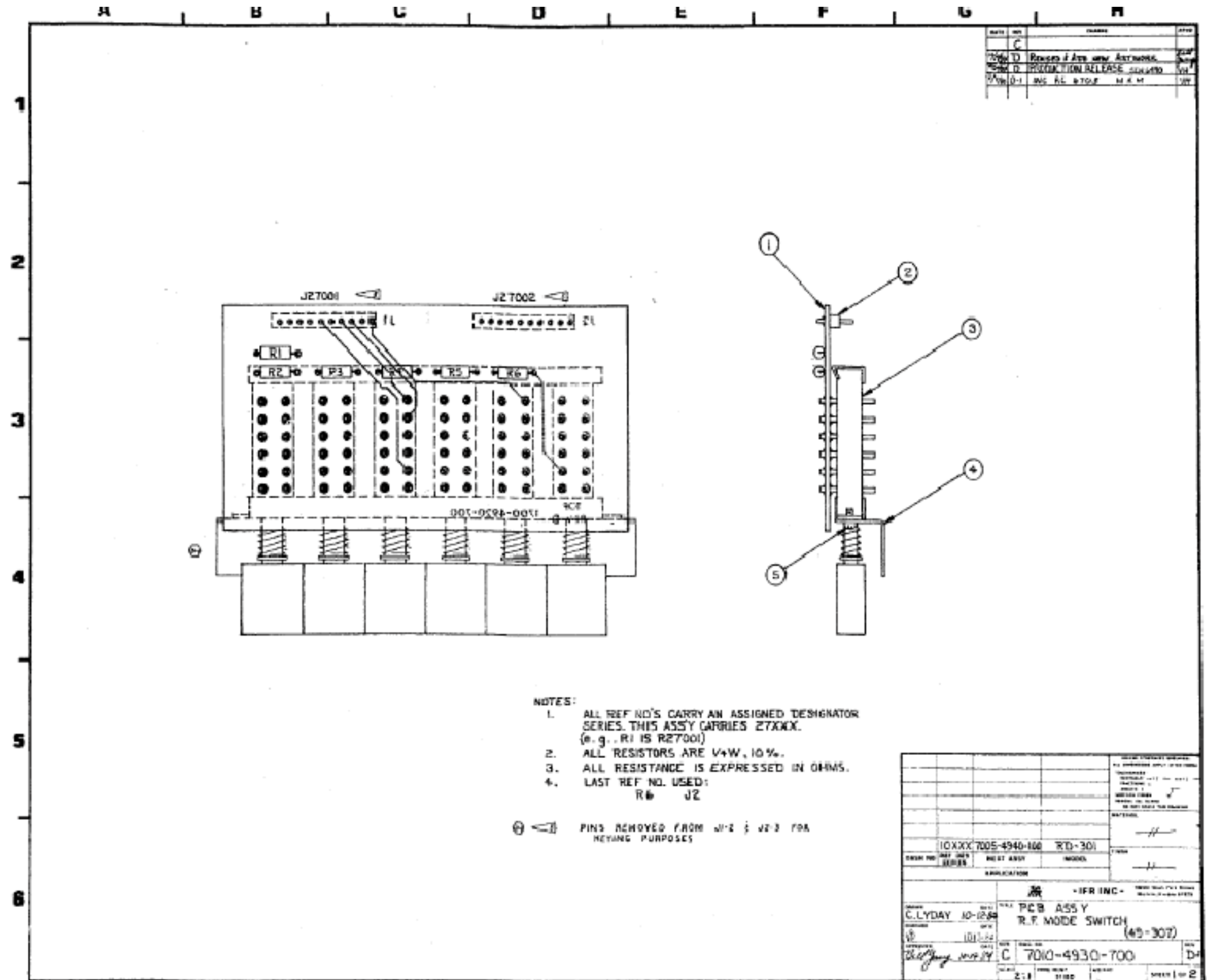
5



NOTE:

1. ALL REF N^o's CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES 32XXX
2. LAST REF USED : J32004
S32001
3. REF N^o's NOT USED: J32001
J32002
J32003
4. SWITCH SHOWN IN TRACKING MODE POSITION.

				UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS APPLY AFTER FINISH	
				TOLERANCES: DECIMALS: .0001 ± .0002 FRACTIONS: 1/16 ± .0002 ANGLES: 1/2 SURFACE FINISH: <input checked="" type="checkbox"/> REMOVE ALL BURRS DO NOT SCALE THIS DRAWING	
				MATERIAL	
				FINISH	
DASH NO	REF DES SERIES	NEXT ASSY	MODEL		
	32XXX	7010-4931-700	RD301		
APPLICATION					
		IFR INC -		10200 West York Street Wichita, Kansas 67215	
DRAWN	DATE	TITLE			
L.A. Meis, Jr.	01 FEB 85	SCHEMATIC MODULATION MODE SWITCH RD 301 (49-117)			
CHECKED	DATE	SIZE	DWG. NO.	REV	
WE	2-11-85	B	0000-4911-700	A	
APPROVED	DATE	SCALE	CODE IDENT.	WEIGHT	SHEET / OF /
Greenbank	2-11-85		51190		1 / 1



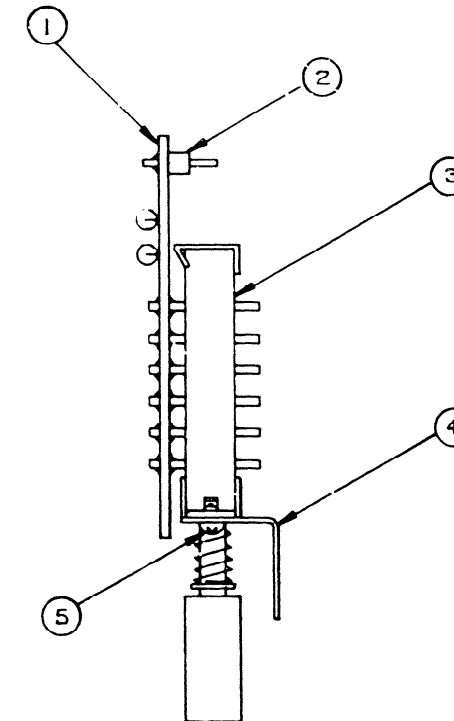
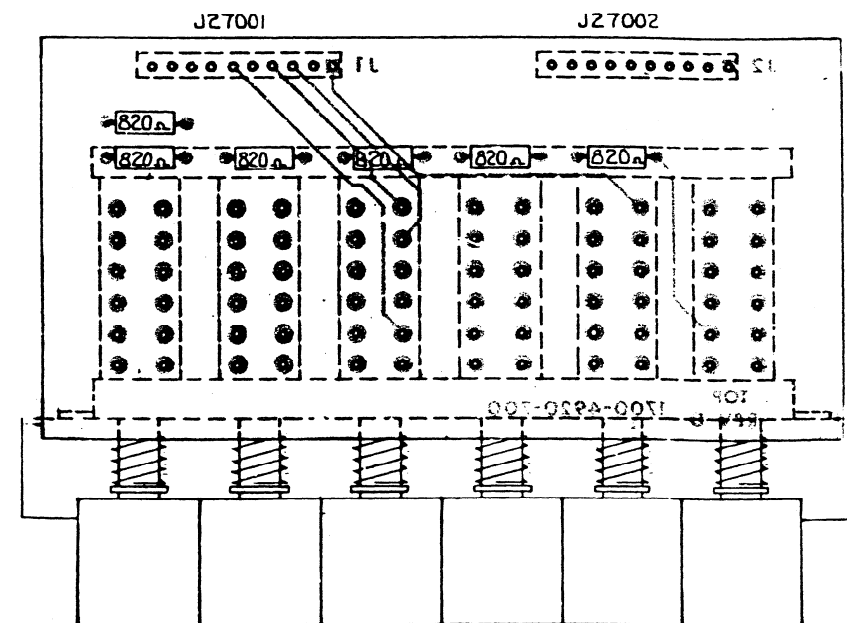
DATE	REV	CHANGE	BY
	C		
10/10/70	D	Revised to Add new Assembly	WJ
10/10/70	D	PRODUCTION RELEASE	WJ
10/10/70	D-1	INS. RL. STOLF	M. K. M.

- NOTES:
1. ALL REF NO'S CARRY AN ASSIGNED DESIGNATOR SERIES. THIS ASSY CARRIES Z7XX. (e.g., R1 IS R27001)
 2. ALL RESISTORS ARE V+W, 10%.
 3. ALL RESISTANCE IS EXPRESSED IN OHMS.
 4. LAST REF NO. USED:
R# J2

④ PINS REMOVED FROM WIRE & W/2 FOR KEYING PURPOSES

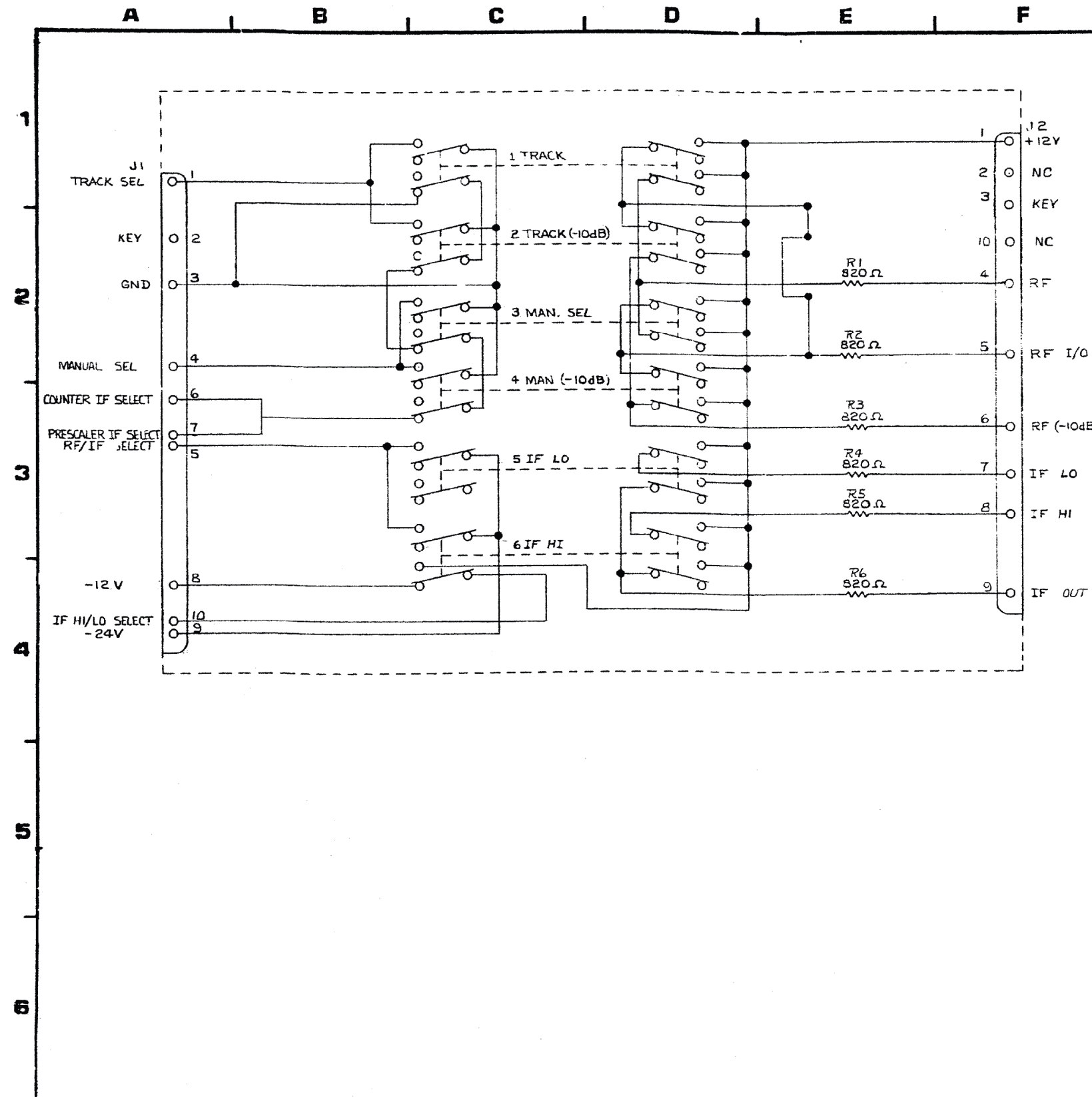
10XXX 7005-4940-800		RD-301
DATE	REV	BY
10/10/70	C	WJ
PCB ASSY		
R.F. MODE SWITCH		
(49-307)		
7010-4930-700		
2:8	TIME	SHEET 1 OF 2

DATE	REV	CHANGE	APPROV
	C		
	D	REMOVE JUMPER & ADD REV. ARTWORK	
	D	PRODUCTION RELEASE ECN 6490 VH	
		SEE SHEET 1	



NOTES : SEE SHT 1 OF 2

DASH NO		REF DES		NEXT ASSY		MODEL		APPLICATION	
10XXX		7005-4940-100		RD-301					
<p>10000 West York Street Wichita Kan 67219</p> <p>IFR INC</p> <p>DRAWN: C. LYDAY DATE: 10-12-84 TITLE: PCB ASSY</p> <p>CHECKED: DATE: R.F. MODE SWITCH</p> <p>APPROVED: Bill Gony DATE: 10-11-84 DWG NO: 7010-4930-700 REV: D</p> <p>SCALE: 2:1 CODE IDENT: 51190 WEIGHT: SHEET 2 OF 2</p>									



DATE	REV	CHANGE	APPROV
11/14/84	C	SEE HISTORY FILE	
12/21/84	D	REVISED ADD KEY POSITIONS	
2/24/85	D	PRODUCTION RELEASE ECN 4495	VH

- NOTES
- ALL REF NO'S CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES NO 27XXX. (e.g., R1 IS R27001)
 - ALL RESISTORS ARE 1/4 W. 10%.
 - ALL RESISTANCE EXPRESSED IN OHMS.
 - LAST REF NO USED:
R6 J2

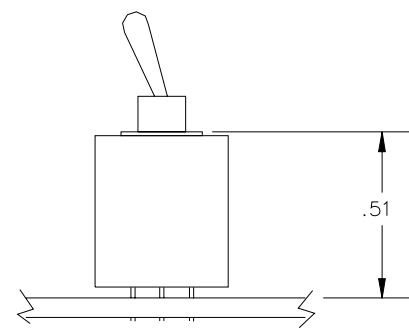
DASH NO		27XXX	REF DES SERIES	1700-4920-700	NEXT ASSY	RD-301	MODEL	
APPLICATION								
DRAWN								C. LYDAY
DATE								6-4-84
CHECKED								
DATE								
APPROVED								
DATE								11-19-84
TITLE								RF MODE SW BD SCHEMATIC (49-107)
DWG. NO.								0000-4910-700
SCALE								5:1
CODE IDENT								51180
WEIGHT								
SHEET								1 OF 1

Subject to Export Control, see Cover Page for details.

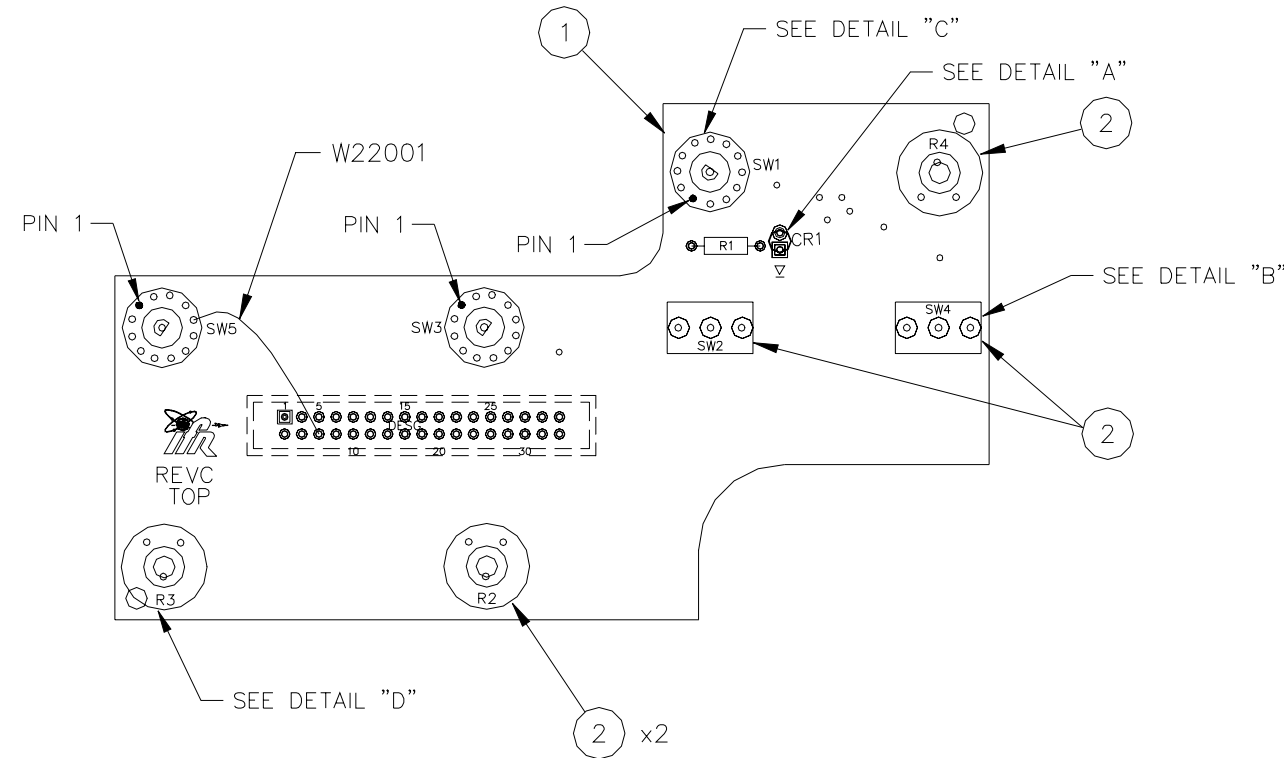
A | B | C | D | E | F | G | H

DATE	REV	CHANGE	BY	CHKD	APVD
		DRAWN TO NEW FORMAT			
		SEE HISTORY FOR PREV REV			
04/27/99	E	INC ECN 18498	REH	MB	MLB

SWITCH STOP PIN POSITIONS					
GRAYHILL SWITCH			GRIGSBY STD SWITCH		
SW #	PIN #1	PIN #2	PIN #1	PIN #2	
SW1	1-12	9-10	2-3	11-12	
SW3	1-12	4-5	2-3	6-7	
SW5	1-12	5-6	2-3	6-7	

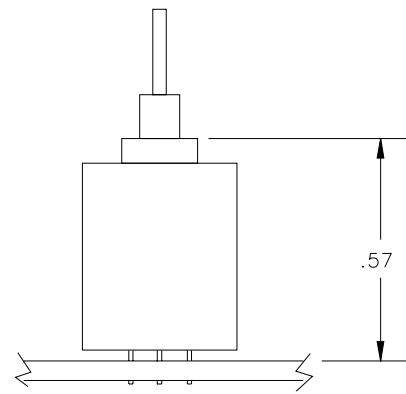


DETAIL "B"

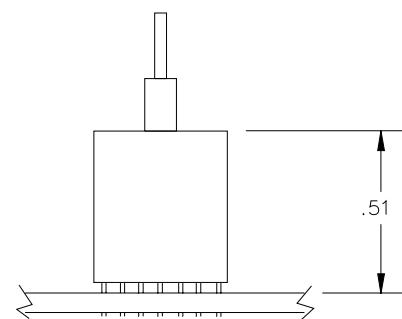


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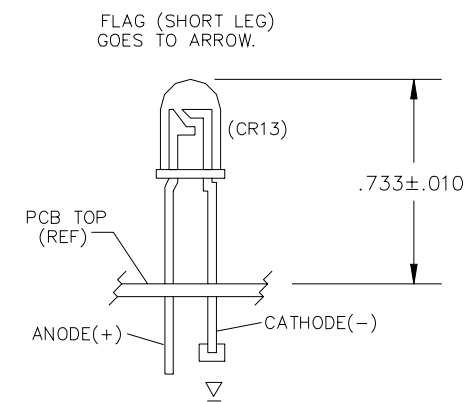
1. BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
2. JIG IS USED TO BUILD BOARD.



