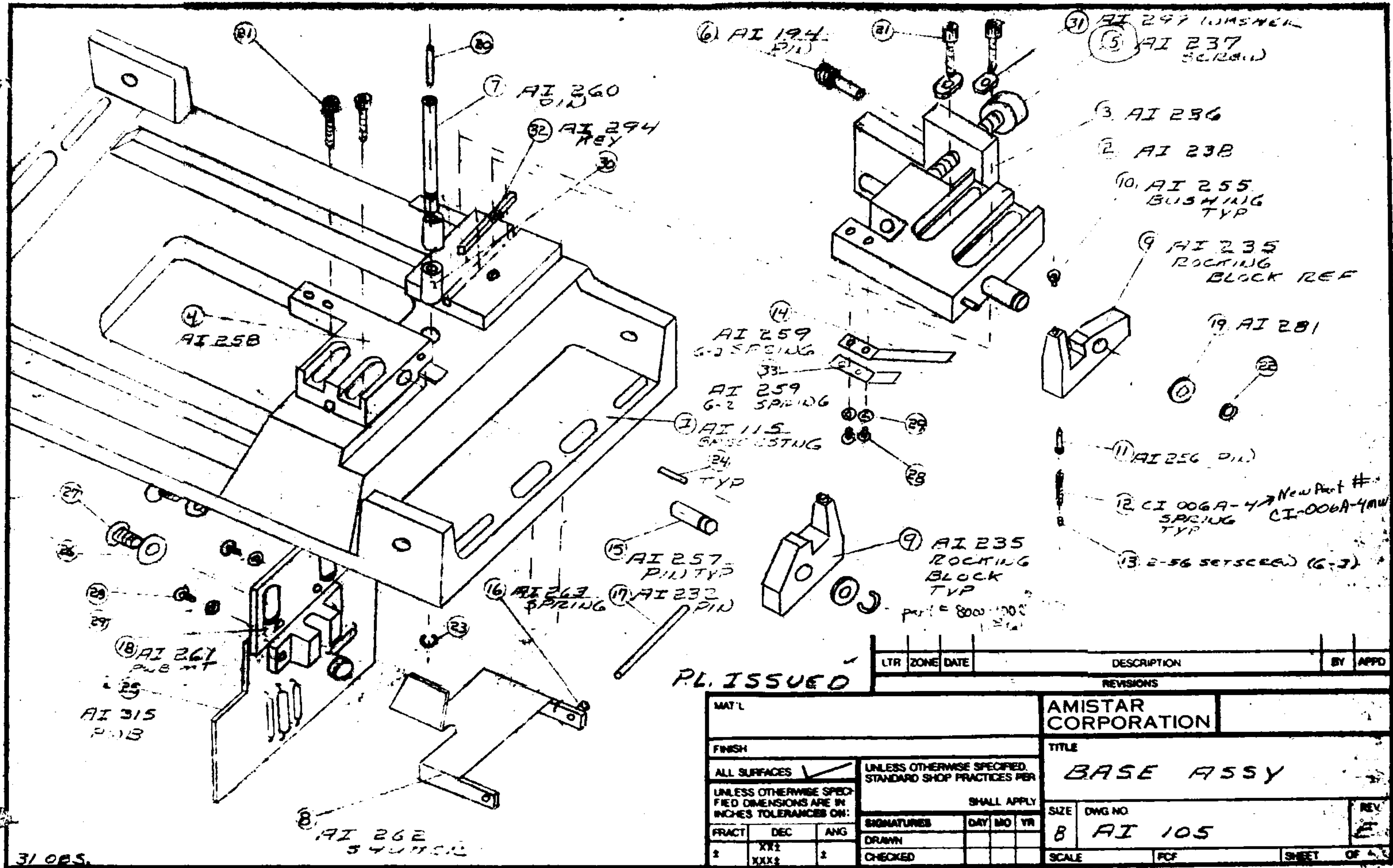


P.L. ISSUED ✓

LTR	ZONE	DATE	DESCRIPTION	BY	APP
REVISIONS					

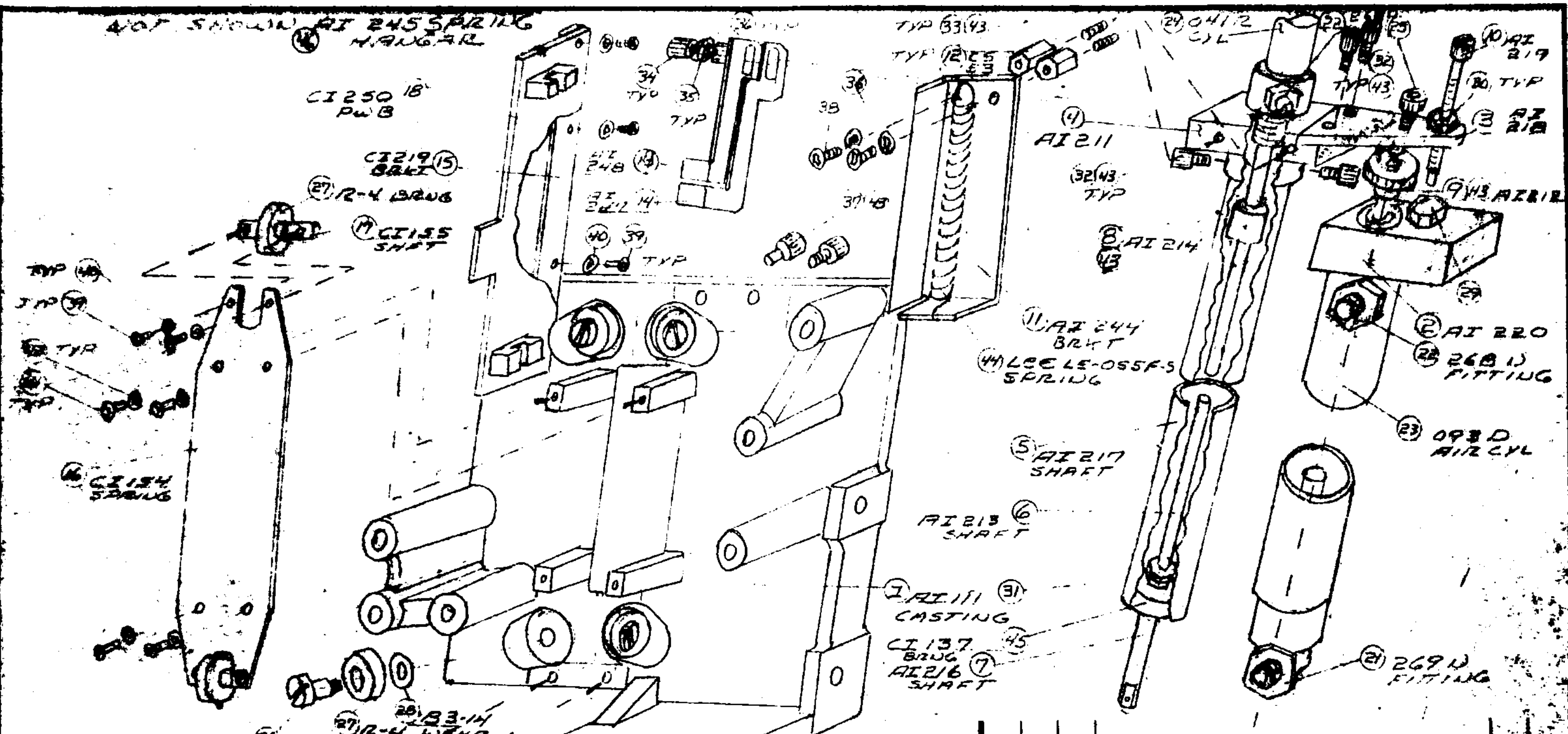
MAT'L		AMISTAR CORPORATION	
FINISH		TITLE	
ALL SURFACES ✓		MONITOR STATION ASSY	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:		UNLESS OTHERWISE SPECIFIED, STANDARD SHOP PRACTICES PER SHALL APPLY	
FRAC'T	DEC	ANG	SIGNATURES
2	XXE XXS	2	DAY MO YR
DRAWN		CHECKED	
SIZE		DWG NO	
B		AI 104	
SCALE		SHEET OF	
FCF		E	



PL ISSUED

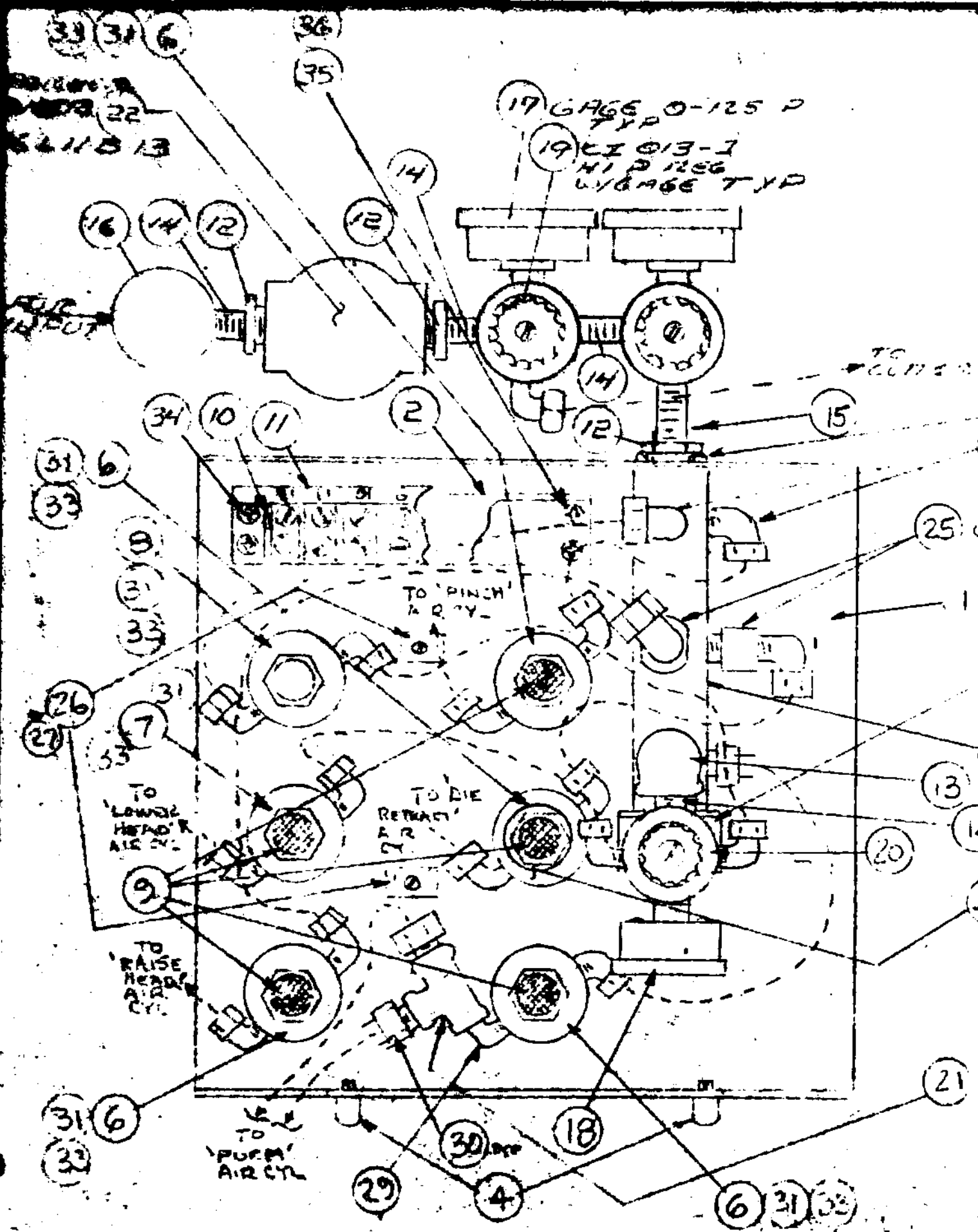
LTR	ZONE	DATE	DESCRIPTION	BY	APPO
REVISIONS					