DETAIL "D"

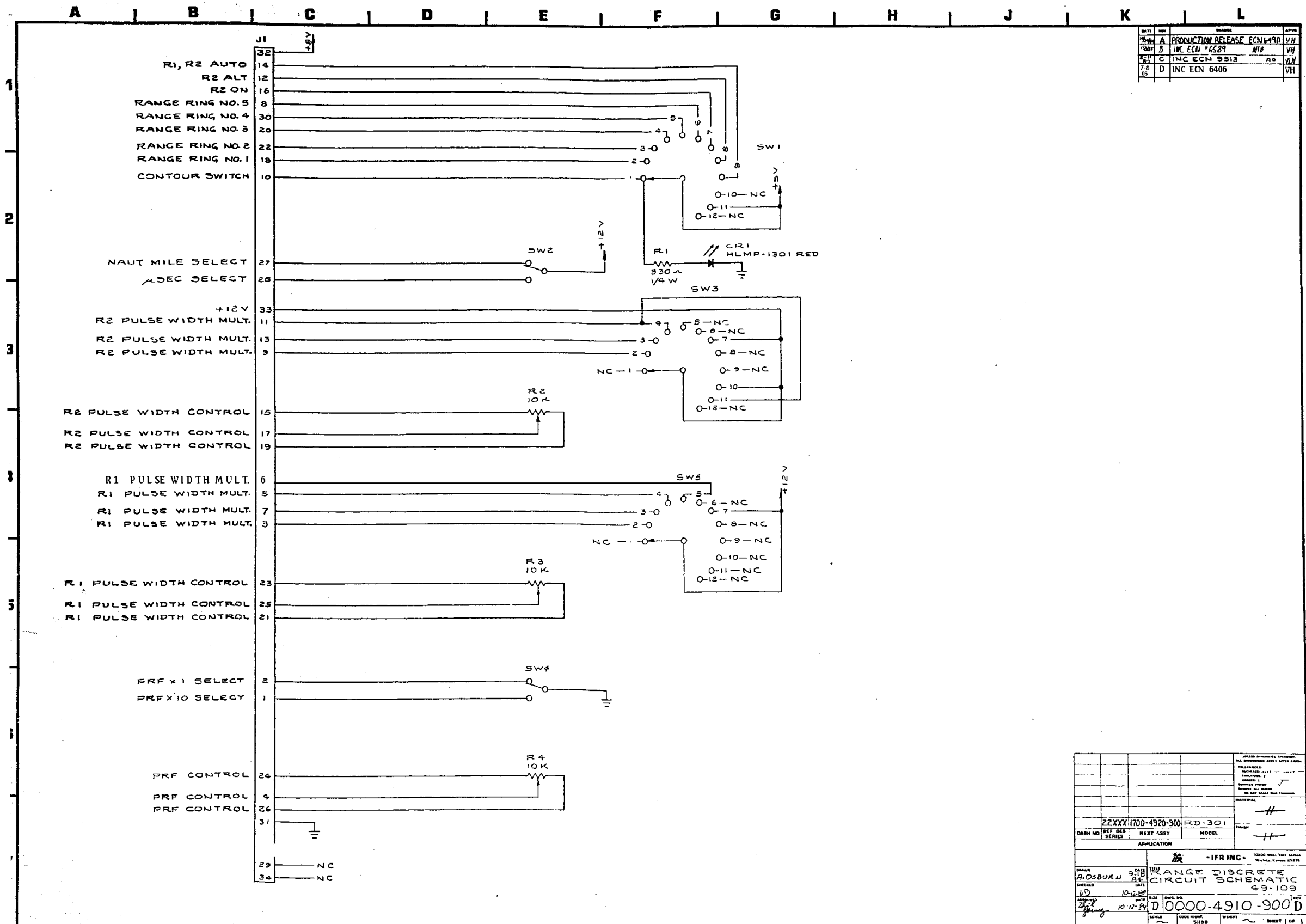


DETAIL "C"



DETAIL A
NOT TO SCALE

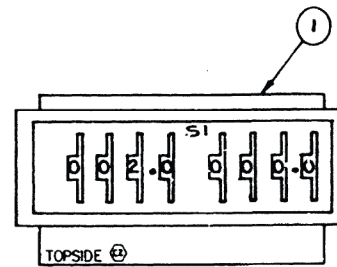
THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
10200 WEST YORK STREET WICHITA, KANSAS 67215		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL
DRAWN A.OSBURN	DATE 09/18/84	TITLE PCB ASSY. RANGE DISCRETE
CHECKED WB	DATE 10/12/84	DWG NO. 7010-4930-900
APPROVED B.YOUNG	DATE 10/12/84	REV E
049309E0.DWG		CAGE 51190 SHEET 1 OF 1



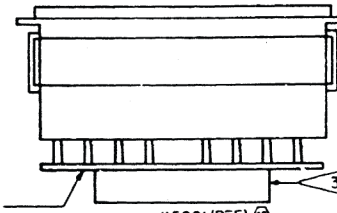
A B C D E F G H

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DATE	REV	DESCRIPTION	APPR
	A	PROTOTYPE RELEASE	
	B	REVISED & REDRAWN	
	C	ADD NEW ARTWORK	
10-23-84	C	PRODUCTION RELEASE ECN 6490	VH
10-23-84	C-1	INC RC 6879 RW	VLH
10-23-84	C-2	INC RC 9078 DAH	VLH

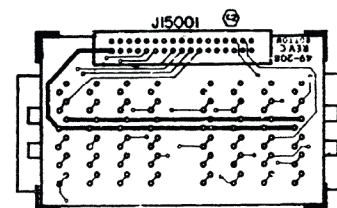


TOPSIDE ⊕



⊖ BOTTHSDE

J15001 (REF) ⊕



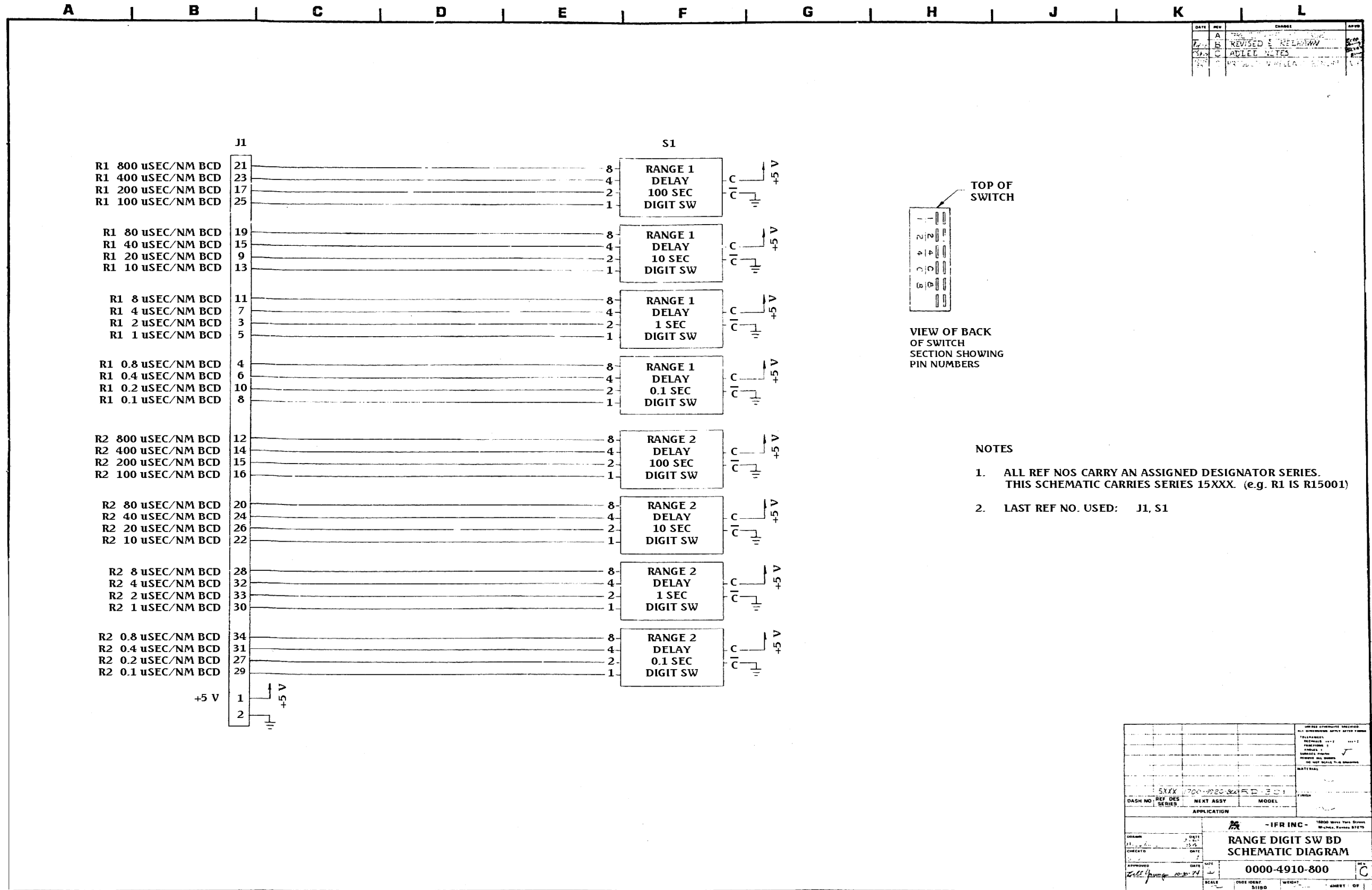
J15001 ⊕

NOTES

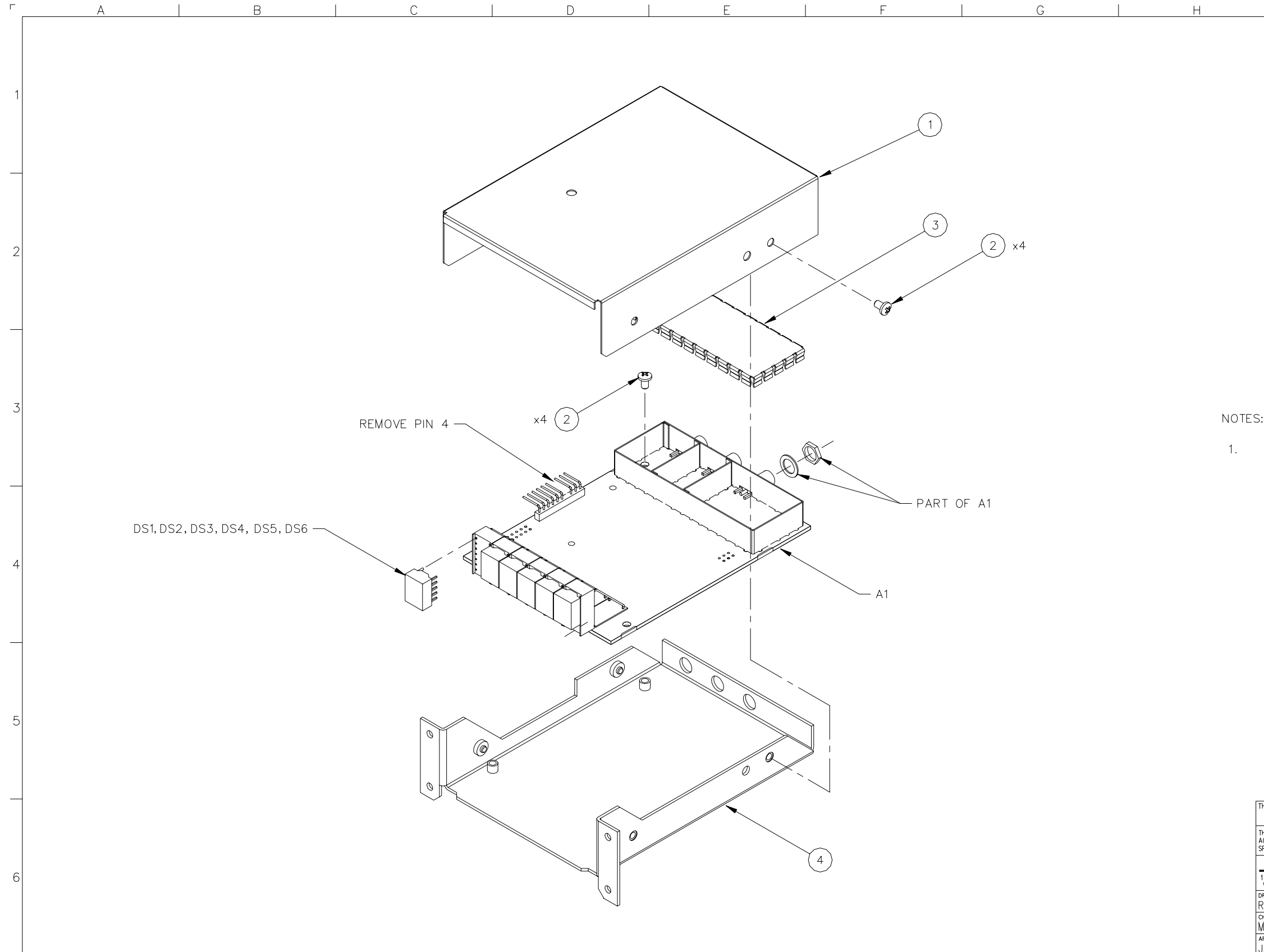
- ALL REF NO'S CARRY AN ASSIGNED DESIGNATOR SERIES. THIS ASSY CARRIES SERIES 15XXX. (e.g., R115 R15001)
- LAST REF NO USED
J1 S1

③ PIN 1 IS INDICATED BY SQUARE PAD.

DASH NO				REF DES				NEXT ASSY				MODEL			
10XXX				7005-4940-100				RD-301							
APPLICATION															
- IFR INC -															
DRAWN		DATE		TITLE		REV		DATE		SCALE		CODE		WEIGHT	
OSBURN		9-7		PC BOARD ASSY.		C		10-28-84		1:1		5180			
CHECKED		DATE		RANGE DIGIT SW BD		C		10-30-84							
APPROVED		DATE		49-308		C		10-30-84							
7010-4930-800		C2													
SHEET 1 OF 1															



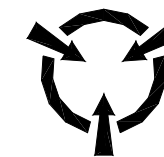
DASH NO: 15XXX		REF DES: 100-220-001	MODEL: RD-301
SERIES:		NEXT ASSY:	MODEL:
APPLICATION:			
- IFR INC - 1800 West Park Drive, Wichita, Kansas 67220			
RANGE DIGIT SW BD SCHEMATIC DIAGRAM			
0000-4910-800			
DATE: 10-2-74	BY: [Signature]	SCALE:	AMERT: OF



DATE	REV	CHANGE	BY	CHKD	APVD
02/20/01	A	REL 19219	REH	MB	GMH

NOTES:

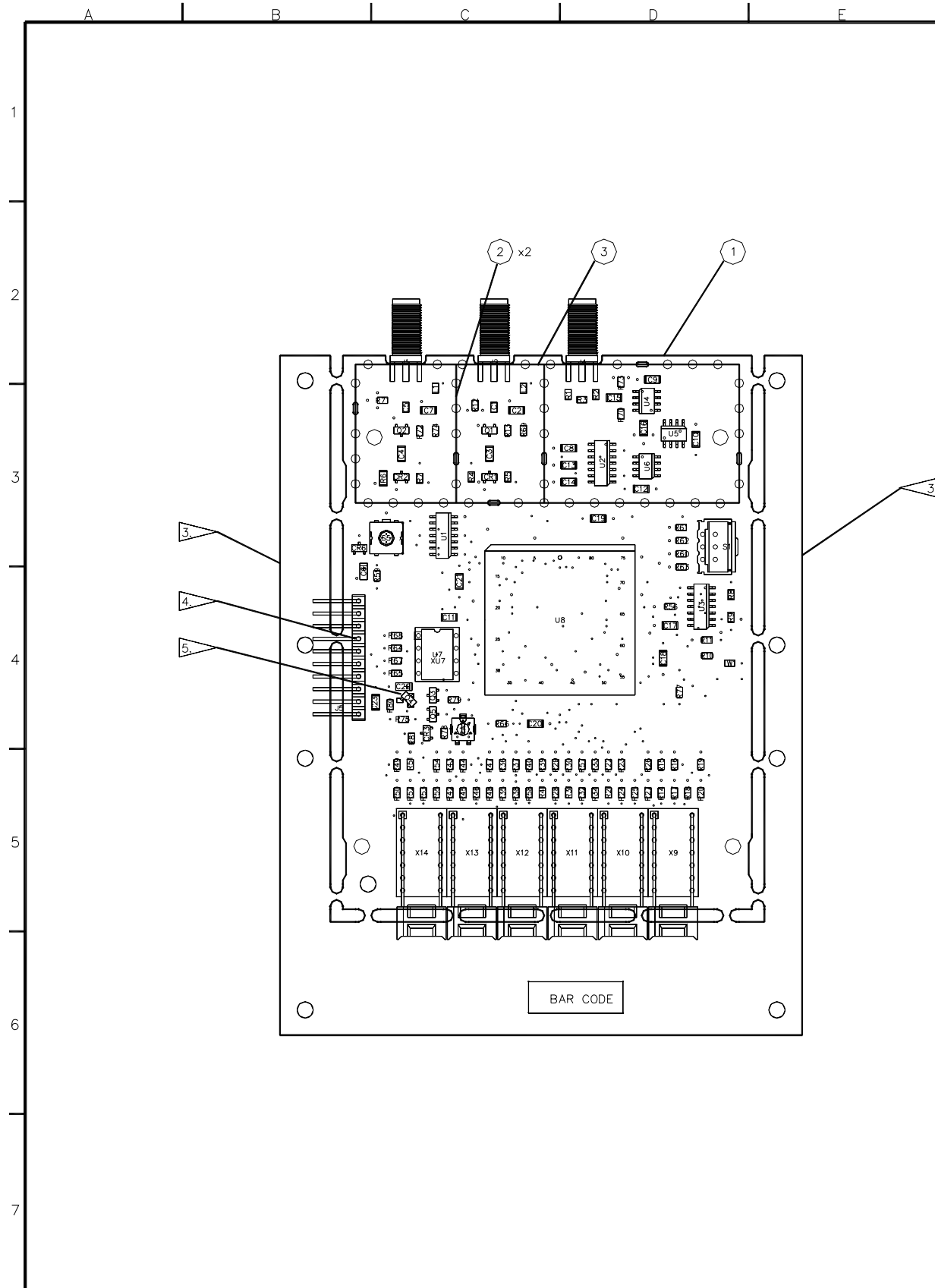
1. BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.



CAUTION:
CONTAINS PARTS AND ASSEMBLIES
SUSCEPTIBLE TO DAMAGE BY
ELECTROSTATIC DISCHARGE (ESD).

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL		
10200 WEST YORK STREET WICHITA, KANSAS 67215		
DRAWN R.HARRIS	DATE 14 FEB, 01	TITLE MECH ASSY, DISPLAY/COUNTER
CHECKED M.BRUFFETT	DATE 02/09/01	DWG NO 7005-9041-900
APPROVED J.BISHOP	DATE 02/20/01	REV A
090419A0.DWG		CAGE 51190 SHEET 1 OF 1


DATE	REV	CHANGE	APVD
16 Oct. 00	A	NOT RELEASED	MKM GH
20 Dec. 00	B	RELEASE PER #19219	MKM GH
19 Nov '01	C	INC PER #19632	MKM GH



NOTES:

1. BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
2. HARDWARE THAT IS NOT PART OF BILL OF MATERIALS SHOULD NOT BE INSTALLED.
3. TO BE REMOVED PRIOR TO MECH. ASSY.
4. REMOVE PIN 4 FROM J5 FOR KEYING.
5. INSTALL Q4 UPSIDE DOWN AND ROTATED AS SHOWN.

CAUTION:
CONTAINS PARTS AND ASSEMBLIES SUSCEPTIBLE TO
DAMAGE BY ELECTROSTATIC DISCHARGE (ESD).

<p>"THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF IFR SYSTEMS, INC. AND IS NOT TO BE DISCLOSED, REPRODUCED, OR PUBLISHED WITHOUT IFR'S APPROVAL."</p>			
<p>IFR SYSTEMS, INC. 10200 West York St., Wichita, Kansas 67215-8935</p>		<p>RF Division</p>	
<p>DRAWN DATE M.Moffitt 17 Oct, 00</p>	<p>CHECKED DATE J.Bishop 18 Oct, 00</p>	<p>TITLE PCB_ASSY, Display / Counter</p>	<p>REV C</p>
<p>APPROVED DATE G.Hill 18 Oct, 00</p>	<p>SIZE B</p>	<p>PART NO. 7010-9031-900</p>	<p>SCALE: DO NOT SCALE</p>
<p>109019C0.PLT</p>	<p>CAGE 51190</p>	<p>SHEET 1</p>	<p>OF 1</p>

TOP VIEW

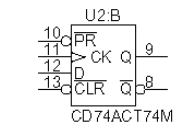
DATE	REV	CHANGE	APPRVD
03 Jan, 01	B	Release Per 19219 MKM	GH
19 Nov '01	C	INC Per 19632 MKM	GH

NOTES:
(UNLESS OTHERWISE SPECIFIED)

1. BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE AND SYSTEM INTERCONNECT.
2. ALL RESISTORS ARE 1%, 1/8W.
3. ALL RESISTANCE IS EXPRESSED IN OHMS
ALL CAPACITANCE IS EXPRESSED IN MICROFARADS.
ALL INDUCTANCE IS EXPRESSED IN MICROHENRIES.
4. HIGHEST REFERENCE DESIGNATIONS:
C23 CR6 J5 L2 Q5 R81 RA1
S5 U8 W2 X14 XU7
5. REFERENCE DESIGNATIONS NOT USED:
CR4 CR5 S2-S4 X1-X8 XU1-XU3 XU5 XU6

◀ 6. COMPONENT(S) NOT INSTALLED.

7. IC FUNCTIONS NOT USED:



CAUTION:
CONTAINS PARTS AND ASSEMBLIES SUSCEPTIBLE TO DAMAGE BY ELECTROSTATIC DISCHARGE (ESD).

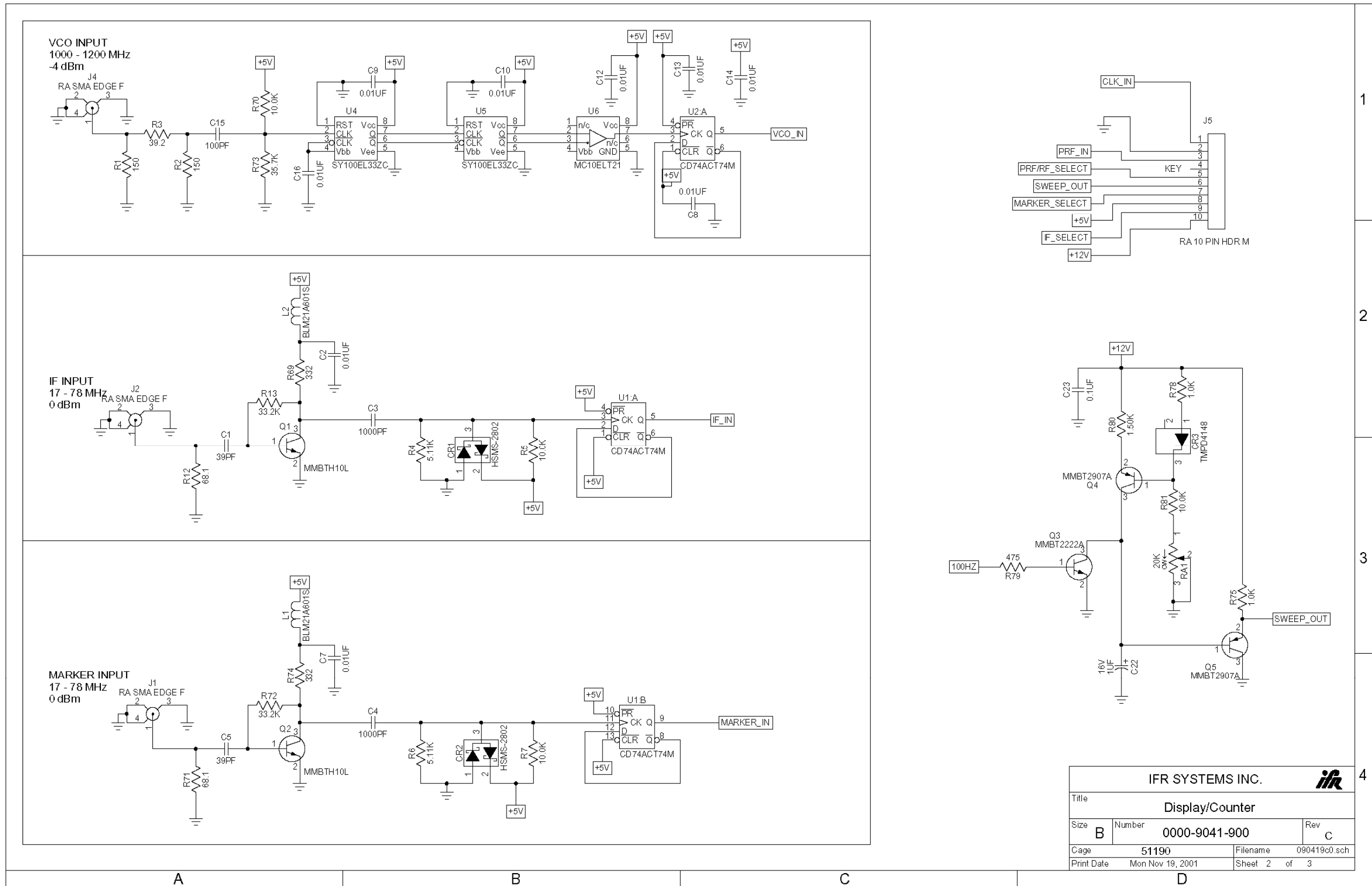
This document contains proprietary information of IFR Systems, INC. and is not to be disclosed, reproduced, or published without IFR's approval.		IFR SYSTEMS INC. 10200 WEST YORK STREET WICHITA, KANSAS 67215-8935		
Drawn J Bishop	Date 26 Oct, 00	Title Display/Counter		
Checked M. Moffitt	Date 26 Oct, 00	Size B	Number 0000-9041-900	Rev C
Approved G.Hill	Date 26 Oct, 00	Cage 51190	Print Date Mon Nov 19, 2001	Filename 090419c0.sch Sheet 1 of 3


A

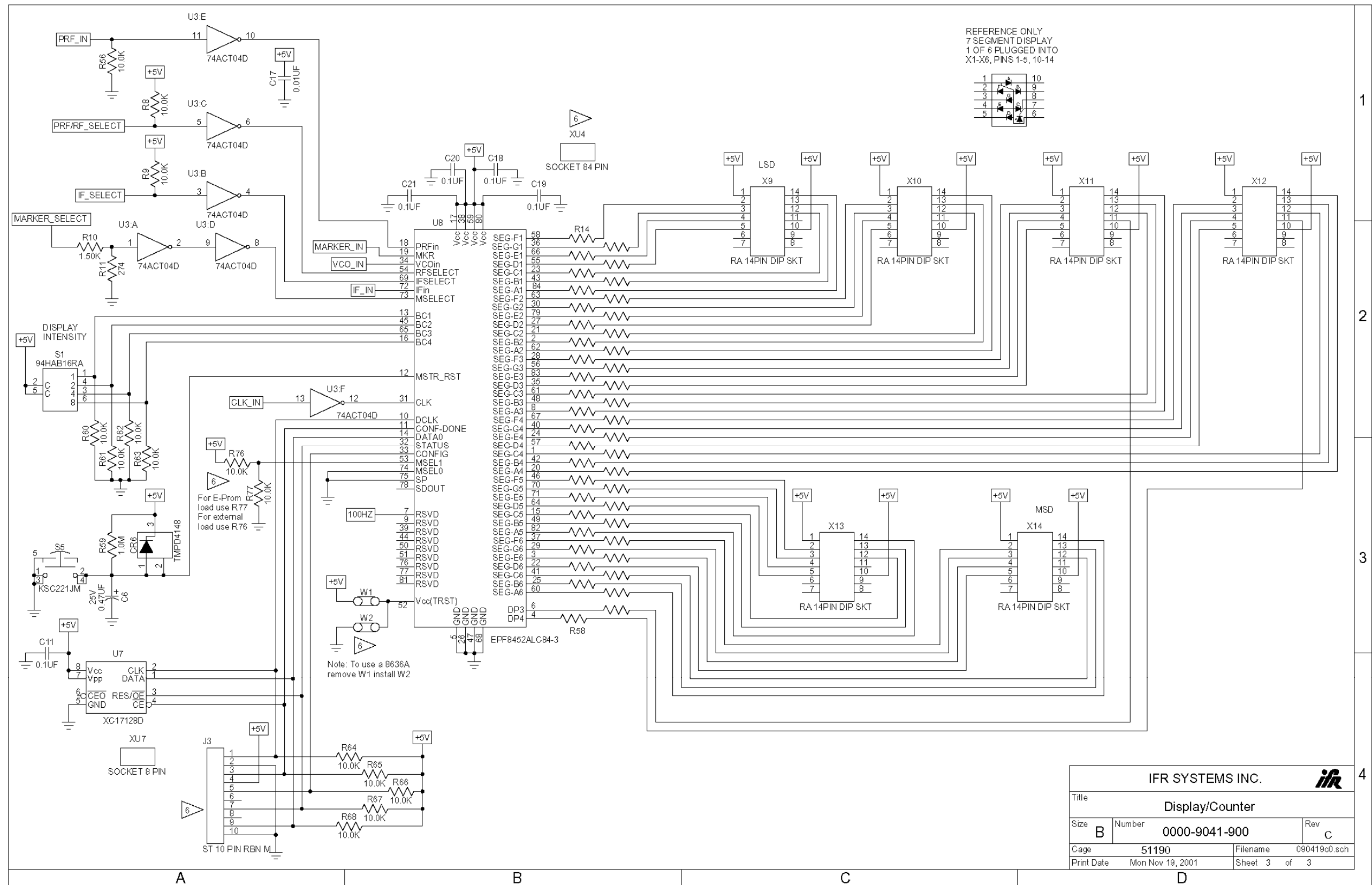
B

C

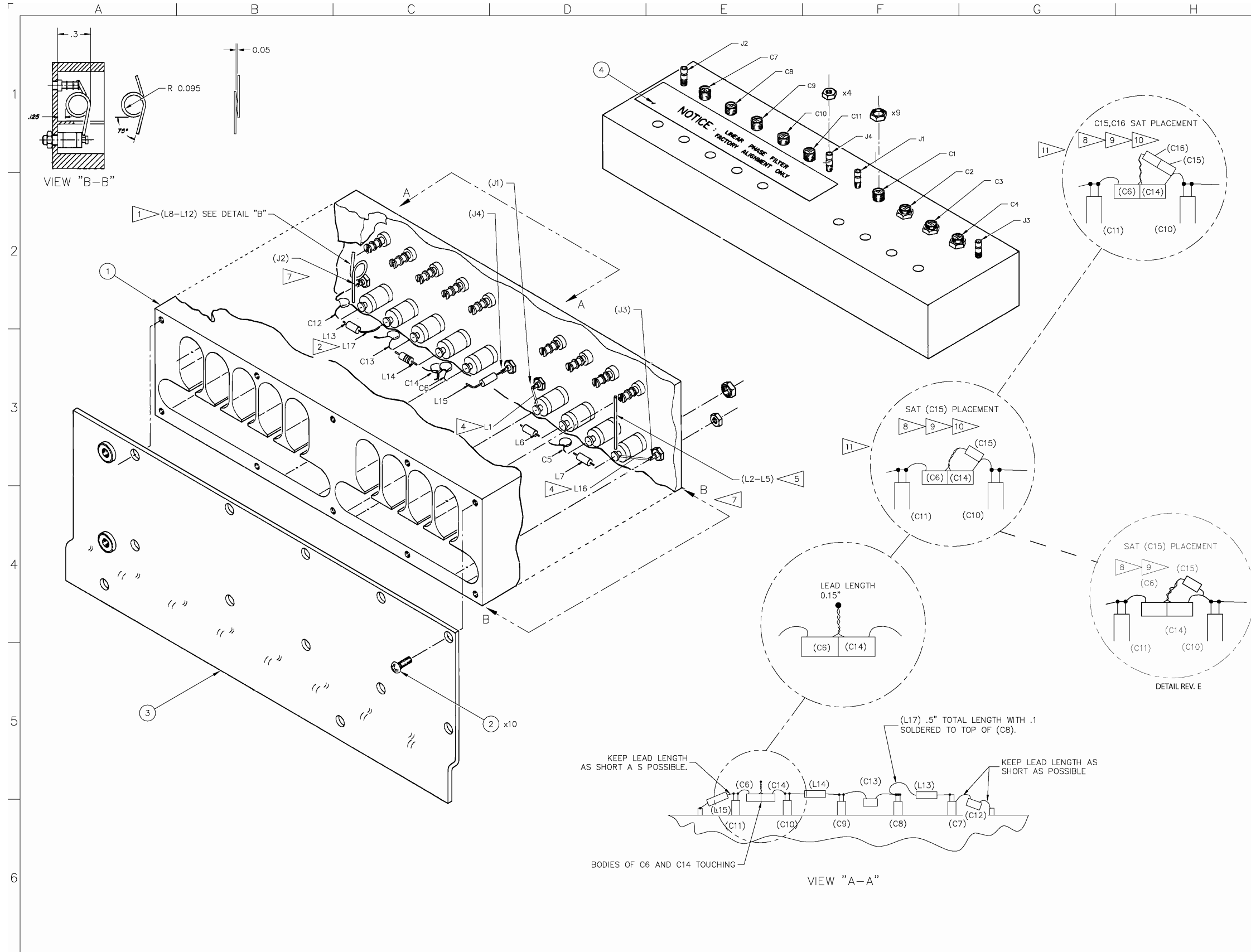
D



IFR SYSTEMS INC. 		
Title	Display/Counter	
Size	Number	Rev
B	0000-9041-900	C
Cage	51190	Filename 090419c0.sch
Print Date	Mon Nov 19, 2001	Sheet 2 of 3



DATE	REV	CHANGE	BY	CHKD	APVD
		DRAWN TO NEW FORMAT SEE HISTORY FOR PREV REV			
01/11/99	D	INC ECN 18461	REH	MT	MLB
05/11/99	D1	INC ECN 18618	REH	MB	MLB
03/15/00	E	INC ECN 18945	REH	SLS	MLB
7-19-04	F	INC 20175	RLA		GH



NOTES:

- 1 IND L8, L9, L11, L12 ARE FORMED BY 1.5" 18 GA WIRE.
- 2 IND L17 IS A .5" LEAD ON L13.
- 3 NOT USED.
- 4 IND L1, L16 ARE FORMED BY 22GA. WIRE LEAD AS SHORT AS POSSIBLE.
- 5 IND L2, L3, L4, L5 ARE FORMED BY .65" 18 GA. WIRE
- 6 BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
- 7 PART PLACEMENT AND LENGTHS ARE CRITICAL! SEE VIEW "A-A".
- 8 C15 IS S.A.T.
SAT VALUES 0pF, .4PF, .6PF (SEE DETAIL)
- 9 C16 IS S.A.T.
SAT VALUES 0pF, .4PF IN SERIES WITH C15
- 10 BEND THE 2 LEADS WHICH CONNECT C6 AND C14 OVER SUCH THAT THE SAT OR SAT VALUES CAN BE SOLDERED ACROSS C14.
- 11 IMPLEMENTED ON REV. F.



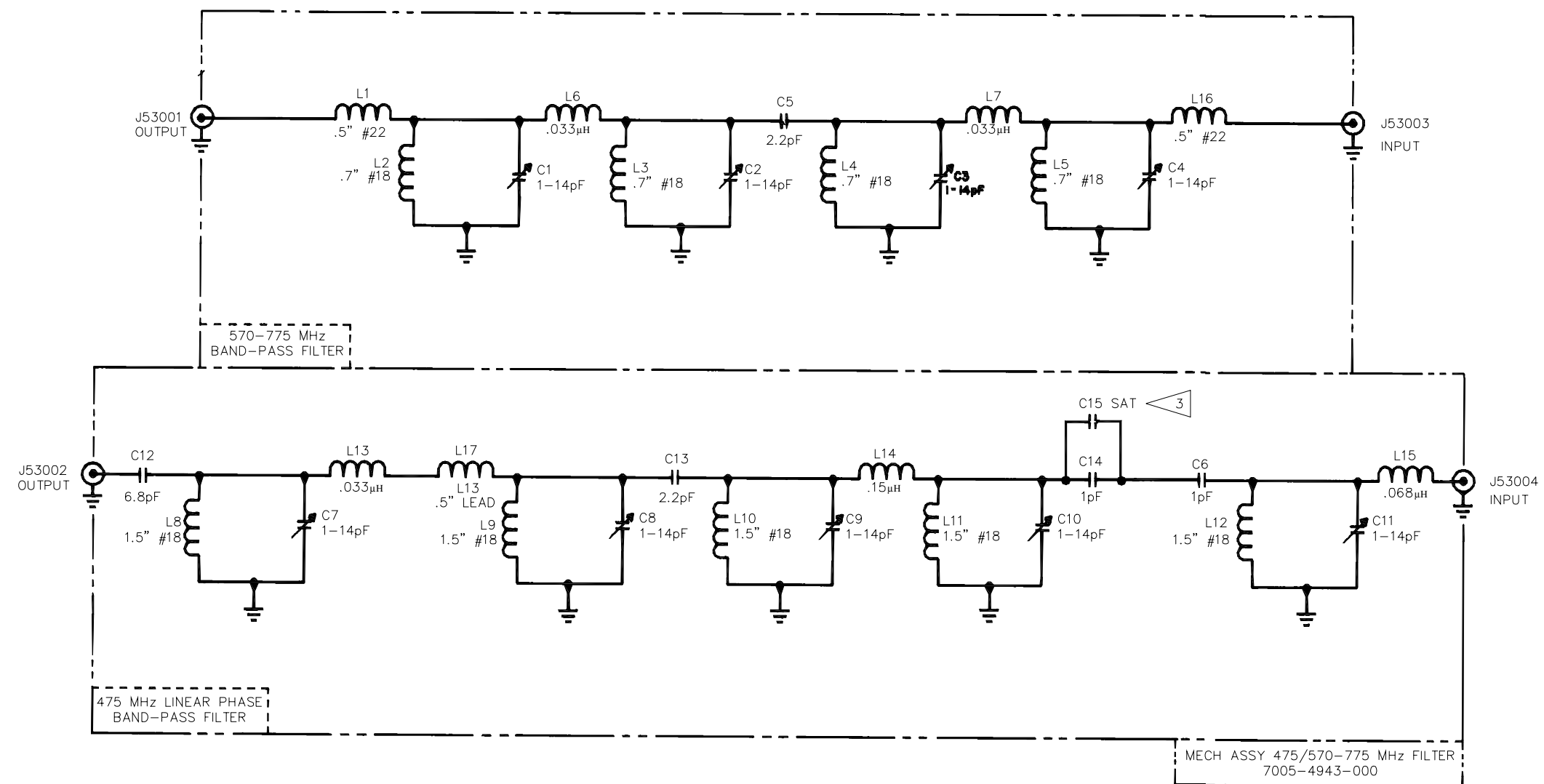
CAUTION:
CONTAINS PARTS AND ASSEMBLIES
SUSCEPTIBLE TO DAMAGE BY
ELECTROSTATIC DISCHARGE (ES)

THIRD ANGLE PROJECTION ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DRAWING STANDARD DO NOT SCALE PRINT / IF IN DOUBT ASK TO IFR EWS-140

THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.