MAT'L			AMISTAR CORPORATION			
FINISH			TITLE			
ALL SURFACES <input checked="" type="checkbox"/>			UNLESS OTHERWISE SPECIFIED, STANDARD SHOP PRACTICES PER			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:			SHALL APPLY			
FRACT	DEC	ANG	SIGNATURES	DAY	MO	YR
2	XX±	±	DRAWN			
	XXX±		CHECKED			
SIZE			DWG NO			
8			AI 105			
SCALE			SHEET OF			
FCF			E			



LTR	ZONE	DATE	DESCRIPTION	BY	APPD
REVISIONS					

MATERIAL			AMISTAR CORPORATION		
FINISH			TITLE		
ALL SURFACES <input checked="" type="checkbox"/>			FLATE ASSY		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:			SHALL APPLY		
FRACT	DEC	ANG	SIGNATURES	DAY	MO YR
2	XXX	1	DRAWN		
	XXX		CHECKED		
SIZE			DWG NO.		
			AI 106		
SCALE			FCF		
			SHEET		



- ITEM # DESCRIPTION
- 6 SKINNER C30K125VALVE
 - 7 MODIFIED " "
 - 8 SKINNER C20M1195 VALVE - MODIFIED
 - 23 IMPERIAL BRISTMAN NYLON ELBOW 269 W
 - 30 IMPERIAL BRISTMAN NYLON FITTING-269 W
 - 16 FILTER

- NOT SHOWN
- 24 TUBING
 - 28 TERMINALS

37 38 TYPICAL
23 TYPICAL

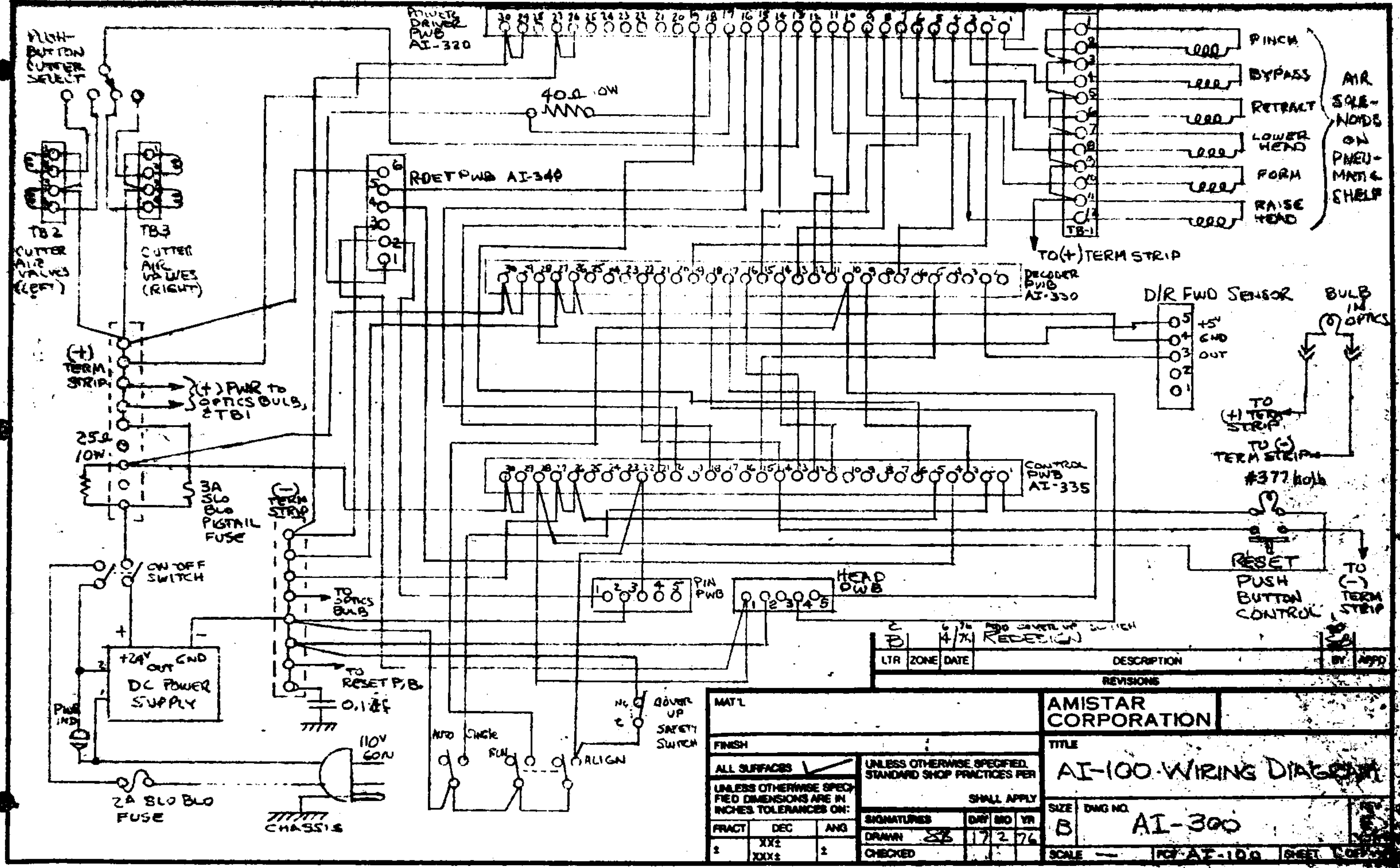
25 CI 2396-2 OR PISE (032 DIA)

5 31 33 37 38 CI 013-2 LOW P REG W/GUAGE

39 CI 2396-3 ORIFICE (.045 DIA)
PL ISSUED

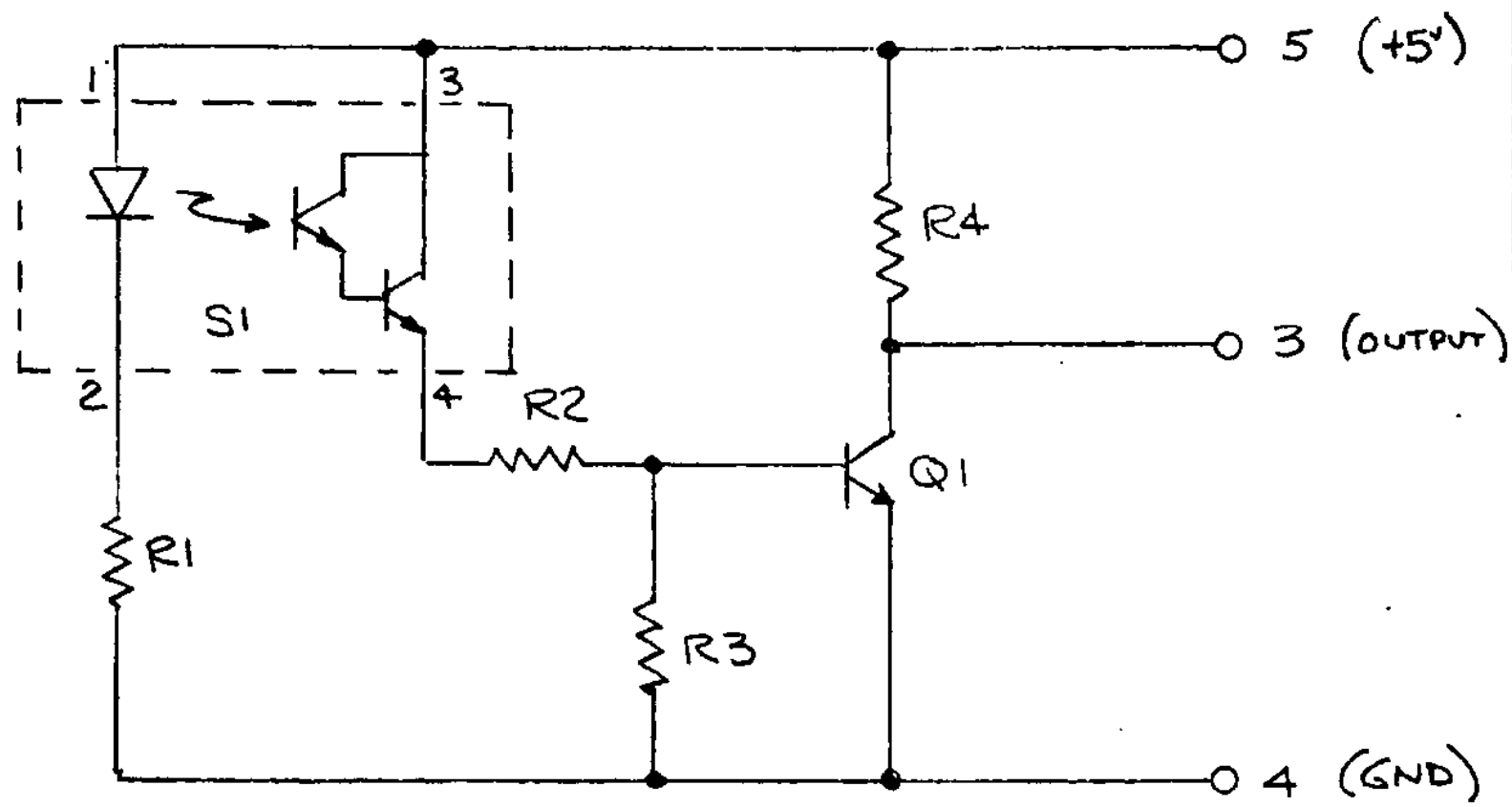
LTR	ZONE	DATE	DESCRIPTION	BY	APPD.
			REVISIONS		

MATERIAL			AMISTAR CORPORATION		
FINISH			TITLE		
ALL SURFACES <input checked="" type="checkbox"/>			PNEUMATIC ASSEMBLY		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:			SIZE DWG NO		
FRAC	DEC	ANG	B	AI-108	REV
1	XXS	1			2
	XXXS				
SIGNATURES			SCALE		
DRAWN SP			FCF AE-100		
CHECKED			SHEET 1 OF 1		
DATE			DATE		
19 6 74					



LTR	ZONE	DATE	DESCRIPTION	BY	APPD
B	4	7/2	ADD COVER UP SWITCH REDESIGN		

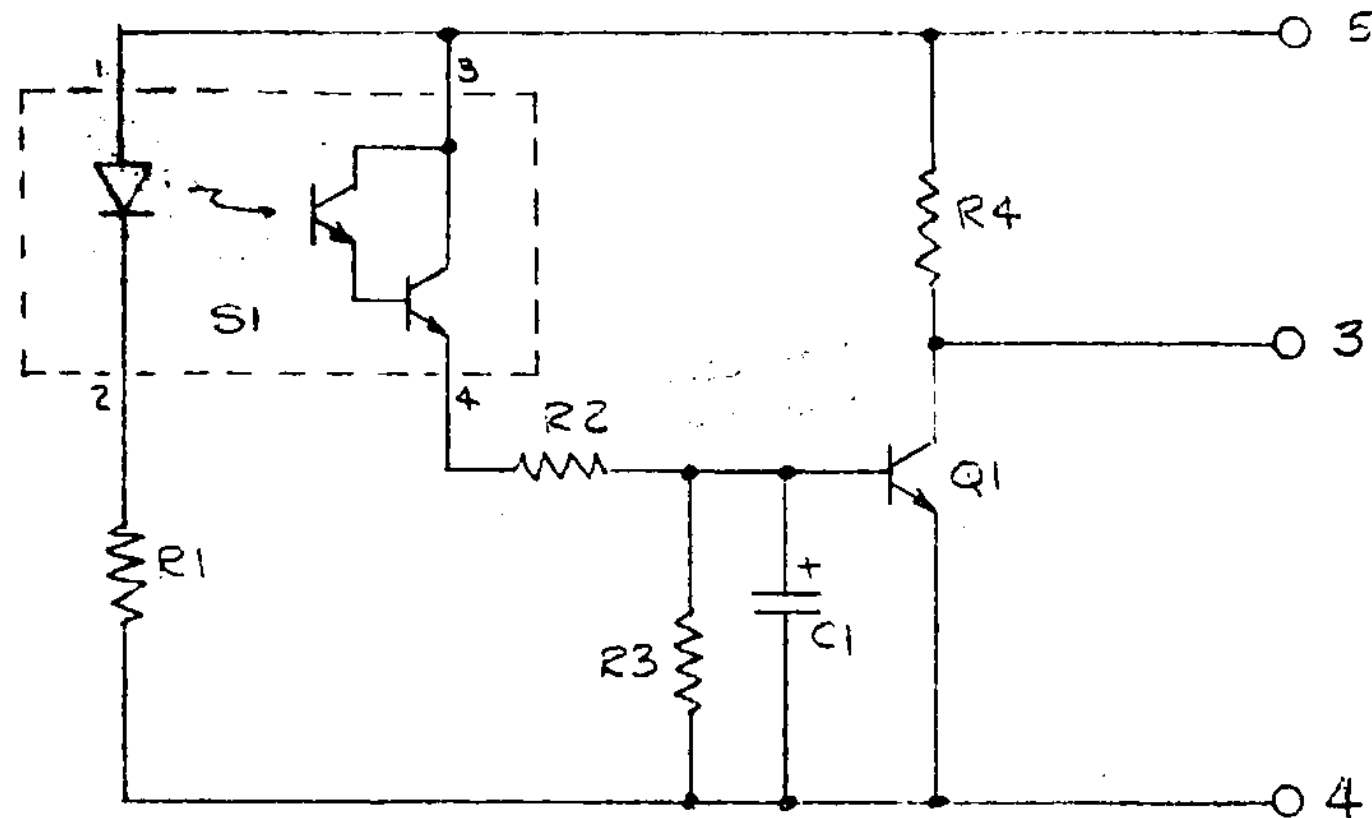
MATERIAL		AMISTAR CORPORATION	
FINISH		TITLE	
ALL SURFACES <input checked="" type="checkbox"/> UNLESS OTHERWISE SPECIFIED, STANDARD SHOP PRACTICES PER SHALL APPLY		AI-100 WIRING DIAGRAM	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:		SIZE	DWG NO.
FRACT	DEC	B	AI-300
2	XX±		
	XXX±		
SIGNATURES		DATE	SCALE
DRAWN <i>SS</i>		17 2 76	1:1
CHECKED			



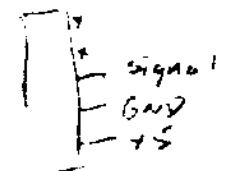
COMPONENT VALUES	
SYMBOL	VALUE / TYPE
S1	H13B1
Q1	SE6020
R1	330Ω - 1/4W
R2, R3, R4	2.2K - 1/4W

LTR	ZONE	DATE	DESCRIPTION	BY	APPD

MAT'L		AMISTAR CORPORATION	
FINISH		TITLE	
ALL SURFACES <input checked="" type="checkbox"/>		R-DET SCHEMATIC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:		UNLESS OTHERWISE SPECIFIED, STANDARD SHOP PRACTICES PER SHALL APPLY	
FRACT	DEC	ANG	SIGNATURES
2	XX±	±	DAY MO YR
	XXX±		30 24 74
DRAWN		SIZE	DWG NO
CHECKED		B	AI-306
		SCALE	REV
		NONE	A
		FOR AI-305	SHEET 1 OF 1

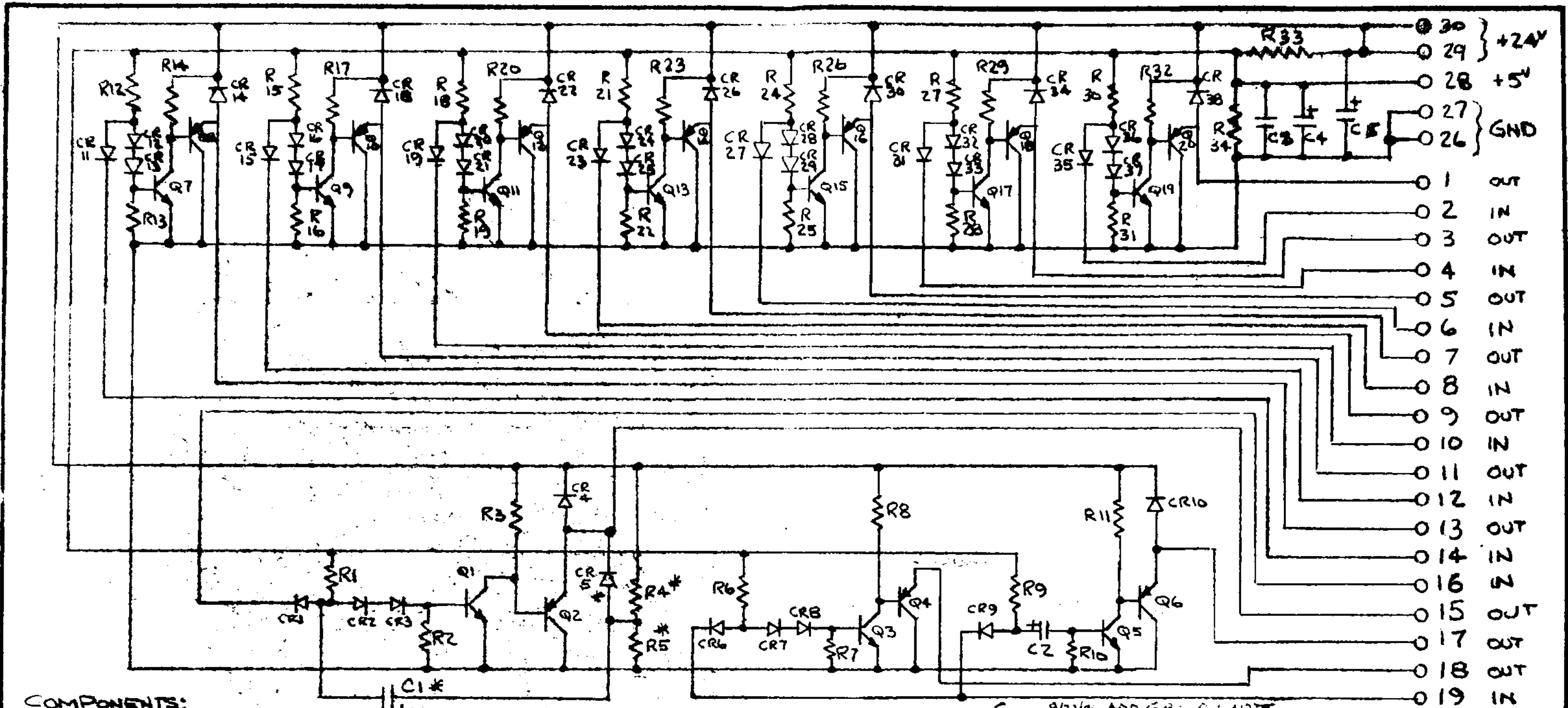


COMPONENT VALUES	
SYMBOL	VALUE / TYPE
S1	H13 B1
Q1	SE6020
R1	330Ω - 1/4W
R2, R3, R4	2.2K - 1/4W
C1	1μfd - 35V



B PL 423 CHANGE VALUE R2, R3, 10K TO 2.2K SJ			
LTR	ZONE	DATE	DESCRIPTION
REVISIONS			

MAT'L		AMISTAR CORPORATION	
FINISH		TITLE	
ALL SURFACES <input checked="" type="checkbox"/>		PIN PWB SCHEMATIC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:		UNLESS OTHERWISE SPECIFIED, STANDARD SHOP PRACTICES PER SHALL APPLY	
FRACT	DEC	ANG	SIGNATURES
2	XX2	±	DAY MO YR
	XXX2		1 12 75
DRAWN		CHECKED	
SIZE	DWG NO.	REV	
B	AI-316	B	
SCALE NONE		PCF AI-315	SHEET 1 OF 1