		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL	
10200 WEST YORK STREET WICHITA, KANSAS 67215		TITLE 475/570-775 MHz FILTER RD-301	
DRAWN HOA VU 06/01/88	DATE 06/01/88	DWG NO 7005-4943-000	REV F
CHECKED J.SCHMIDT 07/07/88	DATE 07/07/88	APPROVED S.P. 07/14/88	DATE 07/14/88

DATE	REV	CHANGE	BY	CHKD	APVD
		DRAWN TO NEW FORMAT			
		SEE HISTORY FOR PREV REV			
01/11/99	B	INC ECN 18461	REH	MT	GB
02/18/00	C	INC ECN 18945	REH	MT	TCN



STANDARDS:

1. ALL REFERENCE DESIGNATORS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS DRAWING CARRIES SERIES 5300.
2. ALL CAPACITANCE IS EXPRESSED IN PICO FARADS, UNLESS OTHERWISE NOTED.
3. ALL INDUCTANCE IS EXPRESSED IN MICRO HENRYS, UNLESS OTHERWISE NOTED.

NOTES:

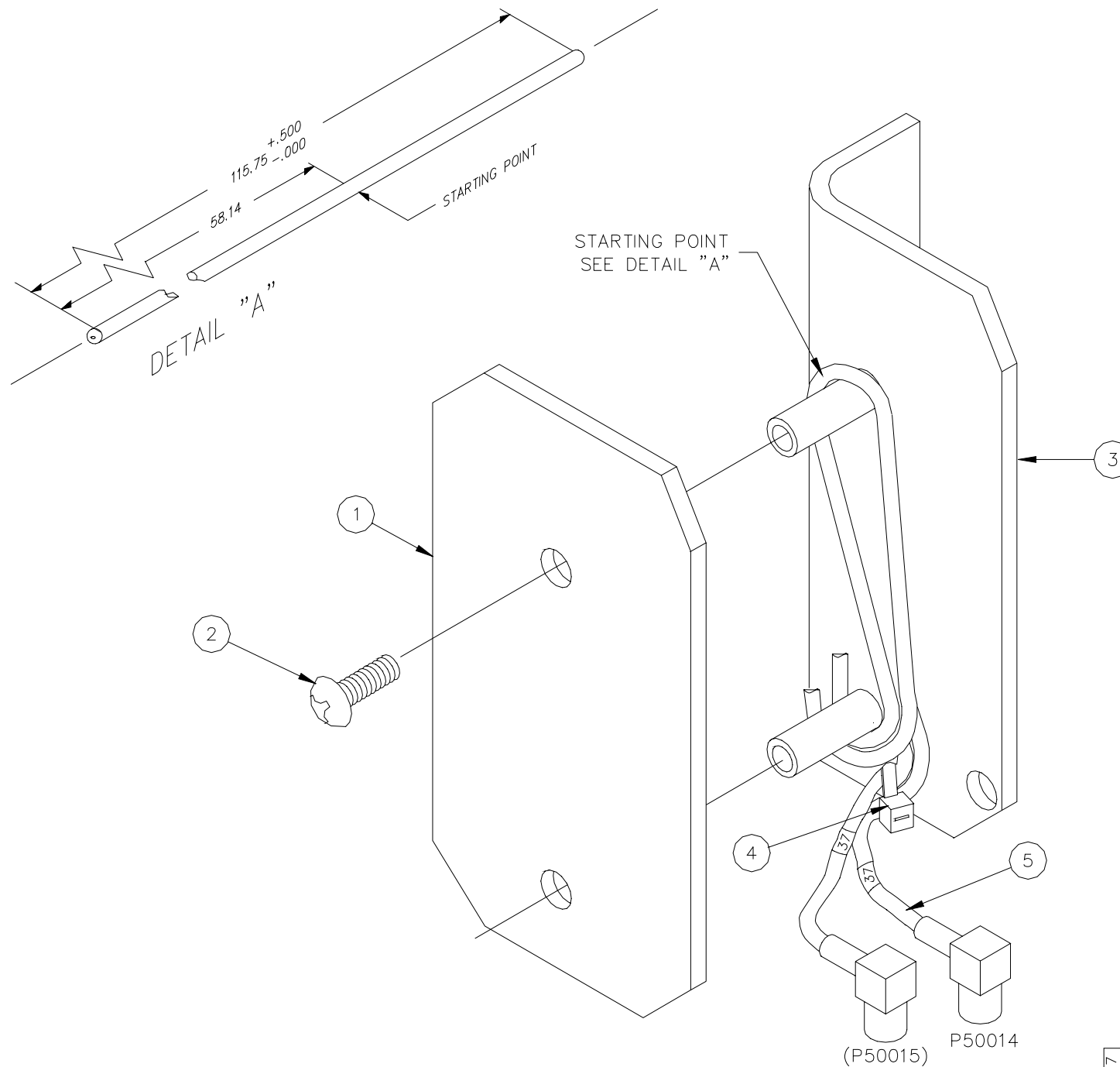
1. LAST REFERENCE DESIGNATOR NUMBER USED:
L17, C15, J4
 2. REFERENCE DESIGNATORS NOT USED:
NONE
- 3 C15 IS S.A.T.:
NOMINAL VALUE: 0pF
SELECTED VALUES: .4 pF, .6pF.

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL		
10200 WEST YORK STREET WICHITA, KANSAS 67215		
DRAWN	DATE	TITLE
HOA VU	06/27/88	SCHEMATIC
CHECKED	DATE	475/570-775 MHz FILTER, RD-301
J.SCHMIDT	07/14/88	DWG NO
APPROVED	DATE	0000-4913-000
S.P.	07/14/88	REV C
049130C0.DWG	CAGE 51190	SHEET 1 OF 1

* PARTS TO BE INSTALLED
APPEAR IN BLACK.

ASSEMBLY NOTES:

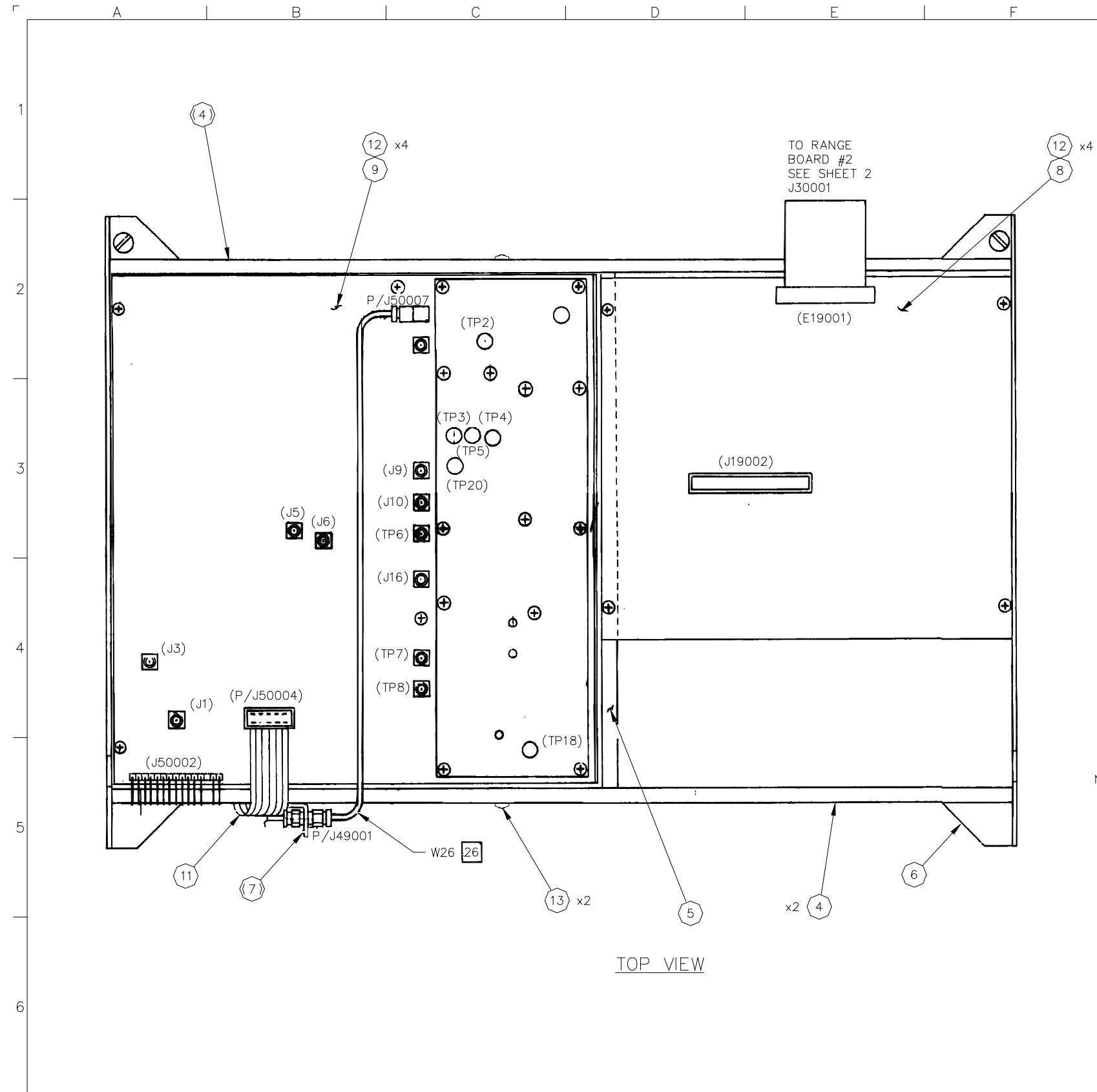
1 P50015 IS INSTALLED AT FINAL TEST.



CAUTION:
CONTAINS PARTS AND ASSEMBLIES SUSCEPTIBLE TO
DAMAGE BY ELECTROSTATIC DISCHARGE (ESD).

Prepared By: 10/22/97 J. WRIGHT Checked By:	IFR Systems Inc. Assembly Process Print		
	Description:		Operation 1 of 1
	MECH. ASSY,DELAY LINE,RD-301A		Sheet 1 of 1
	Assembly #	Revision	Prod. Cont. #
7005-9041-000		*A*	*102297*

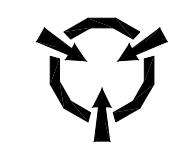
DATE	REV	CHANGE	BY	CHKD	APVD
03/18/99	A	RELEASE PER ECN 18498	REH	MB	MLB



TOP VIEW

NOTES:

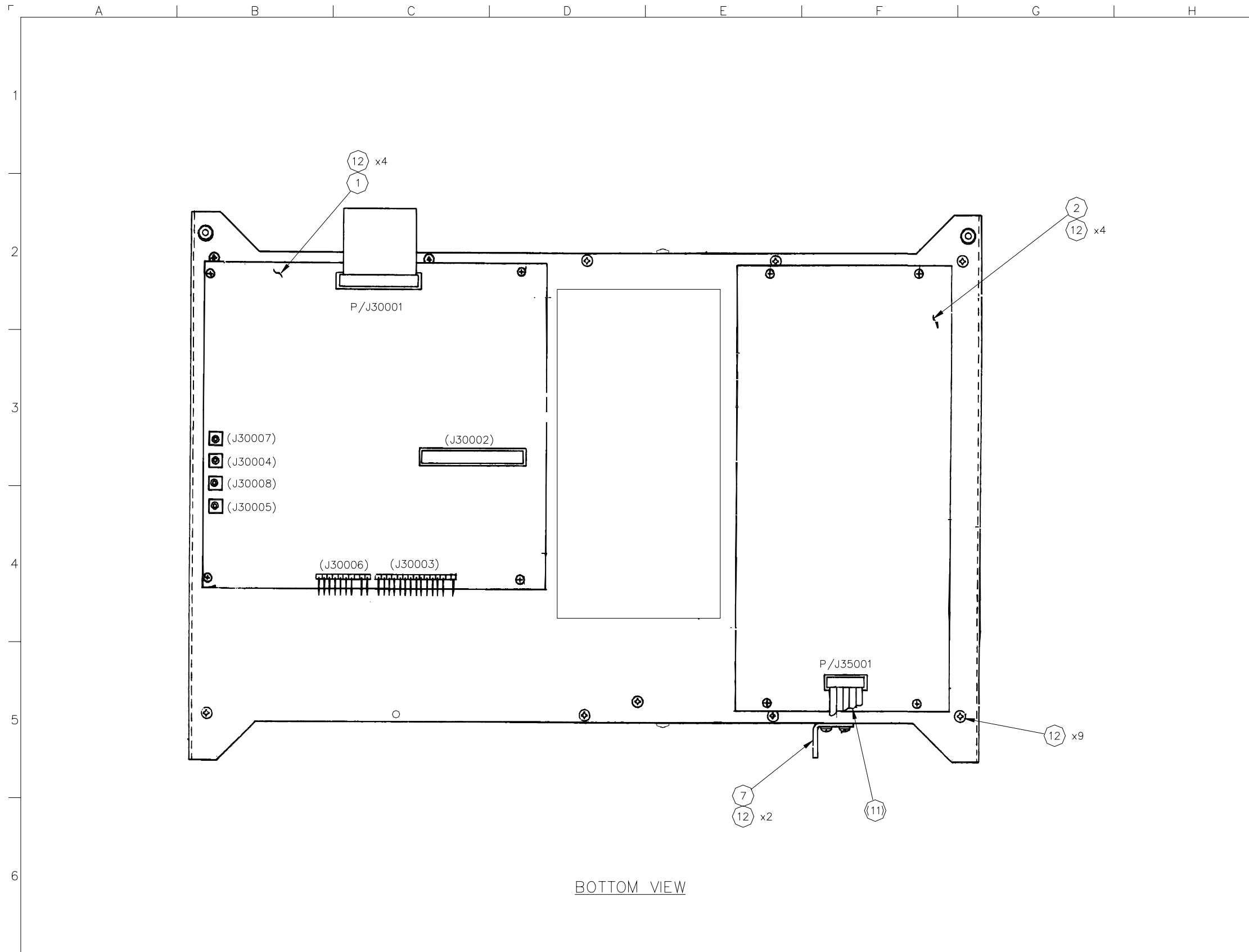
1. BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
2. XX INDICATES COAX TAG No.



CAUTION:
CONTAINS PARTS AND ASSEMBLIES
SUSCEPTIBLE TO DAMAGE BY
ELECTROSTATIC DISCHARGE (ESD).

THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
IFR Americas 10200 WEST YORK STREET WICHITA, KANSAS 67215		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL TITLE MECH ASSY, CARD FRAME
DRAWN R.HARRIS	DATE 02/26/99	DWG NO 7005-9041-800
CHECKED M.BRUFFETT	DATE 03/18/99	REV A
APPROVED M.BACHMAN	DATE 03/18/99	090418A0.DWG CAGE 51190 SHEET 1 OF 2

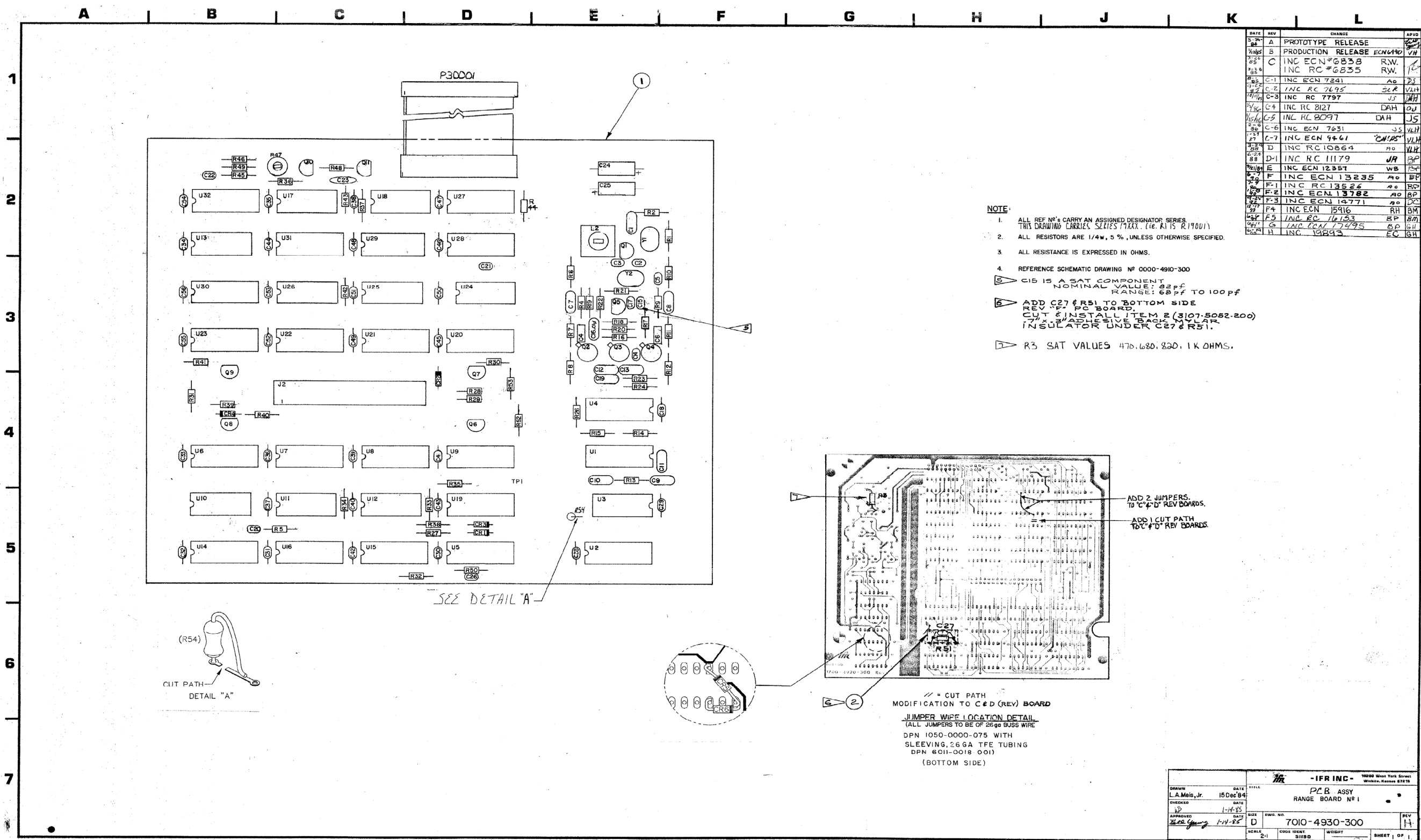
DATE	REV	CHANGE	BY	CHKD	APVD
		SEE SHEET 1			



BOTTOM VIEW

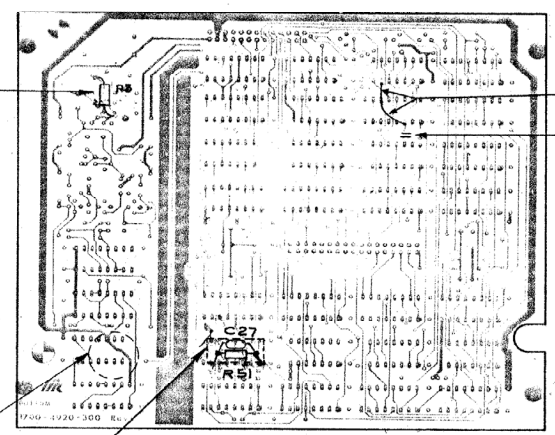
THIRD ANGLE PROJECTION	ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE PRINT / IF IN DOUBT ASK	DRAWING STANDARD TO IFR EWS-140
THIS DRAWING PROVIDES THE MINIMUM LEVEL OF GRAPHIC DETAILS AND SPECIFICATIONS REQUIRED TO ACCURATELY DEFINE THIS LEVEL OF FABRICATED PRODUCT ONLY. REFER TO DETAIL DRAWINGS AND SPECIFICATIONS FOR ACCURATE CONFIGURATION OF LOWER LEVEL PARTS AND SUB-ASSEMBLIES USED HEREIN.		
		PROPRIETARY AND CONFIDENTIAL PROPERTY OF IFR AMERICAS DO NOT DISCLOSE, REPRODUCE, OR PUBLISH WITHOUT IFR APPROVAL
10200 WEST YORK STREET WICHITA, KANSAS 67215		TITLE MECH ASSY, CARD FRAME
DRAWN R.HARRIS	DATE 02/26/99	REV A
CHECKED M.BRUFFETT	DATE 03/18/99	DWG NO 7005-9041-800
APPROVED M.BACHMAN	DATE 03/18/99	090418A0.DWG CAGE 51190 SHEET 2 OF 2

Subject to Export Control, see Cover Page for details.