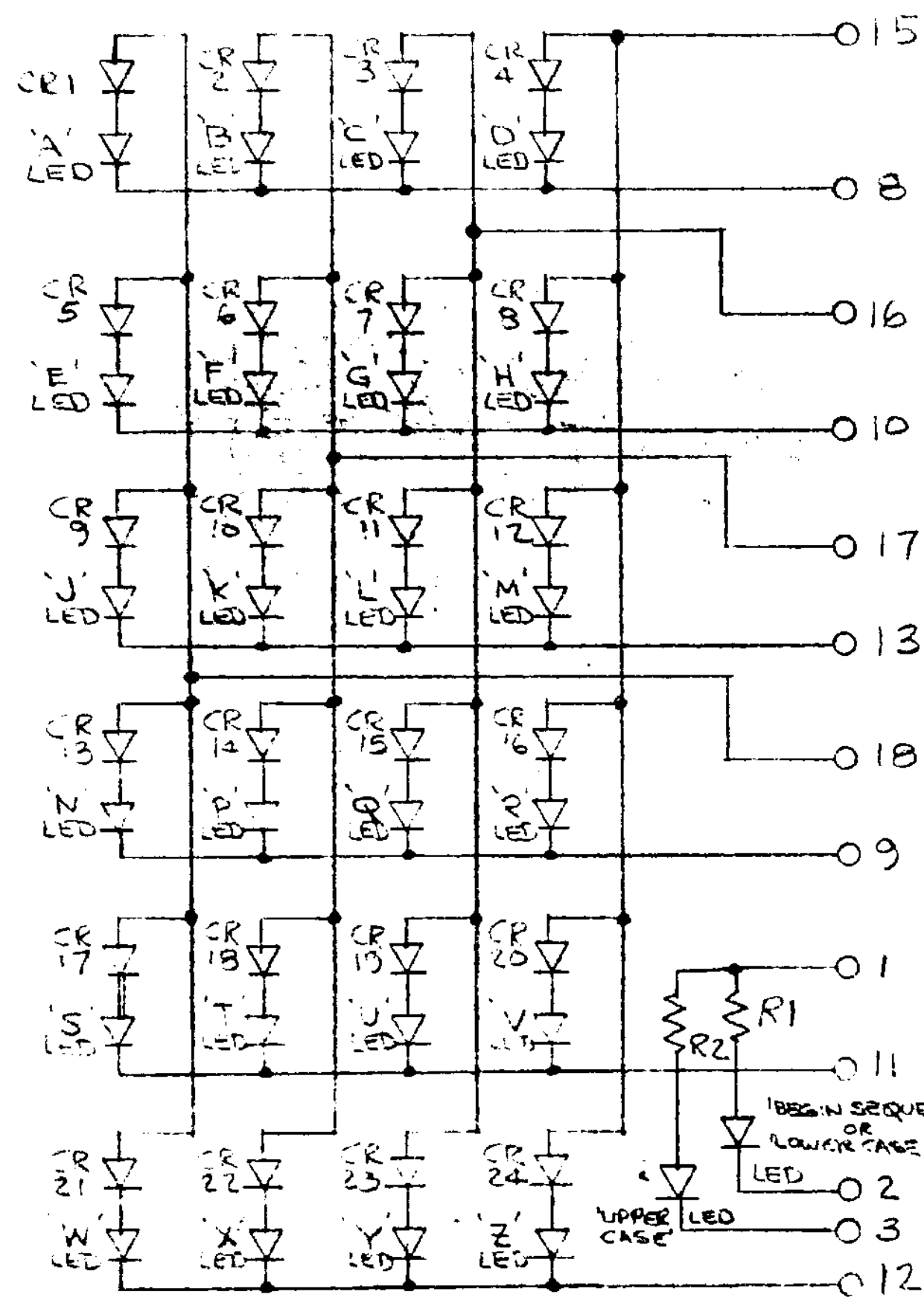
COMPONENTS:

VALUE	RATING	DESIGNATION	VALUE	RATING	DESIGNATION
47 μF	15V	C1, C2	0.1 μF	50V	C3
33 μF	15V	C4	10 μF	50V	C5
SE6020		Q1, 3, 5, 7, 9, 11, 13, 15, 17, 19			
ZNS193		Q2, 4, 6, 8, 10, 12, 14, 16, 18, 20			
1N4454		CR1, 2, 3, 5, 6, 7, 8, 9, 11, 12, 13, 15, 16, 17, 19, 20, 21, 23, 24, 25, 27, 28, 29, 31, 32, 33, 35, 36, 37			
1N4720		CR4, 10, 14, 18, 22, 26, 30, 34, 38			
8.2K-1/4		R1, 6, 9, 12, 15, 18, 21, 24, 27, 30, 4 R5			
10K-1/4		R2, 7, 10, 13, 16, 19, 23, 25, 28, 31			
10K-1/2		R3, 8, 11, 14, 17, 20, 23, 26, 29, 32			
1K-1/4		R4			
270Ω-2W		R33			
100Ω-1/4		R34			

NOTE: OMIT *
C1, R4, R5, CR5
FOR GROUP 1

C		4/21/76 ADD GROUP 1 NOTE	
B		FOR RECT OUTPUT PIN LABEL	
LTR	ZONE	DATE	DESCRIPTION
			BY
			APPO

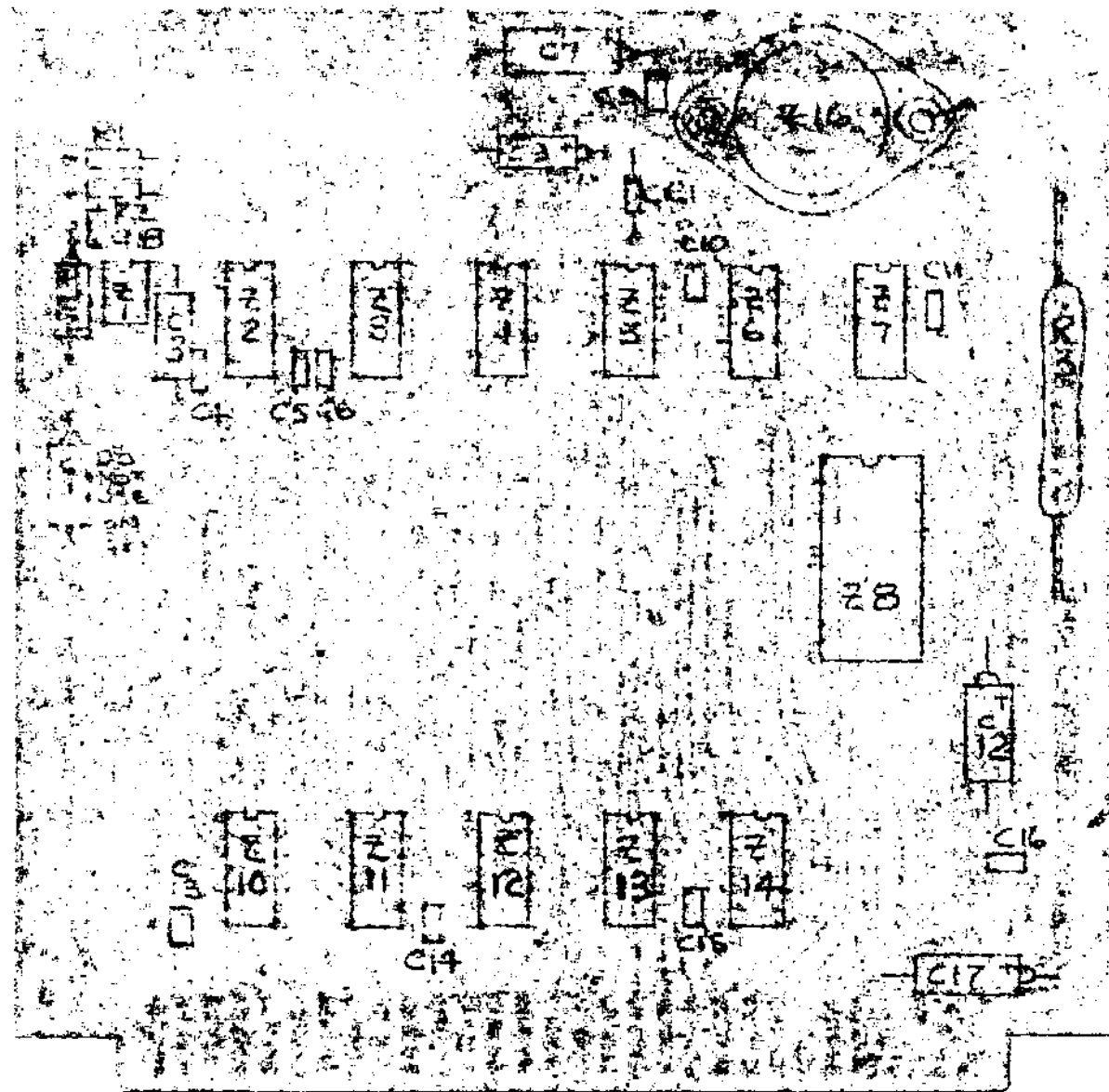
MATERIAL		AMISTAR CORPORATION	
FINISH		TITLE	
ALL SURFACES <input checked="" type="checkbox"/>		POWER DRIVER PWB SCHEMATIC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:		SHALL APPLY	
FRACT	DEC	ANG	SIGNATURES
	XXX		DAY MO YR
	XXX±		DRAWN SB 19 1 76
CHECKED		SIZE	DWG NO
		B	AI-321
		SCALE	REV
			C
		FCF AI-320 SHEET 1 OF 1	



LTR	ZONE	DATE	DESCRIPTION	BY	APPO
REVISIONS					

MATERIAL			AMISTAR CORPORATION		
FINISH			TITLE		
ALL SURFACES <input checked="" type="checkbox"/>			UNLESS OTHERWISE SPECIFIED, STANDARD SHOP PRACTICES PER SHALL APPLY		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:			SIZE		
FRACT	DEC	ANG	DNG NO		REV
2	XX±	2	B AI-326		B
SIGNATURES			DAY	MO	YR
DRAWN SB			6	2	76
CHECKED			SCALE		
			PCF AI-325 SHEET 1 OF 1		

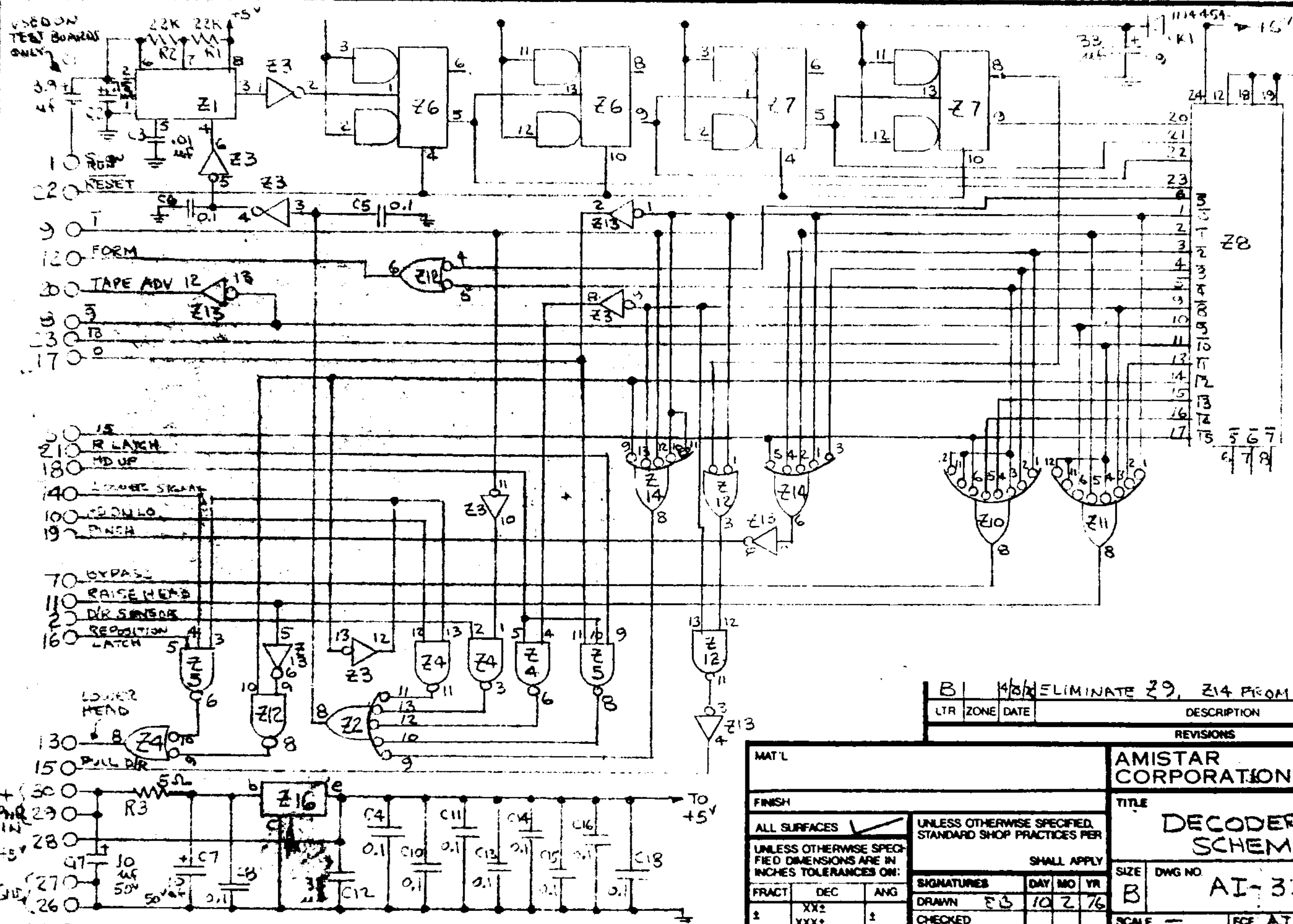
ALL LEDS ARE FLV-110 ALL CR'S ARE 1N4464



ITEM # 1

REV	DATE	DESCRIPTION	BY	APPD
REVISIONS				

MATERIAL		AMISTAR CORPORATION	
FINISH		TITLE	
ALL SURFACES <input checked="" type="checkbox"/> UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES TOLERANCES ON:		DE JONES PWB	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES TOLERANCES ON:		A.000 ±0.005	
FRAC	DEC	ANG	SHALL APPLY
±	XXX	±	SIGNATURES
±	XXXX	±	DAY MO YR
			DRAWN
			CHECKED
			SCALE
			FCF / 12-10-11
			SHEET
			OF
			REV
			(1)

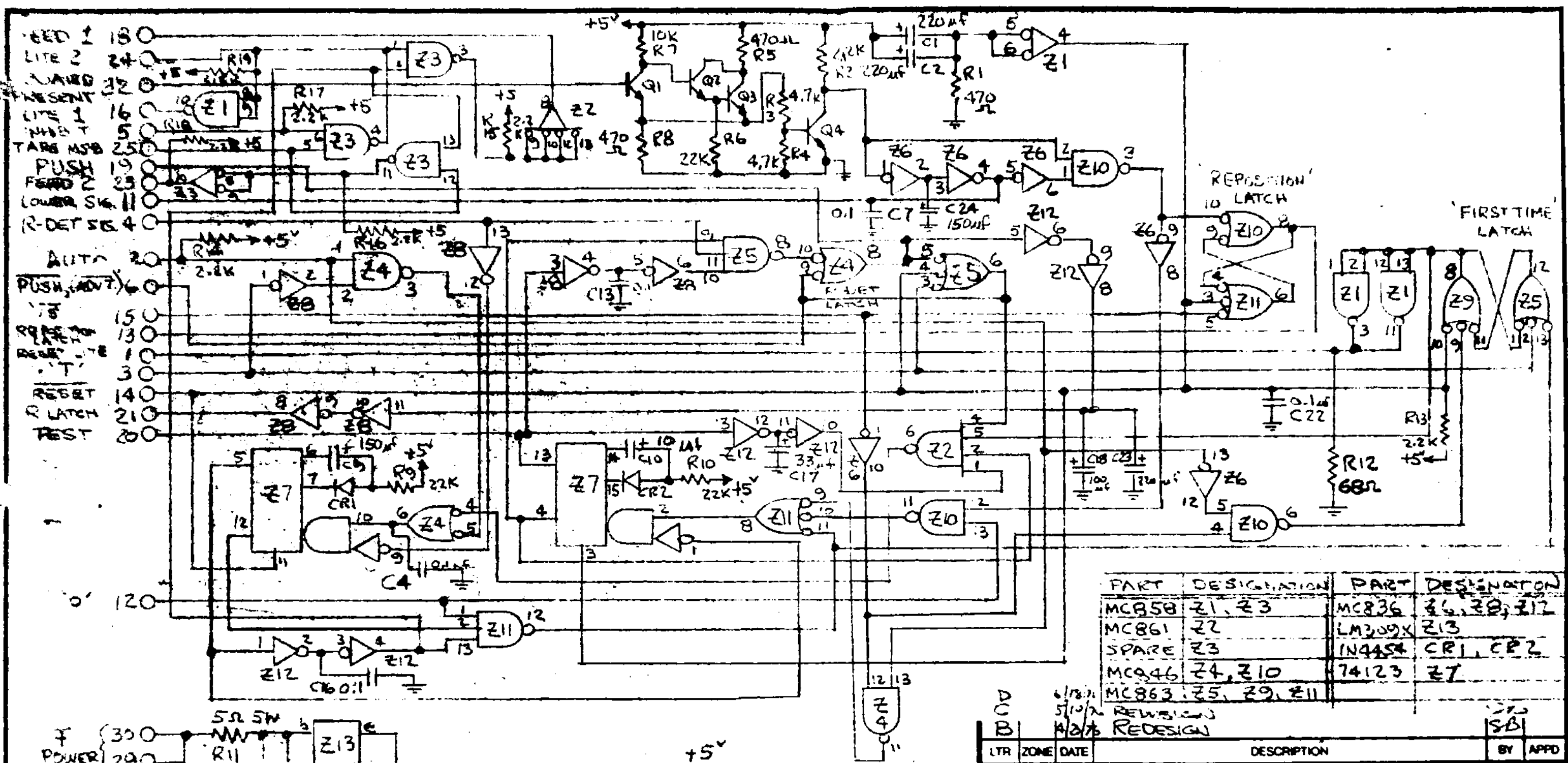


I.C. LIST

TYPE	DESIG.
NE-555	Z1
MC-1801P	Z2, Z14
MC-836P	Z3, 13
MC-846P	Z4, 12
MC-863P	Z5
MC-856P	Z6, 7
7415A	Z8
7430	Z10, 11
SPARE	Z9
SPARE	Z15
LM309K	Z16