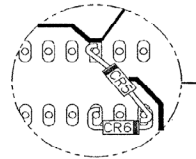
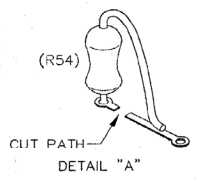
DATE	REV	CHANGE	APPROV
8/84	A	PROTOTYPE RELEASE	VH
10/84	B	PRODUCTION RELEASE ECN 6490	VH
11/84	C	INC ECN #6838 R.W.	
12/84		INC RC #6835 R.W.	
1/85	C-1	INC ECN 7241 A0	JS
2/85	C-2	INC RC 7695 5CR	VH
3/85	C-3	INC RC 7797 JS	VH
4/85	C-4	INC RC 8127 DAH	DJ
5/85	C-5	INC RC 8097 DAH	JS
6/85	C-6	INC ECN 7631 JS	VH
7/85	C-7	INC ECN 9441 CH125	VH
8/85	D	INC RC 10864 A0	VH
9/85	D-1	INC RC 11179 JA	BP
10/85	E	INC ECN 12357 WB	BP
11/85	F	INC ECN 13235 A0	BP
12/85	F-1	INC RC 13526 A0	BP
1/86	F-2	INC ECN 13782 A0	BP
2/86	F-3	INC ECN 14771 A0	BP
3/86	F-4	INC ECN 15916 RH	BM
4/86	F-5	INC RC 16153 5P	BM
5/86	G	INC ECN 17495 6P	BM
6/86	H	INC 19893 EC	BM

- NOTE:**
- ALL REF NOS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS DRAWING CARRIES SERIES 71XXX. (IE. A1 IS R17001)
 - ALL RESISTORS ARE 1/4W, 5%, UNLESS OTHERWISE SPECIFIED.
 - ALL RESISTANCE IS EXPRESSED IN OHMS.
 - REFERENCE SCHEMATIC DRAWING NO 0000-4910-300
- ▽ C15 IS A SAT COMPONENT
 NOMINAL VALUE: 82pf
 RANGE: 68pf TO 100pf
- ▽ ADD C27 & R51 TO BOTTOM SIDE REV OF PCB BOARD.
 CUT & INSTALL ITEM 2 (3107-5052-200) 7% EPOXY ADHESIVE BACK NYLON INSULATOR UNDER C27 & R51.
- ▽ R3 SAT VALUES 470, 680, 820, 1K OHMS.



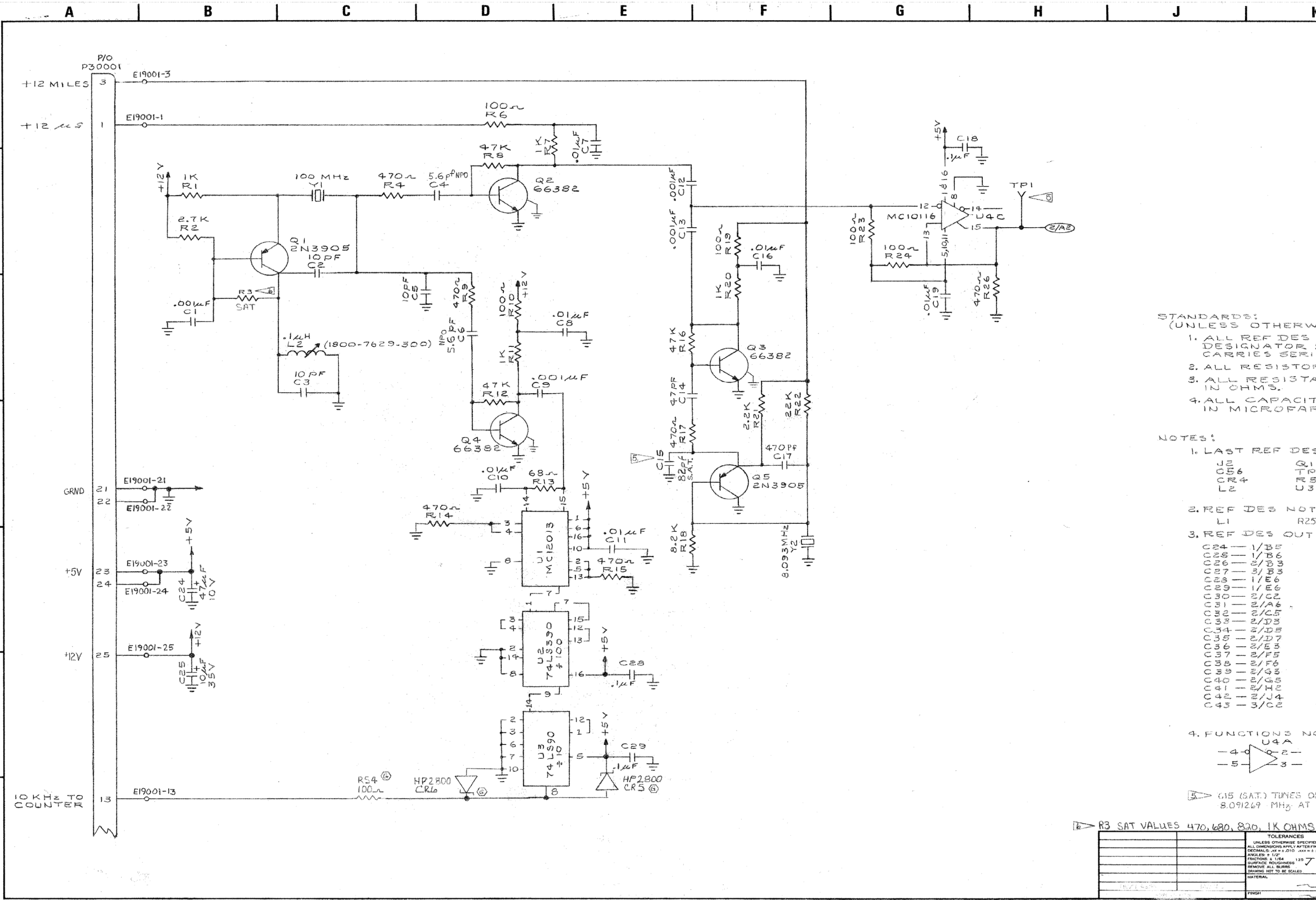
ADD 2 JUMPERS TO 'C' & 'D' REV BOARDS.
ADD 1 CUT PATH TO 'C' & 'D' REV BOARDS.

// = CUT PATH
 MODIFICATION TO C & D (REV) BOARD
JUMPER WIRE LOCATION DETAIL
 (ALL JUMPERS TO BE OF 26ga BUSS WIRE
 DPN 1050-0000-075 WITH
 SLEEVING, 26 GA TFE TUBING
 DPN 6011-0018 001)
 (BOTTOM SIDE)



DRAWN		DATE		TITLE	
L.A. Melo, Jr.	15 Dec 84	PCB ASSY RANGE BOARD NO 1			
CHECKED	DATE				
APPROVED	DATE				
SCALE	CHECK IDENT	WEIGHT	SHEET 1 OF 1		

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DATE	REV	CHANGE	APPD
1/2/81	B	UPDATED DWG	WH
1/2/81	B	PRODUCTION RELEASE ENLARGED	WH
1/2/81	C	INC ECN # 6838 R.W.	JT
1/2/81	C1	INC ECN 7241	NO DS
1/2/81	C2	INC RC 7517	TR VJH
1/2/81	C3	INC RC 7797	JS DPH
1/2/81	C4	INC RC 8127	DAH OJ
1/2/81	C5	INC RC 8097	DAH JS
1/2/81	C6	INC ECN 7621	JS VJH
1/2/81	C7	INC RC 8465	WH VJH
1/2/81	D	INC RC 10864	NO VJH
1/2/81	E	REF ONLY ECN 12357	
1/2/81	F	PER ECN 13235 TO TRACK WITH FC; ALSO INC ECN 12762	NO
1/2/81	F1	INC RC 13826	NO BS
1/2/81	F2	INC ECN 13782	AD BS
1/2/81	F3	INC ECN 15916	BH BM
1/2/81	G	INC ECN 17495	BP BH
1/2/81	H	INC 19893	EC GH

- STANDARDS:
(UNLESS OTHERWISE NOTED):
1. ALL REF DES CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES 19XXX (E.G., R1 IS 19001).
 2. ALL RESISTORS ARE 1/4 W, 5%.
 3. ALL RESISTANCE IS EXPRESSED IN OHMS.
 4. ALL CAPACITANCE IS EXPRESSED IN MICROFARADS.

- NOTES:
1. LAST REF DES USED:

U1	Q11	Y2
C15	TPI	E1
L24	U35	P30001
L24	U35	

2. REF DES NOT USED:

L1	R25	J1
----	-----	----
3. REF DES OUT OF SEQ:

0000000004	1/1/85	00044	3/1/86
0000000005	1/1/85	00045	3/1/86
0000000006	2/1/85	00046	3/1/86
0000000007	3/1/85	00047	3/1/86
0000000008	1/1/86	00048	3/1/86
0000000009	1/1/86	00049	3/1/86
0000000010	2/1/86	00050	3/1/86
0000000011	2/1/86	00051	3/1/86
0000000012	2/1/86	00052	3/1/86
0000000013	2/1/86	00053	3/1/86
0000000014	2/1/86	00054	3/1/86
0000000015	2/1/86	00055	3/1/86
0000000016	2/1/86	00056	3/1/86
0000000017	2/1/86	00057	3/1/86
0000000018	2/1/86	00058	3/1/86
0000000019	2/1/86	00059	3/1/86
0000000020	2/1/86	00060	3/1/86
0000000021	2/1/86	00061	3/1/86
0000000022	2/1/86	00062	3/1/86
0000000023	2/1/86	00063	3/1/86
0000000024	2/1/86	00064	3/1/86
0000000025	2/1/86	00065	3/1/86
0000000026	2/1/86	00066	3/1/86
0000000027	2/1/86	00067	3/1/86
0000000028	2/1/86	00068	3/1/86
0000000029	2/1/86	00069	3/1/86
0000000030	2/1/86	00070	3/1/86
0000000031	2/1/86	00071	3/1/86
0000000032	2/1/86	00072	3/1/86
0000000033	2/1/86	00073	3/1/86
0000000034	2/1/86	00074	3/1/86
0000000035	2/1/86	00075	3/1/86
0000000036	2/1/86	00076	3/1/86
0000000037	2/1/86	00077	3/1/86
0000000038	2/1/86	00078	3/1/86
0000000039	2/1/86	00079	3/1/86
0000000040	2/1/86	00080	3/1/86
0000000041	2/1/86	00081	3/1/86
0000000042	2/1/86	00082	3/1/86
0000000043	2/1/86	00083	3/1/86
0000000044	2/1/86	00084	3/1/86
0000000045	2/1/86	00085	3/1/86
0000000046	2/1/86	00086	3/1/86
0000000047	2/1/86	00087	3/1/86
0000000048	2/1/86	00088	3/1/86
0000000049	2/1/86	00089	3/1/86
0000000050	2/1/86	00090	3/1/86
0000000051	2/1/86	00091	3/1/86
0000000052	2/1/86	00092	3/1/86
0000000053	2/1/86	00093	3/1/86
0000000054	2/1/86	00094	3/1/86
0000000055	2/1/86	00095	3/1/86
0000000056	2/1/86	00096	3/1/86
0000000057	2/1/86	00097	3/1/86
0000000058	2/1/86	00098	3/1/86
0000000059	2/1/86	00099	3/1/86
0000000060	2/1/86	00100	3/1/86

4. FUNCTIONS NOT USED:

U4A	U4B
4-2-3	9-6
5-1-3	10-7

C15 (SAT.) TUNES OSCILLATOR 1 CIRCUIT TO 8.091269 MHz AT TPI; NOMINAL 82PF, RANGE: 68pf TO 100pf

R3 SAT VALUES 470, 680, 820, 1K OHMS

SEE SEPARATE BILL OF MATERIALS

REV	DATE	BY	CHKD	APPD

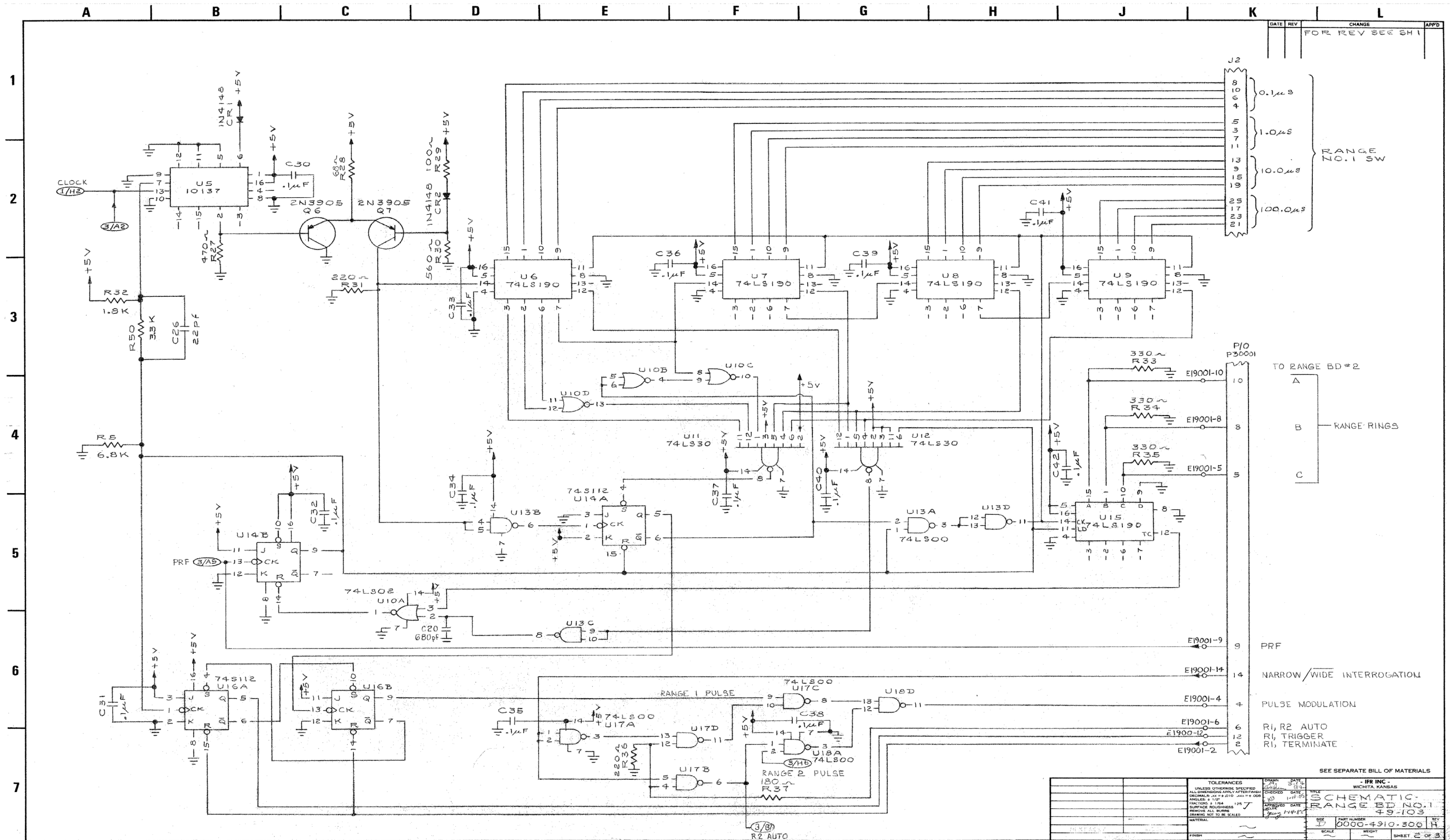
UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN INCHES
DECIMALS ARE TO 0.010 UNLESS OTHERWISE SPECIFIED
ANGLES ARE TO 1/2°
SURFACE FINISHES ARE TO 125 UNLESS OTHERWISE SPECIFIED
REMOVE ALL BURRS
DRAWING NOT TO BE SCALED