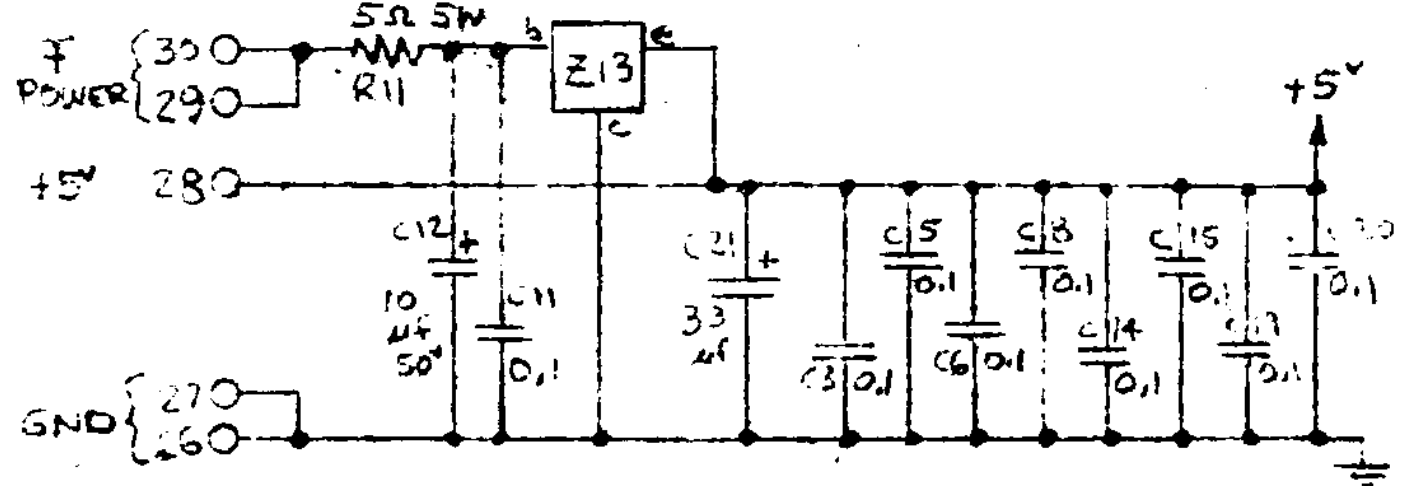
B	4/8/72	ELIMINATE Z9, Z14 FROM 861 TO 1801	SFS		
LTR	ZONE	DATE	DESCRIPTION	BY	APPD

MATERIAL		AMISTAR CORPORATION	
FINISH		TITLE	
ALL SURFACES <input checked="" type="checkbox"/>		DECODER PWB SCHEMATIC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:		SHALL APPLY	
FRACT	DEC	ANG	SIGNATURES
1	XX±	1	DAY MO YR
	XXX±		DRAWN E3 10 2 76
		CHECKED	
SIZE	DWG NO	REV	
B	AI-331	E	
SCALE		SHEET 1 OF 1	



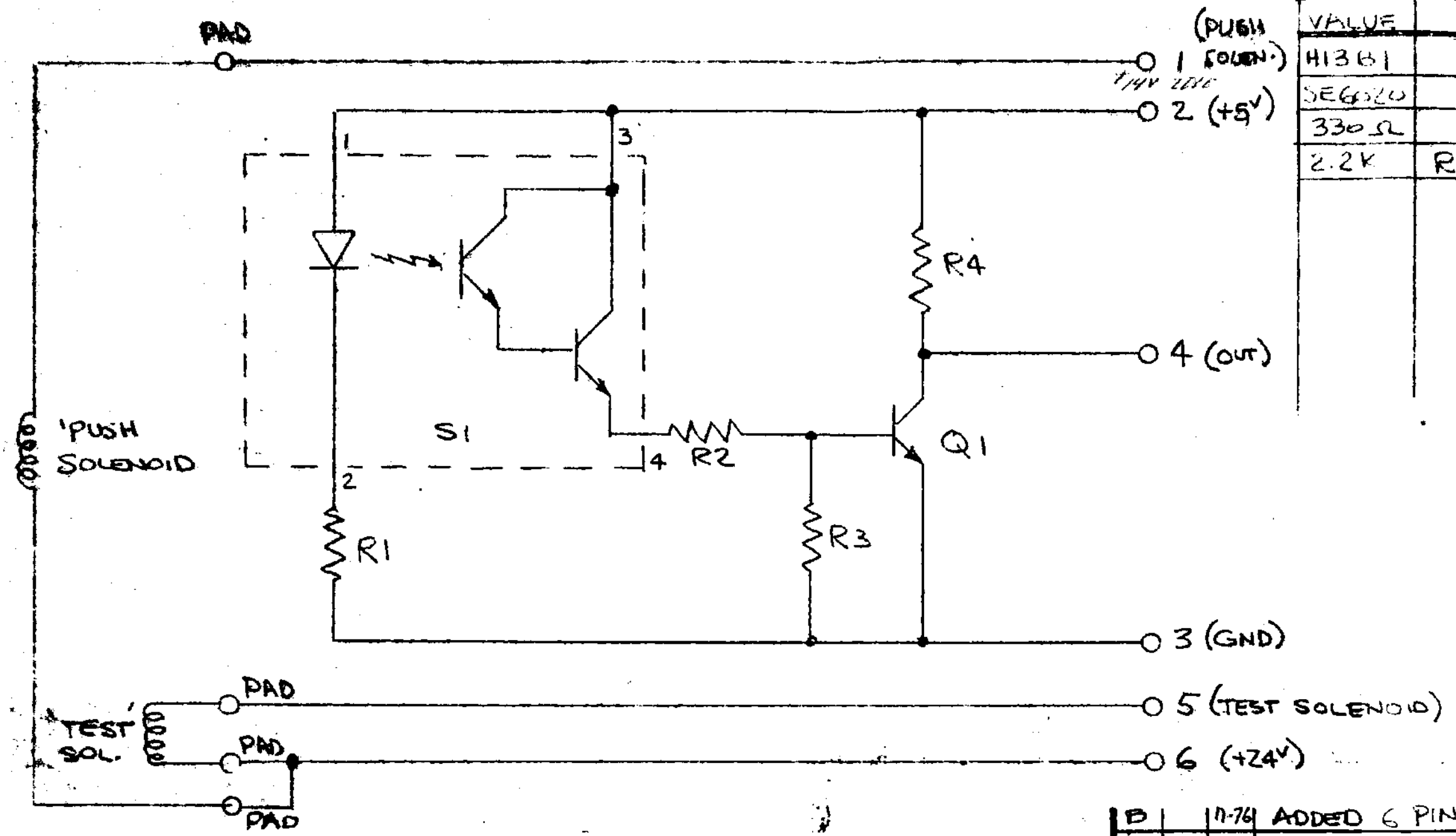
PART	DESIGNATION	PART	DESIGNATION
MC858	Z1, Z3	MC836	Z6, Z9, Z12
MC861	Z2	LM309X	Z13
SPARE	Z3	1N4454	CR1, CR2
MC946	Z4, Z10	74123	Z7
MC863	Z5, Z9, Z11		

LTR	ZONE	DATE	DESCRIPTION	BY	APPD
D		6/18/76	REVISION	SB	
C		5/10/76	REVISION		
B		4/27/76	REDESIGN		



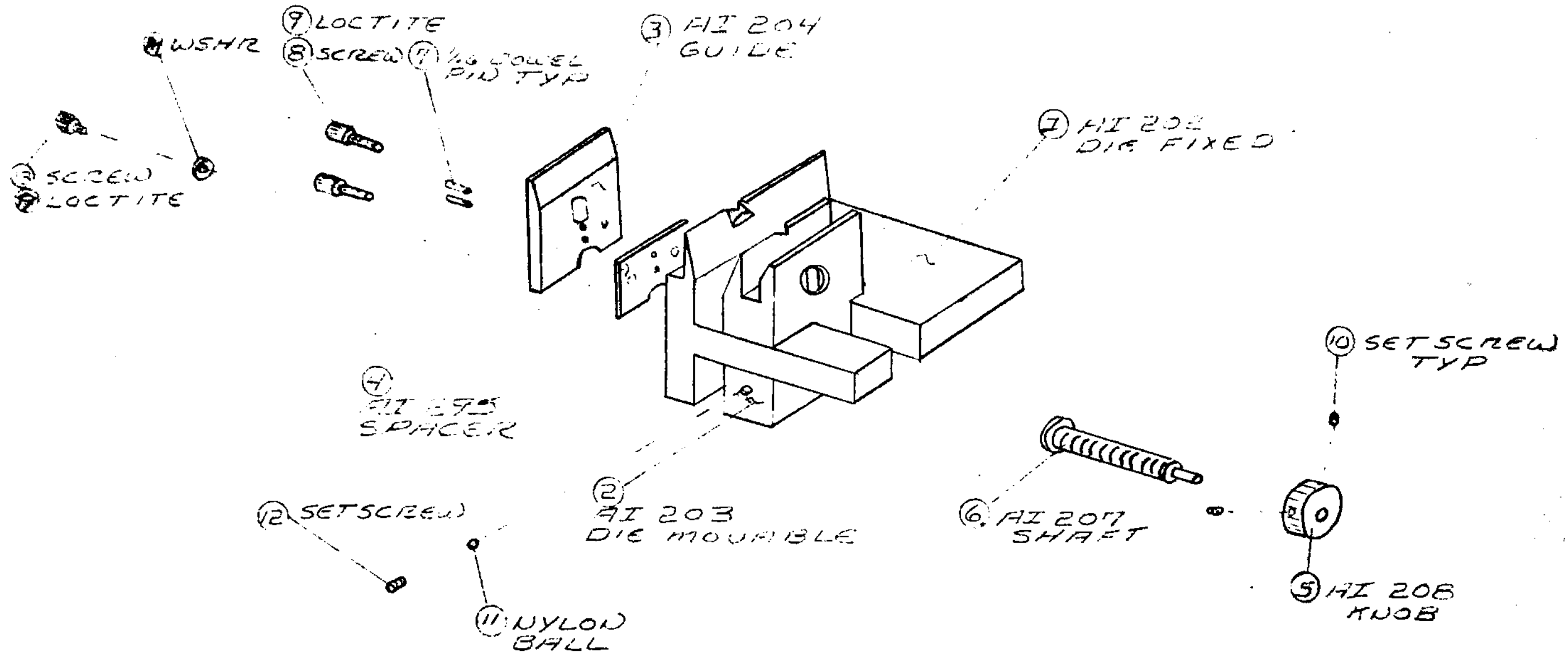
MATERIAL		AMISTAR CORPORATION	
FINISH		TITLE	
ALL SURFACES		CONTROL PWB SCHEMATIC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:		SHALL APPLY	
FRAC	DEC	ANG	SIGNATURES
1/16	.005	±	DAY MO YR
			DRAWN SB 10 2 76
			CHECKED
SIZE	DWG NO	REV	
B	AI-336	1	
SCALE		FCF AI-335 SHEET OF	