WICHITA, KANSAS

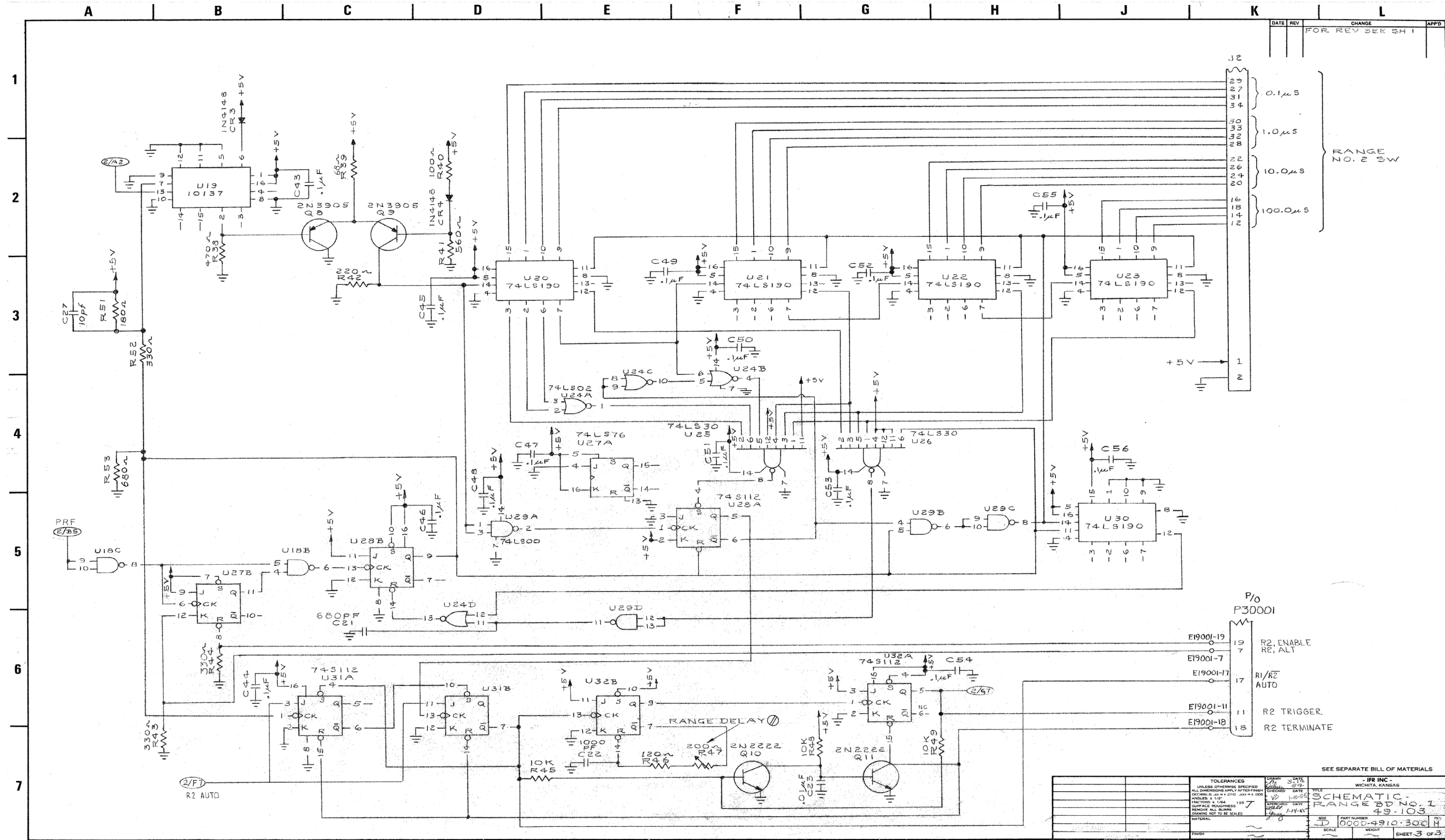
SCHMATIC RANGE 3D NO. 1 49-103

00004910-300H

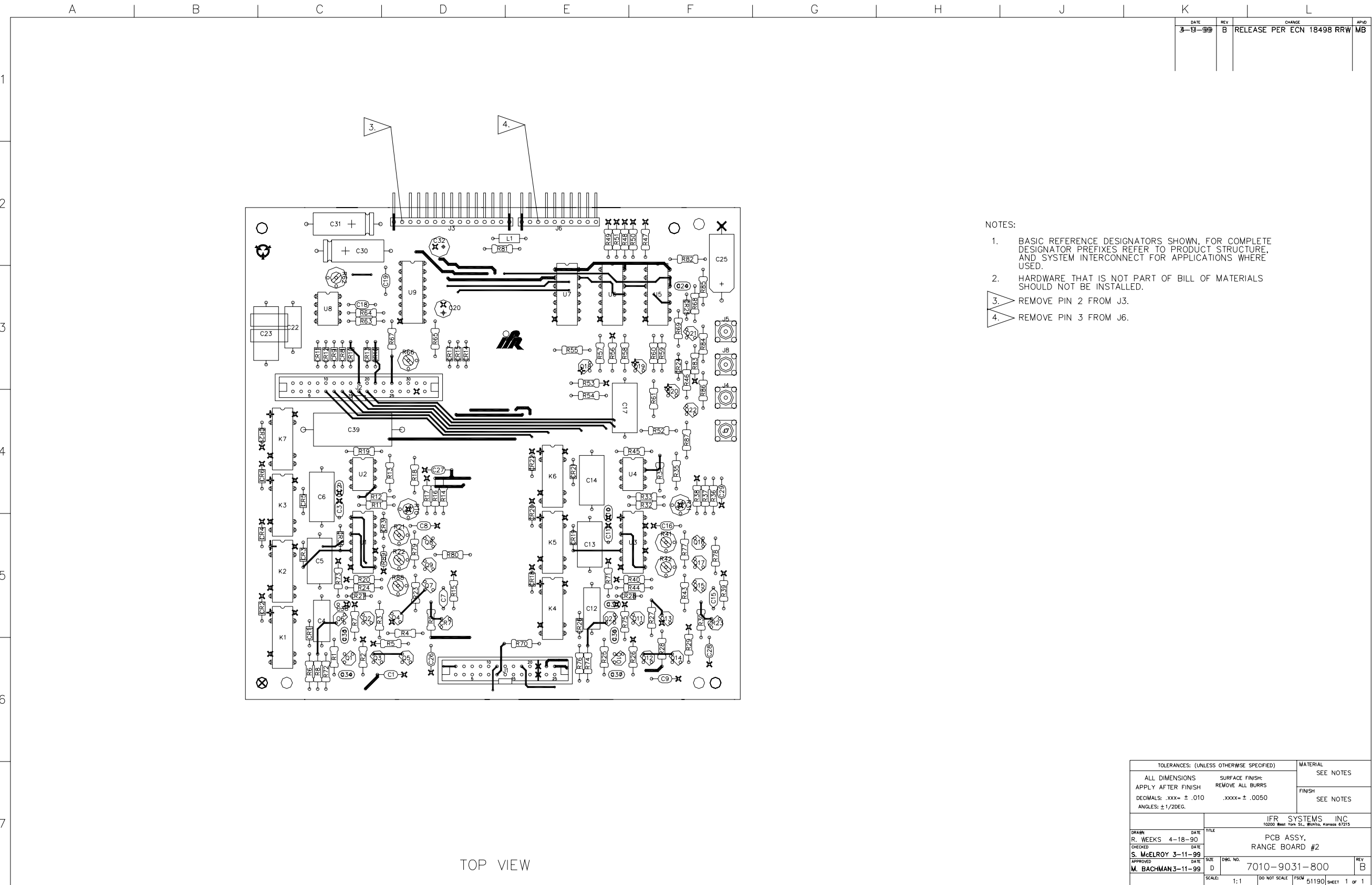
SHEET 1 OF 3



Subject to Export Control, see Cover Page for details.



Subject to Export Control, see Cover Page for details.



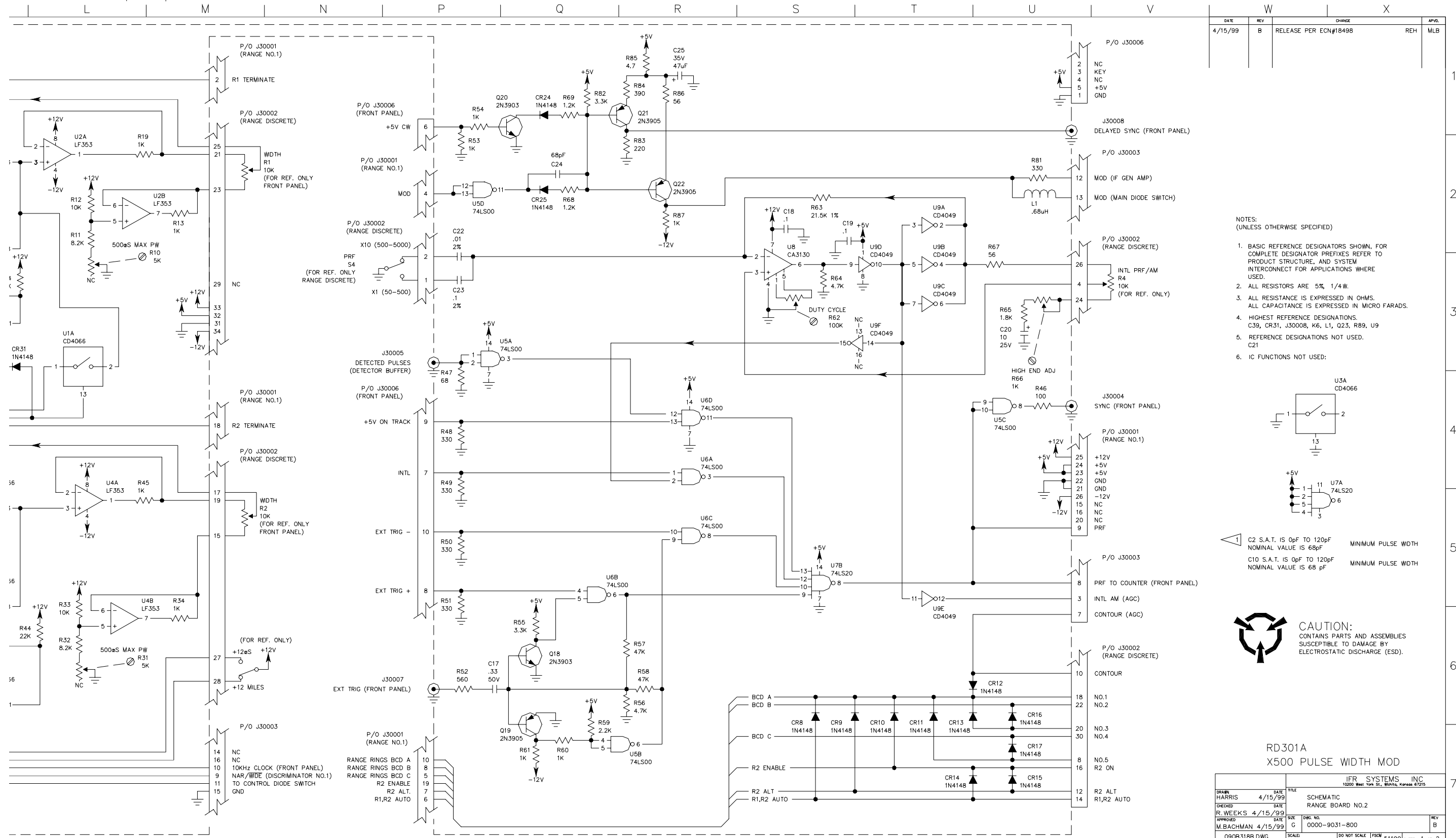
DATE	REV	CHANGE	APPROVED
3-13-99	B	RELEASE PER ECN 18498 RRW	MB

NOTES:

1. BASIC REFERENCE DESIGNATORS SHOWN. FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
2. HARDWARE THAT IS NOT PART OF BILL OF MATERIALS SHOULD NOT BE INSTALLED.
3. REMOVE PIN 2 FROM J3.
4. REMOVE PIN 3 FROM J6.

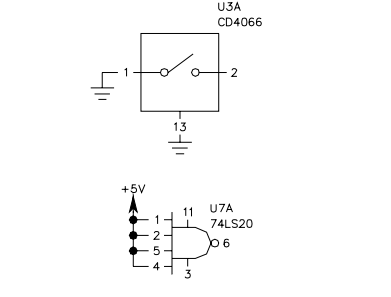
TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		MATERIAL	
ALL DIMENSIONS	SURFACE FINISH:	SEE NOTES	
APPLY AFTER FINISH	REMOVE ALL BURRS	FINISH	
DECIMALS: .xxx = ± .010	.xxxx = ± .0050	SEE NOTES	
ANGLES: ± 1/2DEG.			
IFR SYSTEMS, INC. 10200 West York St., Wichita, Kansas 67215			
DRAWN R. WEEKS	DATE 4-18-90	TITLE PCB ASSY, RANGE BOARD #2	
CHECKED S. McELROY	DATE 3-11-99	SIZE D	REV B
APPROVED M. BACHMAN	DATE 3-11-99	DWG. NO. 7010-9031-800	
SCALE 1:1	DO NOT SCALE	FROM 51190	SHEET 1 OF 1

Subject to Export Control, see Cover Page for details.



DATE	REV	CHANGE	APPROV
4/15/99	B	RELEASE PER ECR#18498	REH MLB

- NOTES:
(UNLESS OTHERWISE SPECIFIED)
1. BASIC REFERENCE DESIGNATORS SHOWN, FOR COMPLETE DESIGNATOR PREFIXES REFER TO PRODUCT STRUCTURE, AND SYSTEM INTERCONNECT FOR APPLICATIONS WHERE USED.
 2. ALL RESISTORS ARE 5%, 1/4W.
 3. ALL RESISTANCE IS EXPRESSED IN OHMS. ALL CAPACITANCE IS EXPRESSED IN MICRO FARADS.
 4. HIGHEST REFERENCE DESIGNATIONS. C39, CR31, J30008, K6, L1, Q23, R89, U9
 5. REFERENCE DESIGNATIONS NOT USED. C21
 6. IC FUNCTIONS NOT USED:

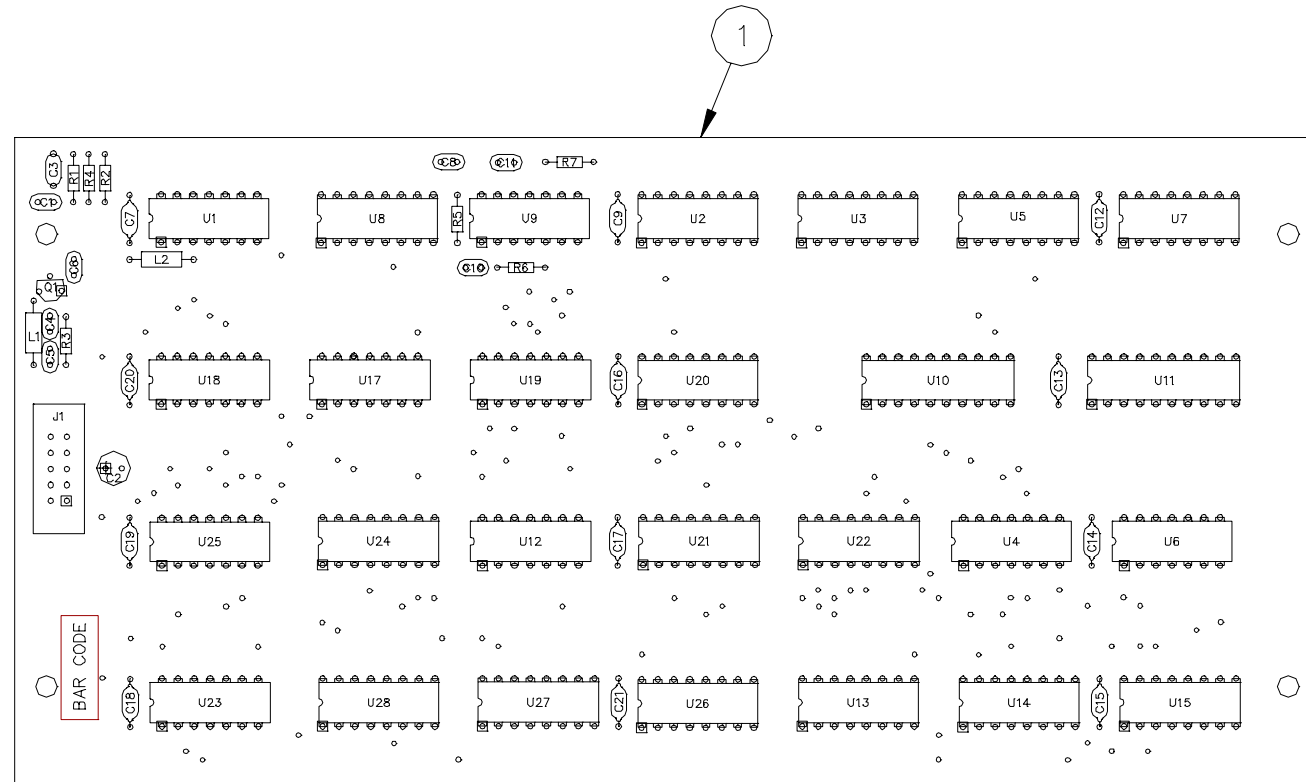


- 1 C2 S.A.T. IS 0pF TO 120pF NOMINAL VALUE IS 68pF
- C10 S.A.T. IS 0pF TO 120pF NOMINAL VALUE IS 68 pF

CAUTION:
CONTAINS PARTS AND ASSEMBLIES SUSCEPTIBLE TO DAMAGE BY ELECTROSTATIC DISCHARGE (ESD).

RD301A
X500 PULSE WIDTH MOD

DRAWN		DATE		TITLE	
HARRIS	4/15/99	SCHEMATIC RANGE BOARD NO.2			
CHECKED		DATE		SCALE	
R. WEEKS	4/15/99	DO NOT SCALE			
APPROVED		DATE		REV	
M. BACHMAN	4/15/99	G	0000-9031-800	B	
090B318B.DWG		SCALE		SHEET 1 OF 2	



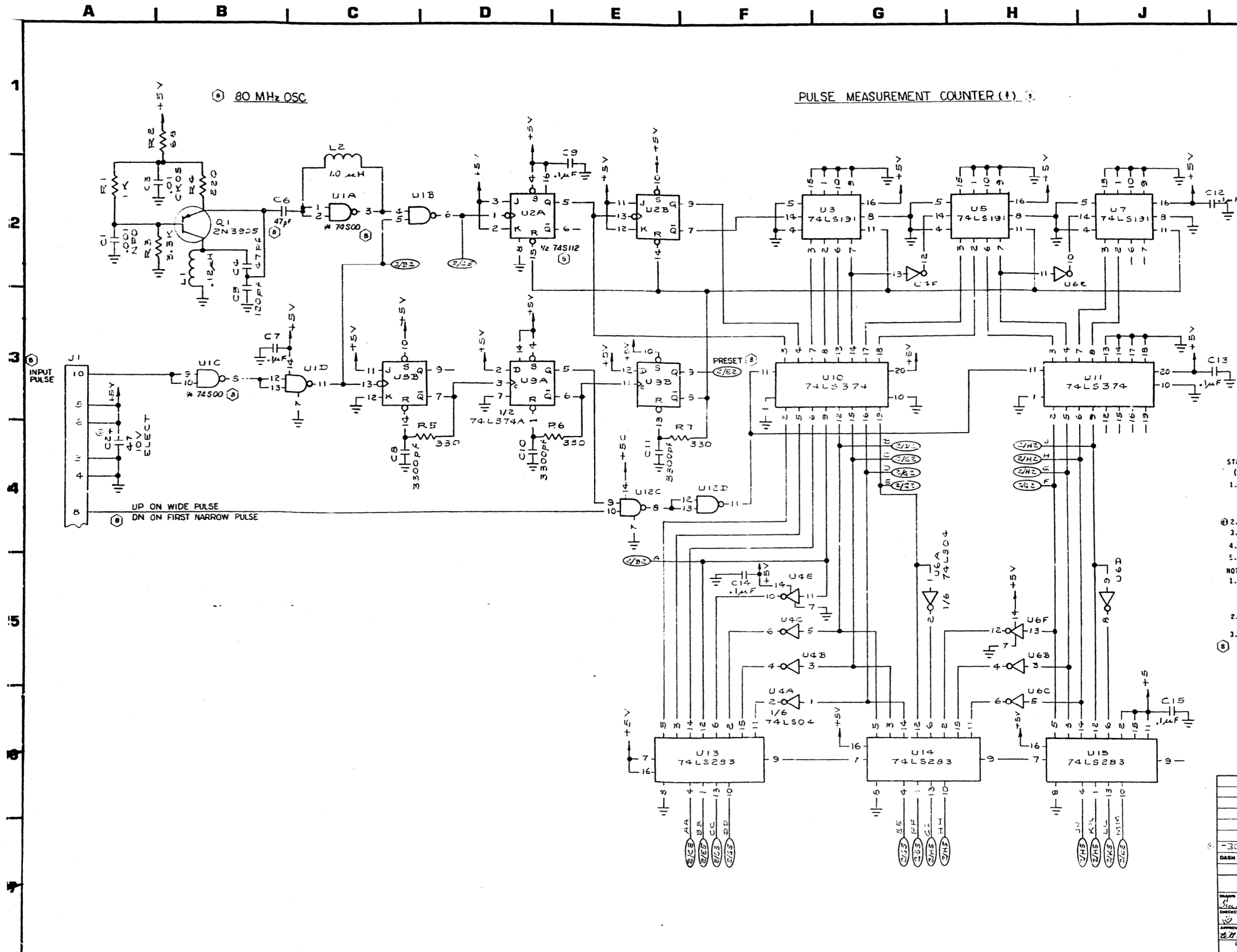
STUFF NOTES:

1. INSTALL ALL HIGHLIGHTED PARTS.



CAUTION:
CONTAINS PARTS AND ASSEMBLIES SUSCEPTIBLE TO
DAMAGE BY ELECTROSTATIC DISCHARGE (ESD).