COMPONENT VALUES	
VALUE	DESIGNATION
H1361	S1
2EG320	Q1
330Ω	R1
2.2K	R2, R3, R4



B	11-76	ADDED 6 PIN CONNECTION			
LTR	ZONE	DATE	DESCRIPTION	BY	APPD
REVISIONS					

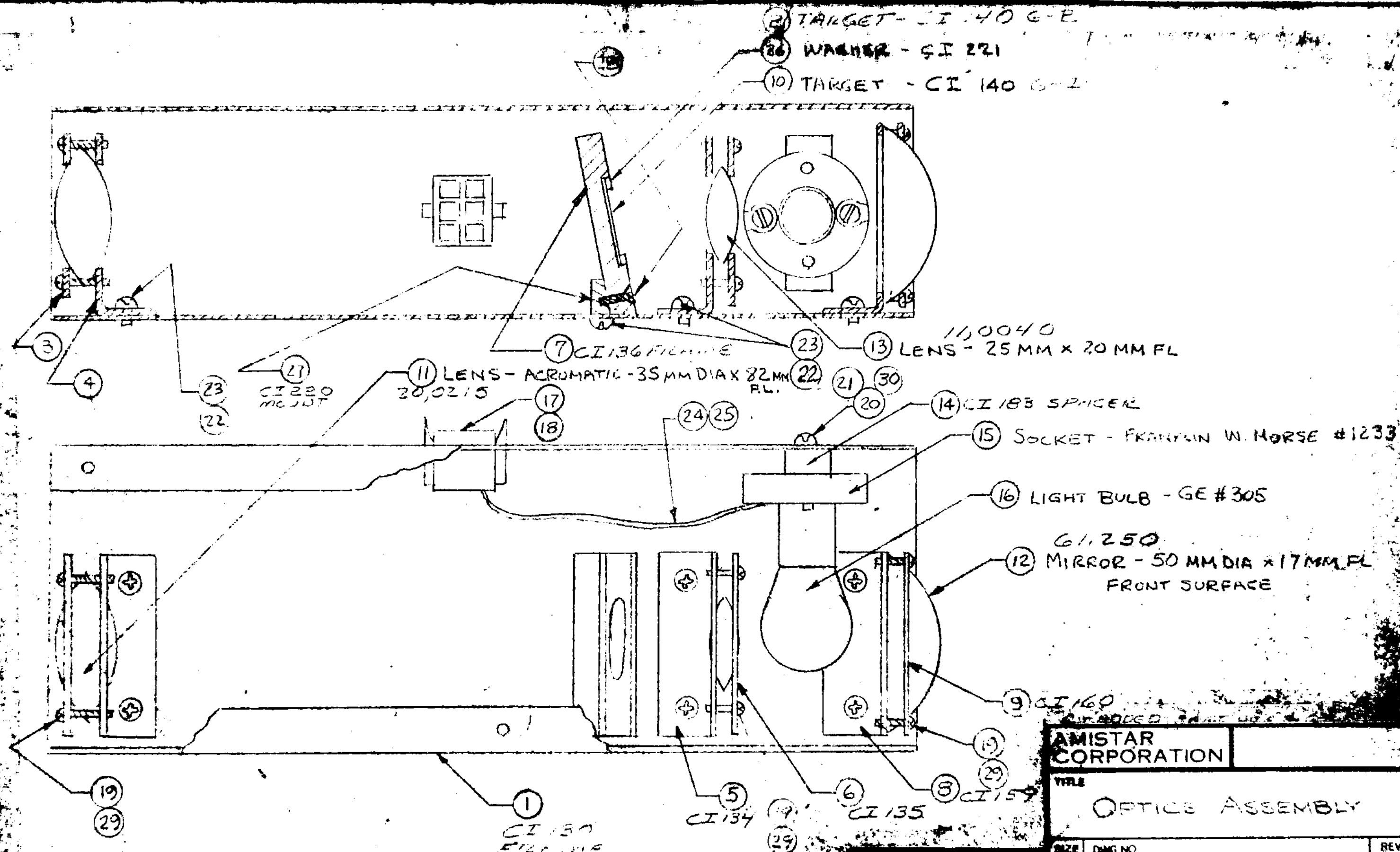
MAT'L		AMISTAR CORPORATION	
FINISH		TITLE	
ALL SURFACES <input checked="" type="checkbox"/>		R-DET. PWB SCHEMATIC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:		UNLESS OTHERWISE SPECIFIED STANDARD SHOP PRACTICES PER	
		SMALL APPLY	
FRACT	DEC	ANG	
*	XXX	±	
	XXX		
SIGNATURES		DRY	NO
DRAWN		86	24 4 76
CHECKED			
SIZE	DWG NO	REV	
B	AI-341	A	
SCALE	FCF AI-340		SHEET 1 OF 1



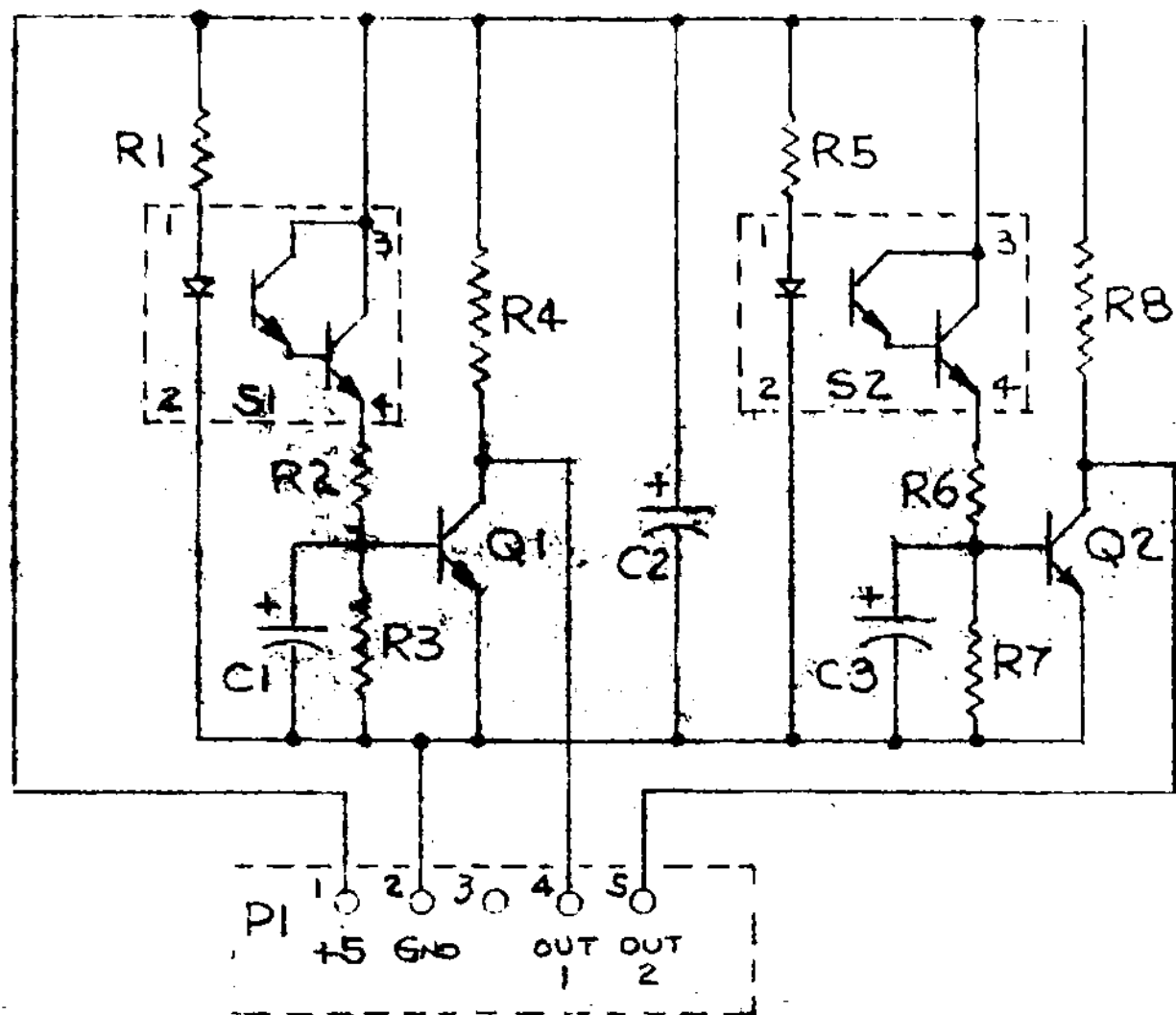
- NOTES
- ④ HI 202, 203 & 204 ARE MACHINED AS MATCHED SETS
 - ③ G-3 DIE CONTAINS 6-3 HI 203 & TWO HI 295 SPACERS
 - ② G-2 DIE INCORPORATES 6-2 HI 203 & ONE HI 295 SPACER
 - ① G-1 DIE INCORPORATES 6-1 HI 203 & NO HI 295 SPACERS

PL
ISSUED

LTR	ZONE	DATE	DESCRIPTION	BY	APPD
MATERIAL			AMISTAR CORPORATION		
FINISH			TITLE		
ALL SURFACES <input checked="" type="checkbox"/>			FORMING DIE ASSEMBLY		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:			SHALL APPLY		
FRACT	DEC	ANG	SIGNATURES	DAY	MO
±	XX±	±	DRAWN		
	XXX±		CHECKED		
SIZE			DWG NO.		REV
			AI 393		B
SCALE			FCF		SHEET
					OF



AMISTAR CORPORATION		TITLE	
		OPTICS ASSEMBLY	
SIZE	DWG NO	REV	
B	CI-109	C	
CHECKED	DAY MO YR	SCALE	SHEET 1 OF
		FCF CI-109	