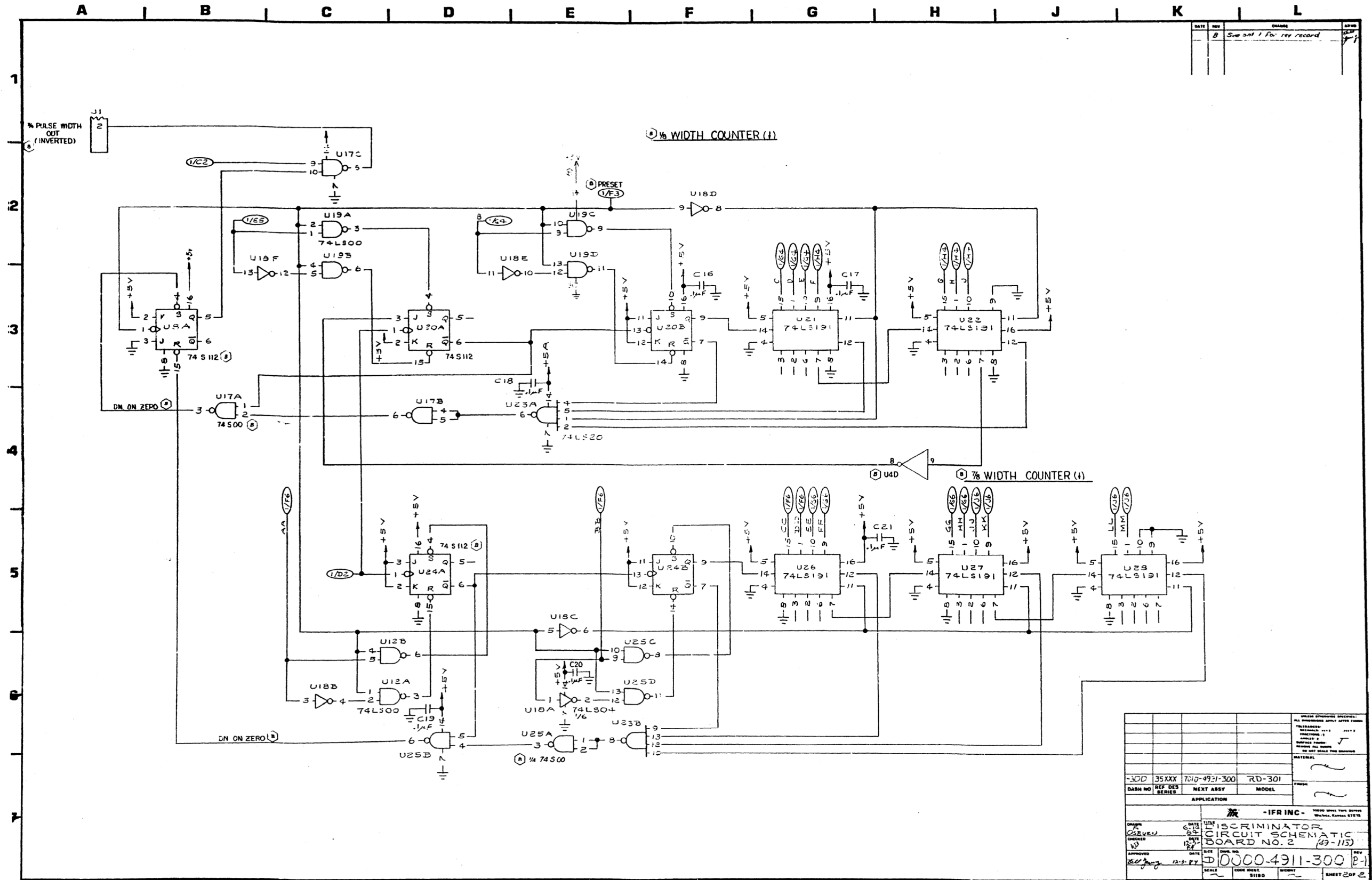
IFR Systems Inc. Assembly Process Print	PROC. CHG BY: R.B. 03/Nov/03	Last ECN:	Prepared By: 03/Nov/03 R. BURNETT	Check By:	Description PCB ASSY, DISCRIMINATOR #2	Assembly # *7010-4931-300*	Revision *B5*	Operation 1 of 1 Sheet 1 of 1
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DATE	REV	CHANGE	BY	CHKD
12-27-84	1	Revised per mark-up	LA	PH
12-27-84	2	PRODUCTION RELEASE ECN 4490	LA	PH
12-27-84	3	REVISED PER MARK-UP	LA	PH

- STANDARDS:**
(UNLESS OTHERWISE NOTED)
1. ALL REFERENCE NUMBERS CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES 35XXX (E.G. R1 IS R35001).
 2. ALL RESISTORS ARE: 1/4w 5%.
 3. ALL RESISTANCES ARE EXPRESSED IN OHMS.
 4. ALL CAPACITANCES ARE EXPRESSED IN MICROFARADS.
 5. ALL INDUCTANCES ARE EXPRESSED IN MICROHENRIES.
- NOTES:**
1. LAST REF DES USED:
C21 RQ1
J1 RQ7
L2 U2B
 2. REF DES NOT USED:
U16
 3. FUNCTIONS NOT USED:
U17D

DASH NO	REF DES	NEXT ASSY	MODEL
-300	35XXX	7010-4911-300	RD-301
APPLICATION			
-IFR INC- 1000 West Park Street Woburn, Mass 01896			
DESIGNED	DATE	CHKD	DATE
LA	12-27-84	PH	12-27-84
APPROVED	DATE	CHKD	DATE
LA	12-27-84	PH	12-27-84
PART NO.		REV	
D0000-4911-300		E1	
SCALE	CODE IDENT.	WEIGHT	SHEET 1 OF 2
	5180		

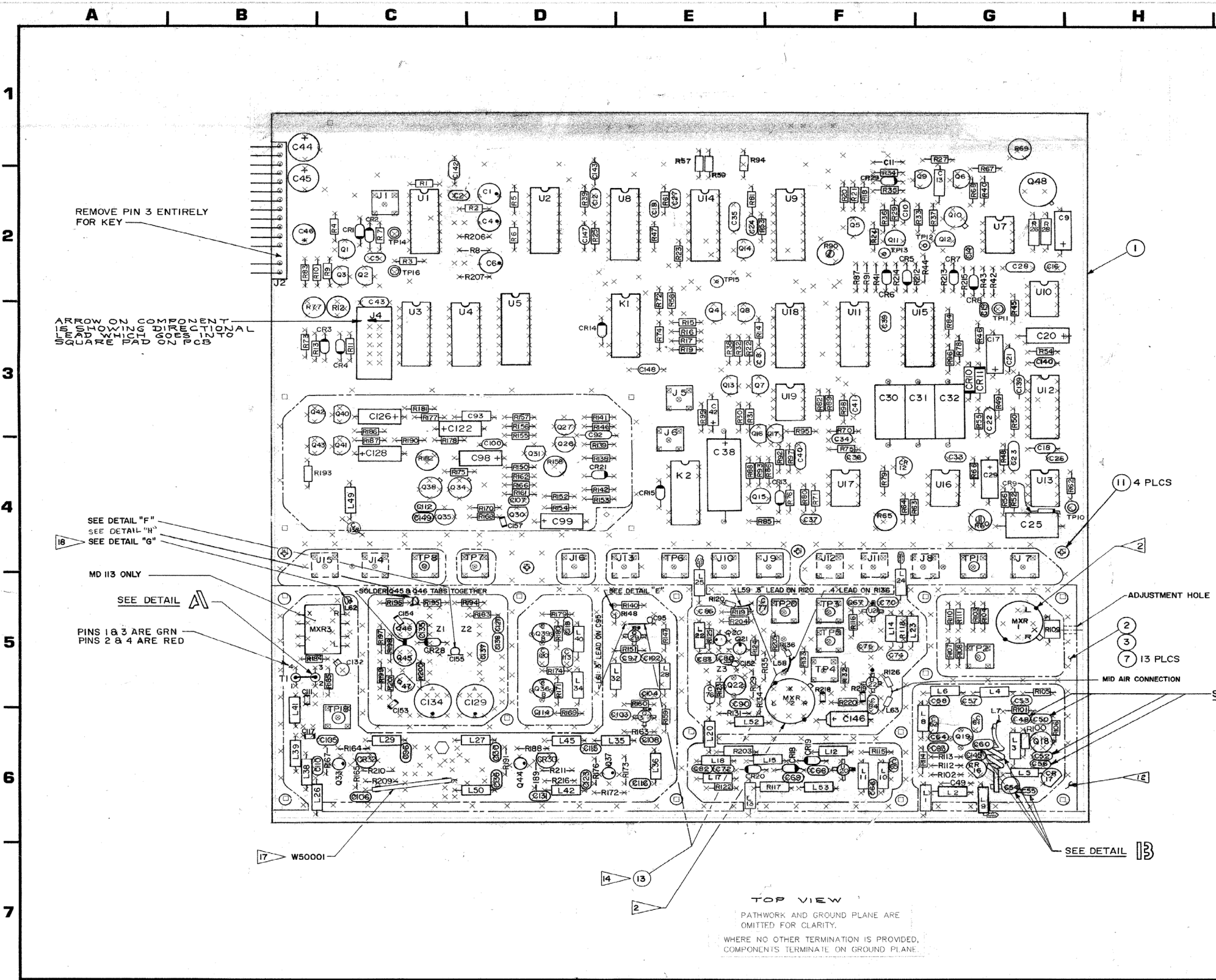


DASH NO				REF DES				NEXT ASSY				MODEL			
-300				35XX				7010-931-300				RD-301			
APPLICATION															
- IFR INC -															
DATE		DRAWN		DATE		CHECKED		DATE		DATE		DATE		DATE	
02/10/81		02/10/81		02/10/81		02/10/81		02/10/81		02/10/81		02/10/81		02/10/81	
DISCRIMINATOR CIRCUIT SCHEMATIC BOARD NO. 2 (49-115)															
SCALE				CODE				WEIGHT				SHEET			
1:1				S110				2.0				2 of 2			

DATE	REV	CHANGE	APPR	DATE	REV	CHANGE	APPR
1-27-77	J	INC ECN 17618	RH	DSG	A	PRODUCTION RELEASE ECN 8053	VH
4-29-78	K	INC 19830	EC	GH	A-1	INC ECN 8521	JS
7-14-77					D	INC ECN 9234 ADDENDUM "CHIPS"	VH
7-17-77					D-1	INC ECN 9972	JS
7-22-77					D-2	INC RC 10175	AO
8-2-77					E	INC RC 10161 "CHIPS"	VH
7-11-77					E-1	INC ECN 11166	HV
7-28-77					E-2	INC RC 11441	AO
8-2-77					E-3	INC ECN 11474	AO
8-9-77					E-4	INC RC 11499	PL
11-21-77					E-5	INC RC 11871	PL
7-7-77					E-6	INC RC 11966	JR
7-27-77					E-7	INC RC 12365	AO
7-30-77					E-8	INC ECN 13230	AO
7-31-77					E-9	INC RC 13334	AO
8-7-77					F	INC RC 13387	AO
8-22-77					F-1	INC RC 13534	AO
8-24-77					F-2	INC RC 13490	AO
8-24-77					F-3	INC RC 13858	AO
8-24-77					G	INC ECN 14073	AO
8-24-77					G-1	INC ECN 15477	BP
8-24-77					G-2	INC ECN 15510	BP
8-24-77					G-3	INC ECN 16283	MRM

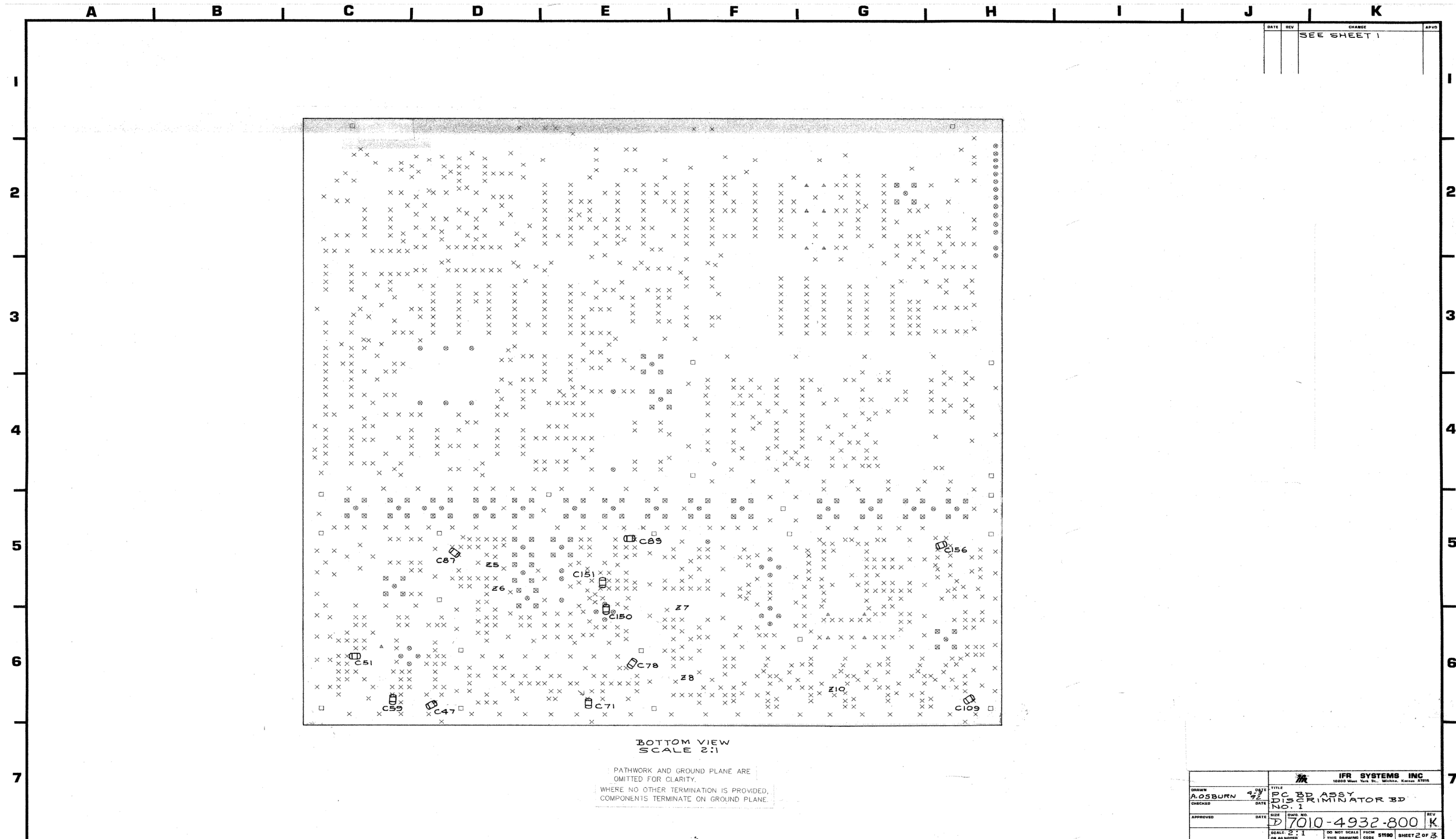
NOTES:

- ALL REF NO'S CARRY AN ASSIGNED DESIGNATOR SERIES. THIS DWG CARRIES SERIES 50XXX (e.g., R1 IS R50001).
- MOUNT MIXER 1 AND 2 FLAT AGAINST P.C. BOARD. TAC SOLDER CAN TO GND PLANE. USED M2A ONLY.
- NOTE NOT USED.
- NOT USED.
- NOT USED.
- NOTE NOT USED.
- NOTE NOT USED.
- NOTE NOT USED.
- NOTE NOT USED.
- NOTE NOT USED.
- L7 IS CONSTRUCTED FROM AN 18GA WIRE 1.8" LG. C60 IS ATTACHED 2" FROM GND PLANE. (SEE DETAIL P62 FOR CONSTRUCTION INFO).
- NOT USED.
- REMOVE OXIDE AND EXCESS SOLDER UNDER ENCLOSURE.
- NOT USED.
- LEAD ON SLEEVING
L61: C95 4" IF POSSIBLE, 3" MIN
L59: R120 5"
L58: R136 4"
- C155 LEADS TO SOLDER TO TRACE IN LINE WITH ADJACENT PLATED THRU HOLES
- O86 SEMI RIGID, 1.25" LG SOLDERED TO GND AT ENDS
- L62 IS FORMED BY 26GA, 11" LG, 2 TURNS. KEEP IT CLEAR OF THE COVER BLOCK
- NO CONNECTION TO PC BOARD
- NOT USED
- NOTE NOT USED



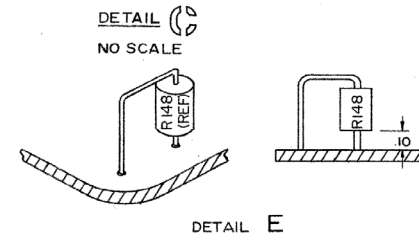
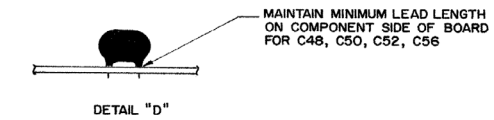
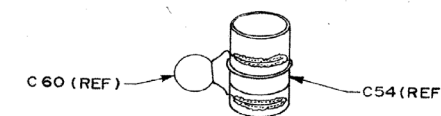
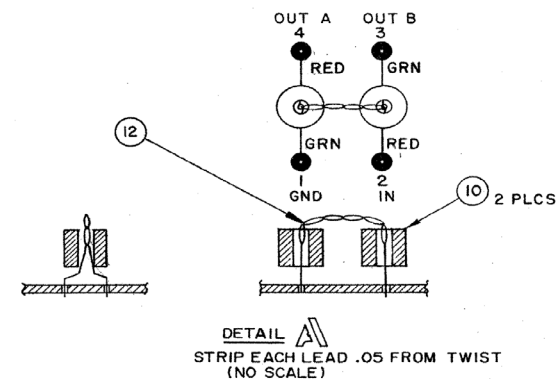
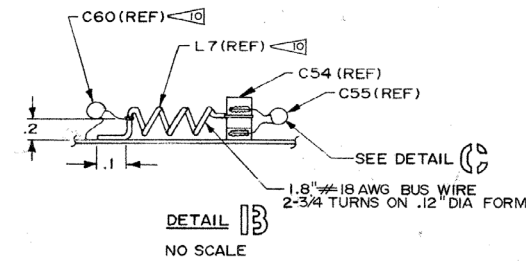
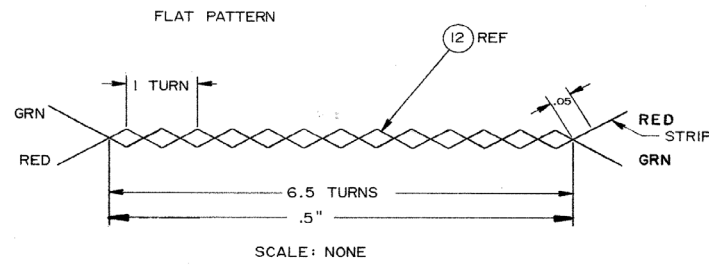
SEE SHEET 3 FOR DETAILS

DRAWN		DATE		TITLE	
J. SIGLER				P.C. BD ASSY	
				DISCRIMINATOR BD NO. 1	
				RD301	(49-328)
				D	7010-4932-800
				SCALE: 2:1	CODE IDENT: 8180
					SHEET 1 OF 3

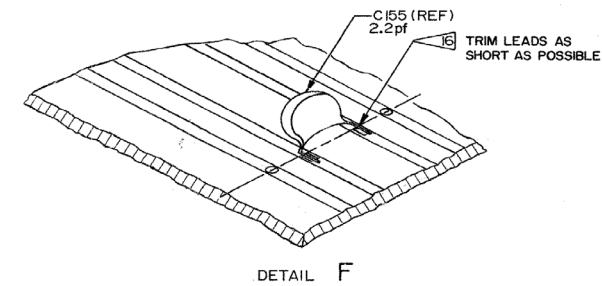
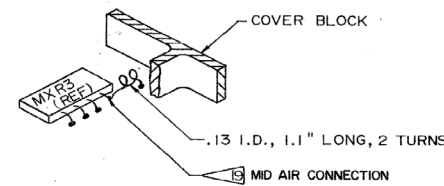
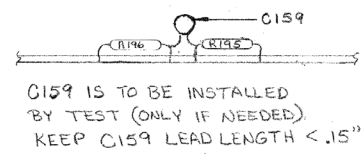


Subject to Export Control, see Cover Page for details.