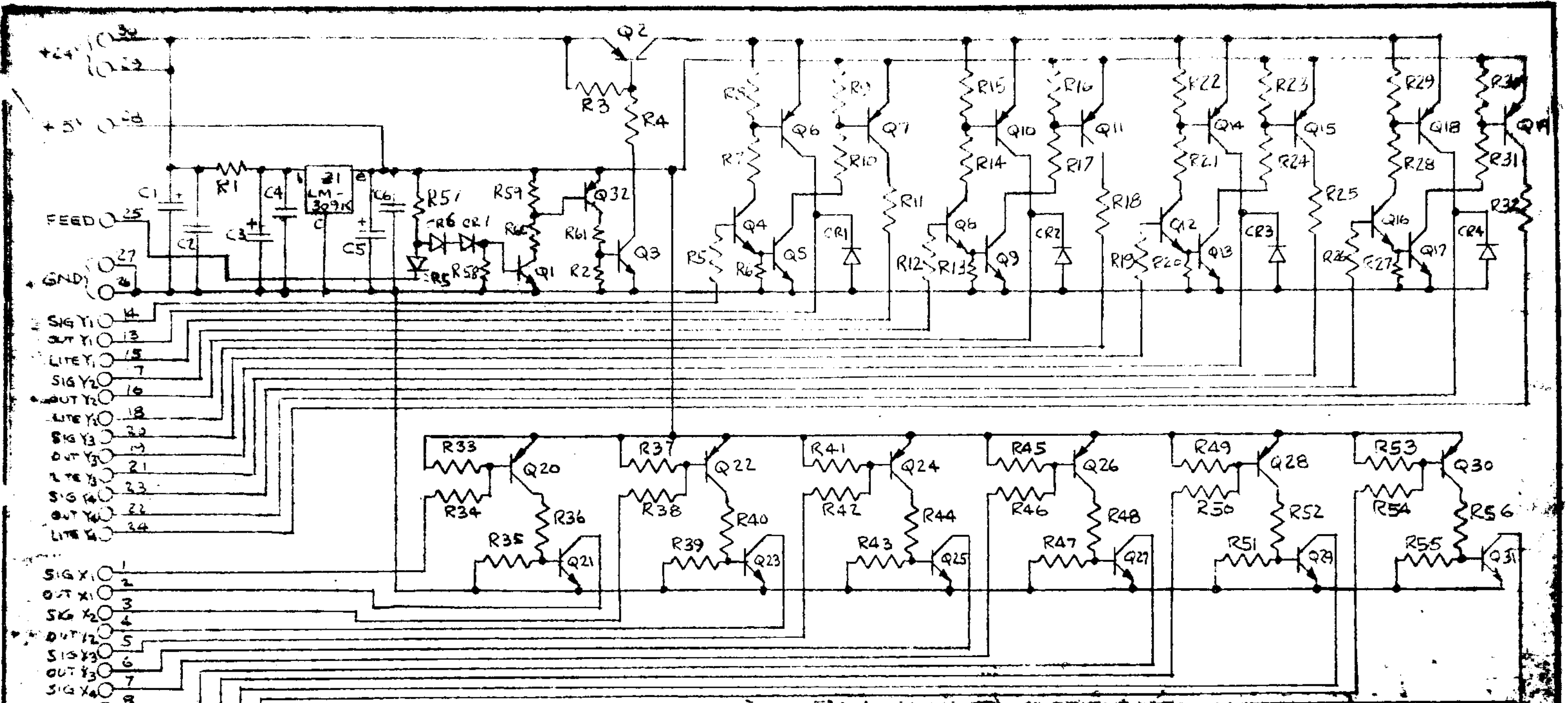


COMPONENT VALUES

- R1, R5 - 330 Ω 1/4 W
- R2, R3, R6, R7 - 2.2K 1/4 W
- R4, R8 - 2.2K 1/4 W
- C1, C3 - 1 μfd 35V TANTALUM
- C2 - 10 μfd 10V TANTALUM
- S1, S2 - H13-B1 SENSOR
- Q1, Q2 - SE6020

B1	17/76	CHNG	10K TO 2.2K	R2 R3 R6 R7	SPB
LTR	ZONE	DATE	DESCRIPTION	BY	APPD
REVISIONS					

MATERIAL			AMISTAR CORPORATION		
FINISH			TITLE		
ALL SURFACES <input checked="" type="checkbox"/>			HEAD FWB SCHEMATIC		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:			UNLESS OTHERWISE SPECIFIED, STANDARD SHOP PRACTICES PER SHALL APPLY		
FRAC	DEC	ANG	SIGNATURES	DAY	MO
±	XX1 XXX±	±	DRAWN		YR
			CHECKED		
SIZE		DNG NO		REV	
≈		CI-251		C	
SCALE		FCF		SHEET / OF	



- FEED 25
- GND 26
- SIG Y1 14
- OUT Y1 13
- LITE Y1 15
- SIG Y2 7
- OUT Y2 16
- LITE Y2 18
- SIG Y3 30
- OUT Y3 19
- LITE Y3 21
- SIG Y4 23
- OUT Y4 22
- LITE Y4 34
- SIG X1 1
- OUT X1 2
- SIG X2 3
- OUT X2 4
- SIG X3 6
- OUT X3 7
- SIG X4 8
- OUT X4 9
- SIG X5 10
- OUT X5 11
- SIG X6 12
- OUT X6 12

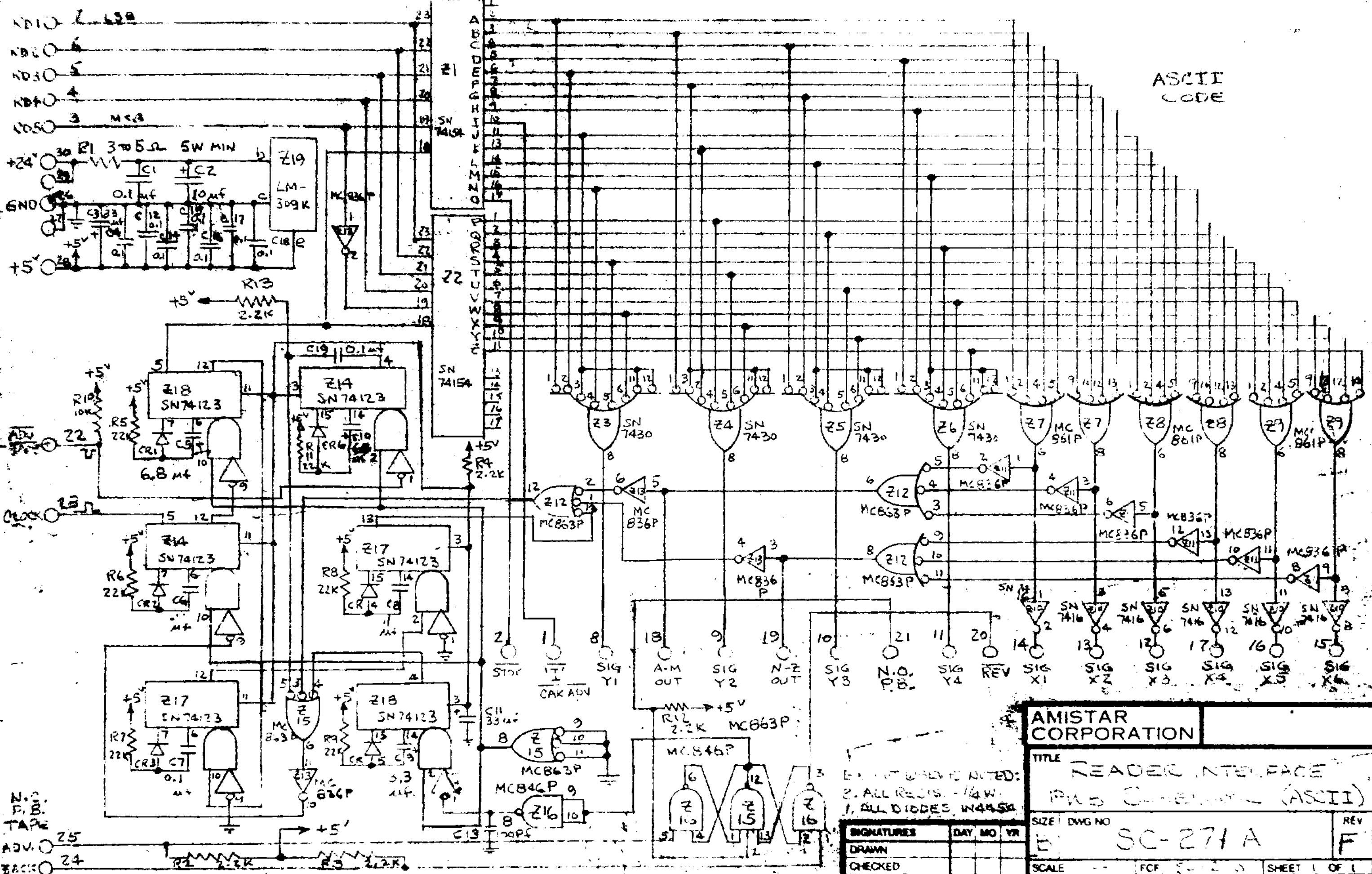
VALUE	DESIGNATION
10K-1/4W	R33, R37, R41, R45, R49, R53
1K-1/4W	R2, 3, 5, 6, 8, 9, 10, 12, 13, 15, 16, 17, 19, 20, 22, 23, 24, 26, 27, 28, 30, 31, 34, 35, 38, 39, 42, 43, 46, 47, 50, 51, 54, 55
470Ω-1/4W	R4, R7, R14, R21, R28, R61
150Ω-2W	R1
120Ω-1/4W	R11, R18, R25, R32
52Ω-1/4W	R36, R40, R44, R48, R52, R56
33μf-10V	C5
10μf-50V	C1, C3
C _{0.1μf-50V}	C2, C4, C6
2N5193	Q2, Q6, Q10, Q14, Q18
2N5190	Q21, Q23, Q25, Q27, Q29, Q31
2N4395	Q7, 11, 15, 19, 20, 22, 24, 26, 28, 30, 32

VALUE	DESIGNATION
2.2K	R57, 58, 59, 60
1N4734	CR5, 6, 7

VALUE	DESIGNATION
SE 6010	Q1, 3, 4, 5, 9, 12, 13, 16, 17
1N4720	CR1, 2, 3, 4

FINISH			UNLESS OTHERWISE SPECIFIED, STANDARD SHOP PRACTICES PER		
ALL SURFACES			SHALL APPLY		
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES TOLERANCES ON:			SIGNATURES		
FRAC	DEC	ANG	DAY		MO YR
±	XX±	±			
	XXX±		DRAWN		CHECKED

AMISTAR CORPORATION		TITLE		REV.	
		X-Y DRIVER PWB SCHEMATIC		C	
SIZE	DWG NO	SCALE		SHEET 1 OF 1	
B	SC-261	- FCF SC-260			



ASCII
CODE

AMISTAR CORPORATION	
TITLE: READER INTERFACE	
PWB CONNECTION (ASCII)	
SIZE: DWG NO	REV
E	F
SCALE: FCF	SHEET 1 OF 1

EX: AT 04/16/68 ACTED:
 2. ALL RESIS. - 1/4W
 1. ALL DIDDIES, W445A

SIGNATURES	DAY	MO	YR
DRAWN			
CHECKED			

N.O. P.B. TAPE
 ADV. 25
 BACK 24