DATE	REV	CHANGE	APPROV
		SEE SHEET ONE	

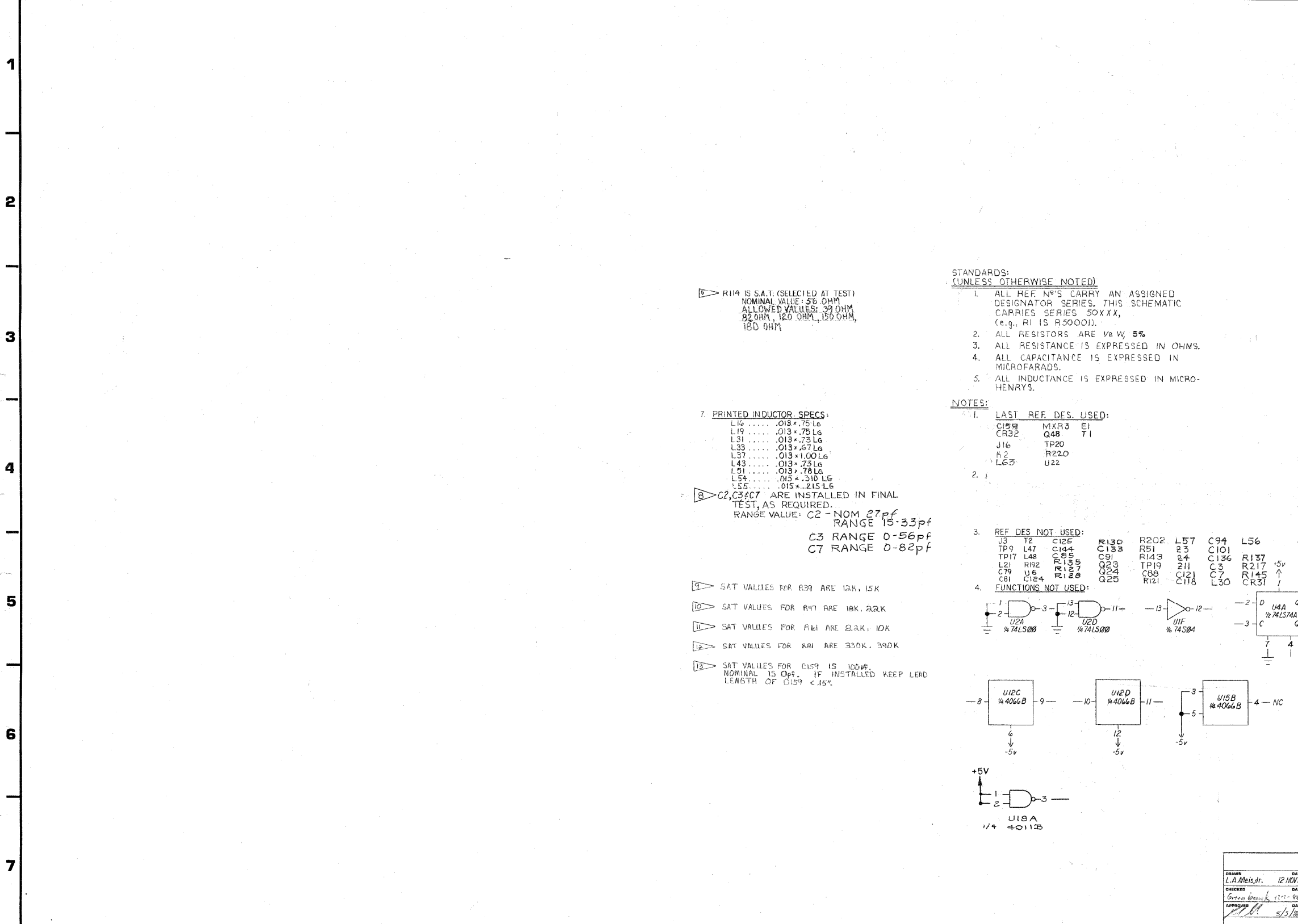


DETAIL H



TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		MATERIAL
ALL DIMENSIONS APPLY AFTER FINISH		
TOLERANCES: DECIMALS: .015" - .0001"	RD-301	FINISH
FRACTIONS: 1/16" - .0005"		
ANGLES: 1/16" - .0005"		
SURFACE FINISH: REMOVE ALL BURRS		
IFR SYSTEMS INC 10250 West York St., Wichita, Kansas 67225		
DRAWN: J. SIGLER	DATE:	TITLE: PC BD ASSY
CHECKED:	DATE:	DISCRIMINATOR BD No 1
APPROVED:	DATE:	SIZE: D
		DWG NO: 7010-4932-800
		SCALE: DO NOT SCALE FROM THIS DRAWING
		CODE: S190 SHEET 3 OF 3

A B C D E F G H J K L



DATE	REV	CHANGE	APPROV
	B	PROD. REL. & ADVANCED BOARD TO "B" REV. PER FIRST BUILD ECN 8053	VLH
5-15-80	B1	INC ECN 8521	JS VLH
4-14-81	D	INC ECN 9238 & ADDENDUM "CHIPS"	VLH
8-1-81	D-1	INC ECN 9972	JS VLH
7-8-81	E	INC RC 10161 "CHIPS"	VLH
7-8-81	E-1	INC ECN 11166	JR BP
7-2-81	F-2	INC ECN 13230	BP
7-2-81	E-3	INC ECN 13534	A0 BP
7-2-81	F	Was never Released	
7-2-81	G	INC ECN 14073	BP
7-2-81	G1	INC ECN 15477	AD BP
7-2-81	H	INC ECN 16283	MRM BM
7-2-81	J	INC ECN 17618	MRM BSB
7-2-81	K	INC 19830	EC GH
7-2-81	L	INC 20600	EB RC

9 R114 IS S.A.T. (SELECTED AT TEST)
NOMINAL VALUE: 50 OHM
ALLOWED VALUES: 39 OHM
82 OHM, 120 OHM, 150 OHM,
180 OHM

7. PRINTED INDUCTOR SPECS:
L10013 x .75 Lg
L19013 x .75 Lg
L31013 x .75 Lg
L33013 x .67 Lg
L37013 x 1.00 Lg
L43013 x .75 Lg
L51013 x .78 Lg
L54015 x .310 Lg
L55015 x .215 Lg

8 C2, C3 & C7 ARE INSTALLED IN FINAL TEST, AS REQUIRED.
RANGE VALUE: C2 - NOM 27pf
RANGE 15-33pf
C3 RANGE 0-56pf
C7 RANGE 0-82pf

- 9 SAT VALUES FOR R39 ARE 12K, 15K
- 10 SAT VALUES FOR R47 ARE 18K, 22K
- 11 SAT VALUES FOR R61 ARE 2.2K, 10K
- 12 SAT VALUES FOR R81 ARE 330K, 390K
- 13 SAT VALUES FOR C159 IS 100pf, NOMINAL IS Opt. IF INSTALLED KEEP LEAD LENGTH OF C159 < .15"

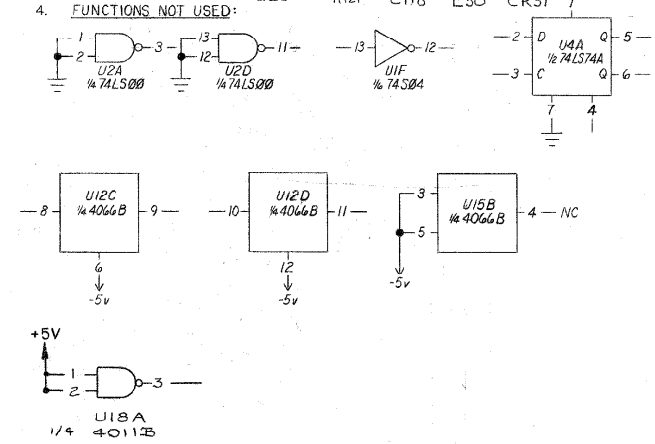
STANDARDS:
(UNLESS OTHERWISE NOTED)

- ALL REF. N^o'S CARRY AN ASSIGNED DESIGNATOR SERIES. THIS SCHEMATIC CARRIES SERIES 50XXX, (e.g., R1 IS R.50001).
- ALL RESISTORS ARE 1/4 W, 5%.
- ALL RESISTANCE IS EXPRESSED IN OHMS.
- ALL CAPACITANCE IS EXPRESSED IN MICROFARADS.
- ALL INDUCTANCE IS EXPRESSED IN MICRO-HENRY'S.

NOTES:

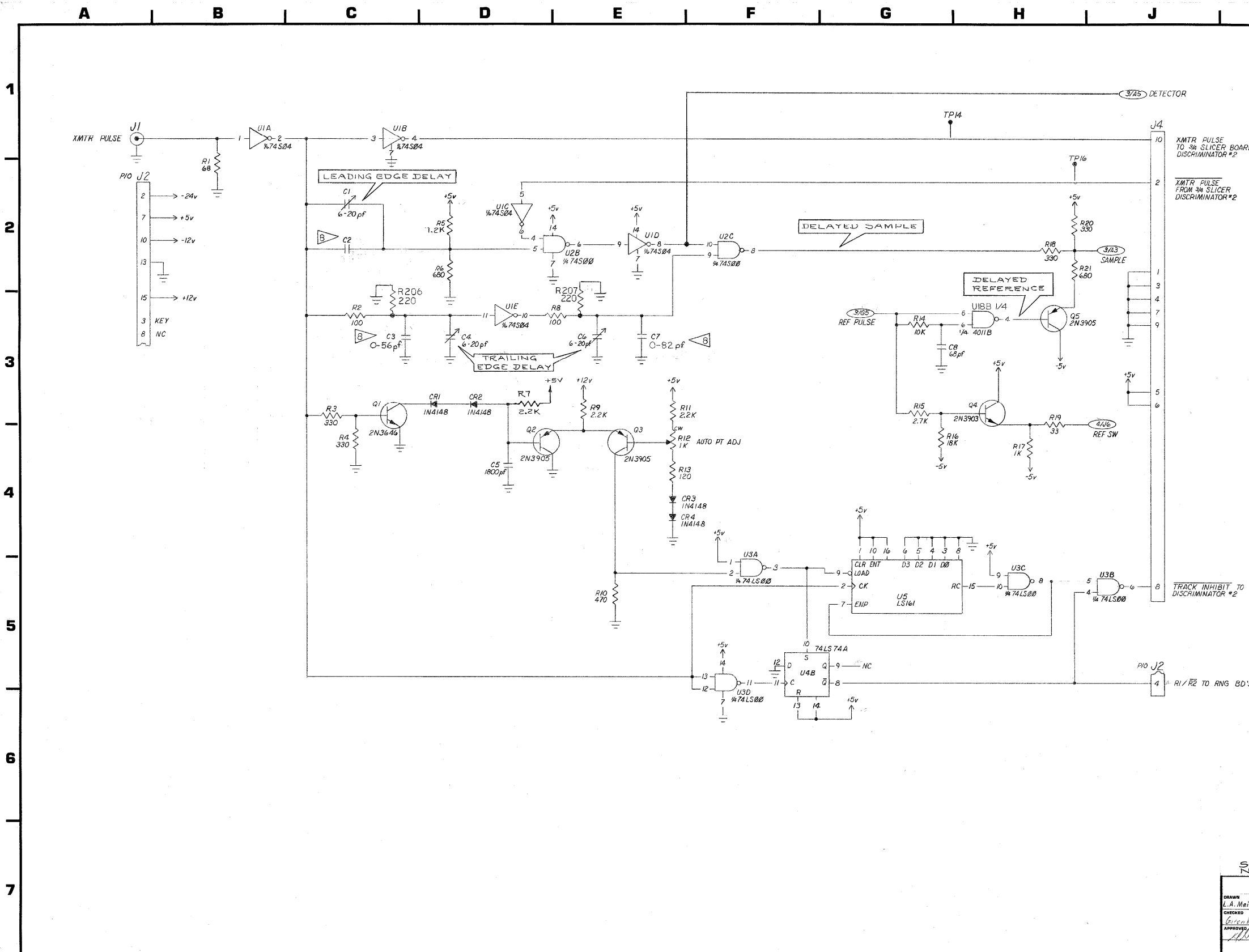
1. LAST REF. DES. USED:
C159 MXR3 EI
CR32 Q48 TI
J16 TP20
K2 R220
L63 U22

3. REF. DES. NOT USED:
J3 T2 C125 R130 R202 L57 C94 L56 Q28
TP9 L47 C144 R133 R51 23 C101 R144
TP17 L48 C95 C91 R143 24 C136 R137 R149
L21 R142 R135 Q23 TP19 211 C3 R217 R208
C79 U5 R127 Q24 C88 C21 C7 R145 C73
C81 C124 R128 Q25 R21 C118 L50 CR31



DRAWN L.A. Meis, Jr.		DATE 12 NOV 75	TITLE SCHEMATIC	
CHECKED L.A. Meis, Jr.		DATE 12-1-75	DISCRIMINATOR Bd #1 RD-301 (49-128)	
APPROVED [Signature]	DATE 5/1/86	SIZE D	DWG. NO. 0000-4912-800	REV L
SCALE	CODE IDENT	WEIGHT	SHEET / OF 5	

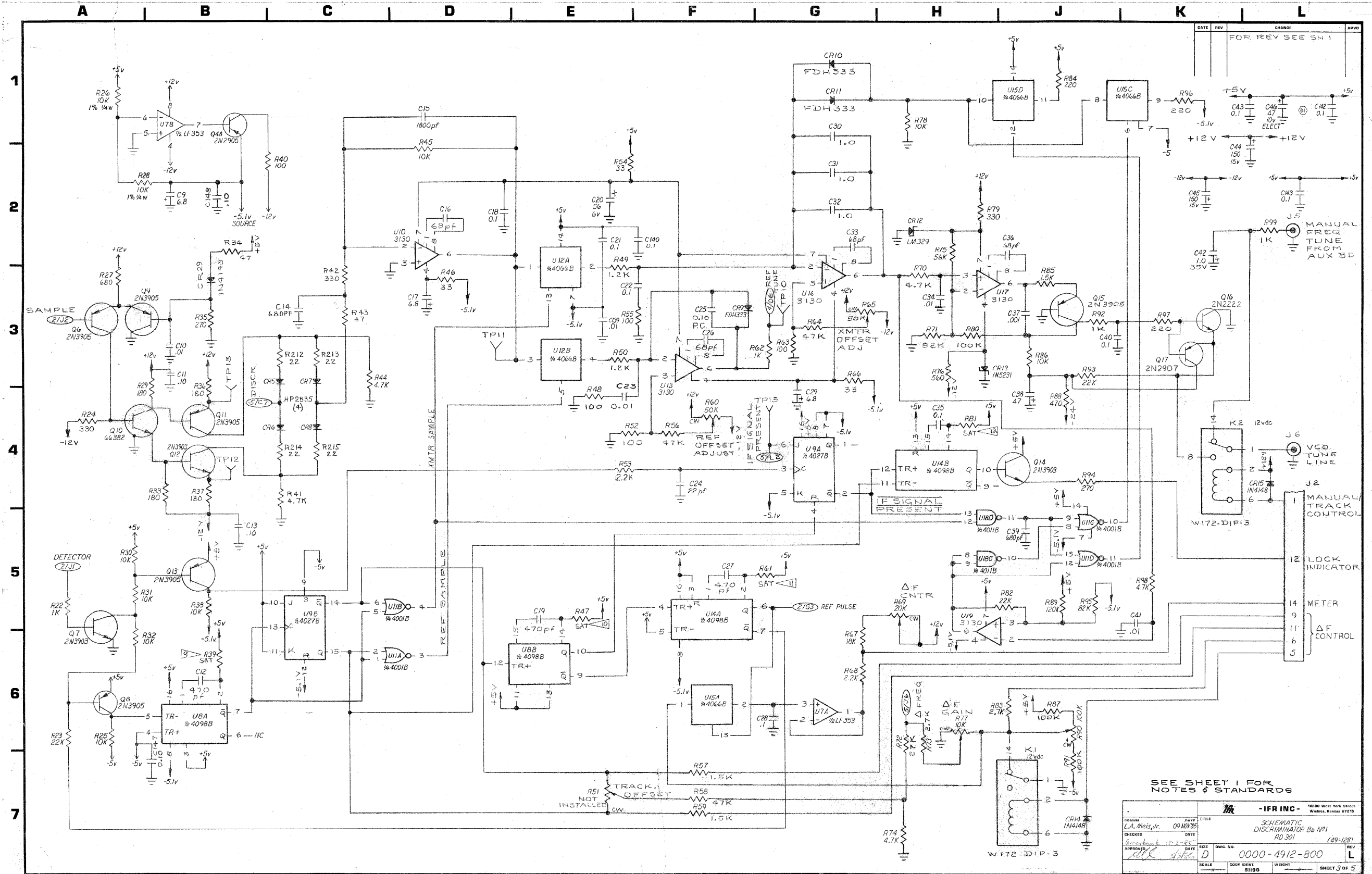
DATE	REV	CHANGE	APPROV
		FOR REV SEE SH1	



SEE SHEET 1 FOR NOTES & STANDARDS

DRAWN		DATE		TITLE	
L. A. Meis, Jr.		05 NOV 85		SCHEMATIC	
CHECKED		DATE		DISCRIMINATOR Bd N# 1	
APPROVED		DATE		RD-301 (49-128)	
SIZE	DWG. NO.	SCALE	CODE IDENT.	WEIGHT	SHEET 2 OF 5
D	0000-4912-800		S190		

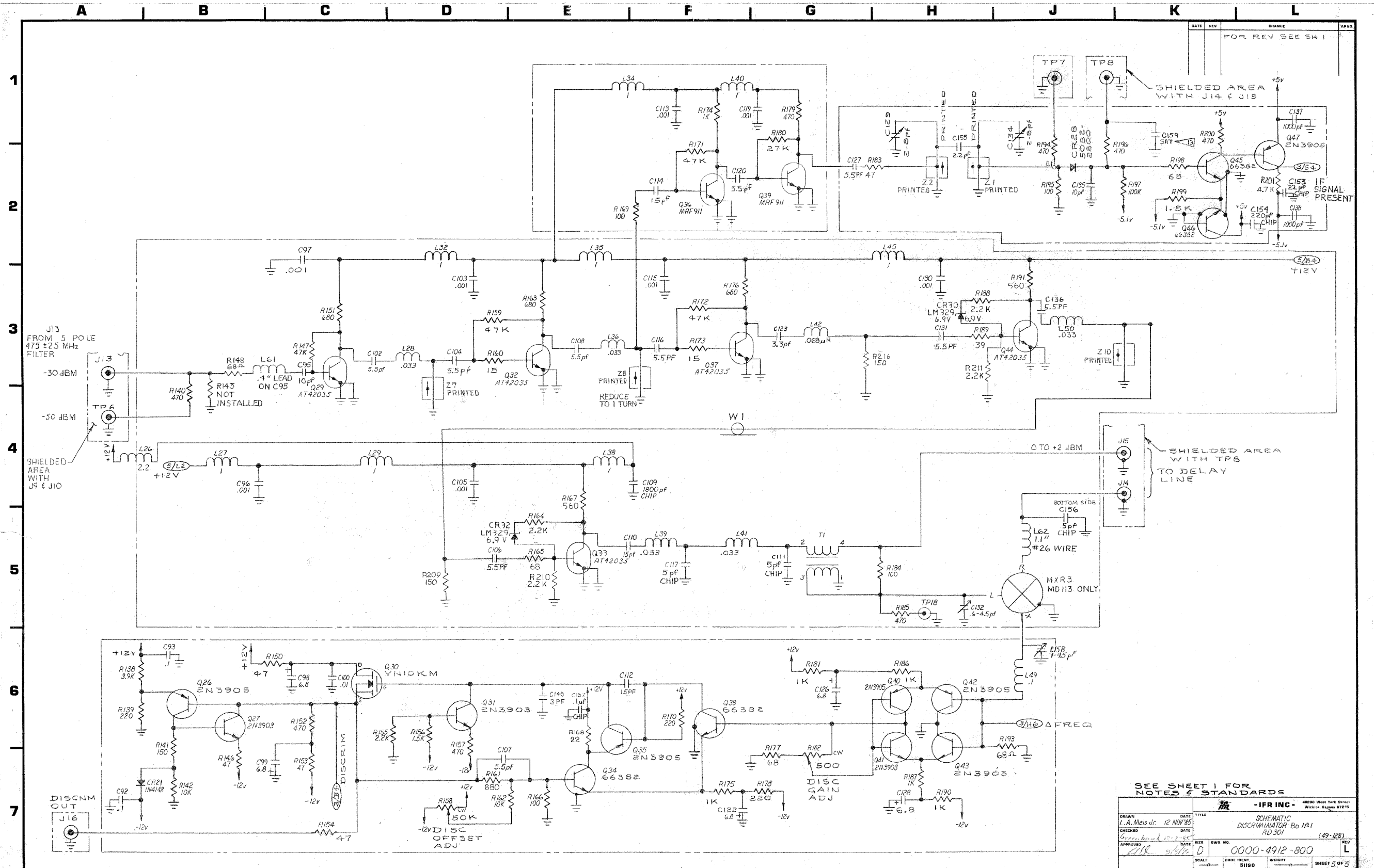
Subject to Export Control, see Cover Page for details.



SEE SHEET 1 FOR NOTES & STANDARDS

DATE	REV	CHANGE	APPROV
		FOR REV SEE SH 1	

FORM	REV	TITLE	DATE
L.A. Meis, Jr.	09/01/75	SCHEMATIC DISCRIMINATOR 80 N1 RD 301	
CHECKED			
APPROVED			
SCALE	CODE IDENT	WEIGHT	SHEET 3 OF 5



SEE SHEET 1 FOR NOTES & STANDARDS

DRAWN I. A. Meis Jr. 12 NOV 85		DATE		TITLE SCHEMATIC DISCRIMINATOR Bo #1 RD 301	
CHECKED George G. Smith 12/1/85		DATE		REV (49-128)	
APPROVED JLB 2/1/86		DATE		DWG NO. 0000-4912-800	
SCALE		CODE IDENT.		SHEET 5 OF 5	

Subject to Export Control, see Cover Page for details.