

**digital**

202

**861**

**Engineering Drawings**

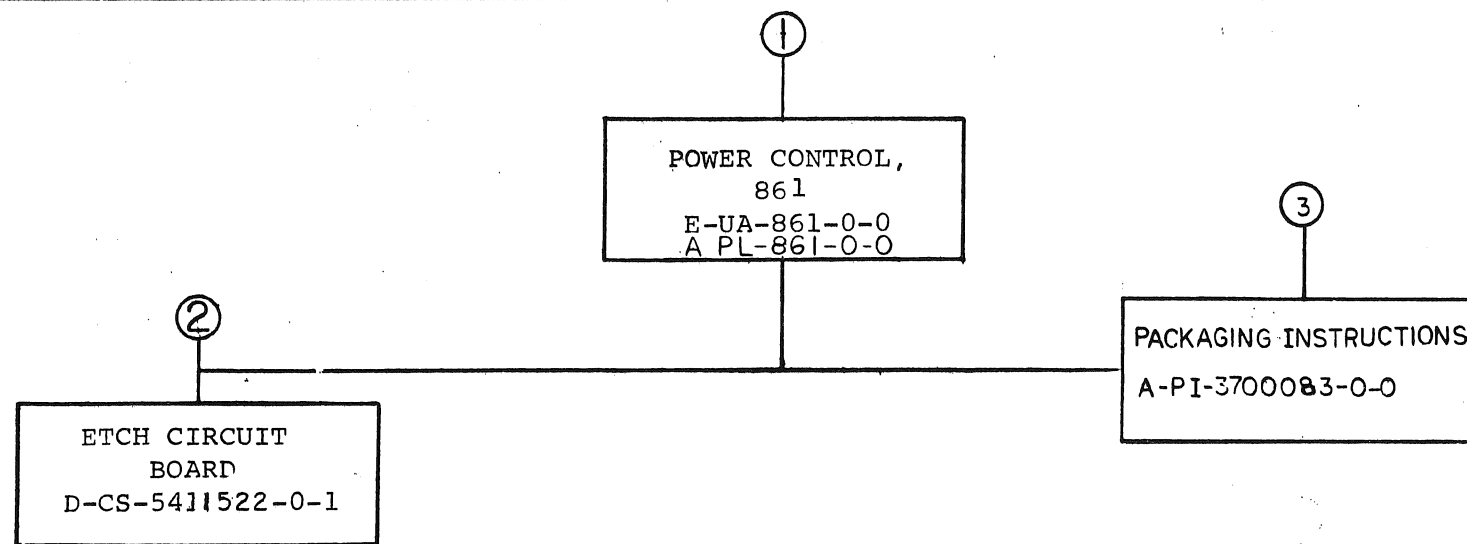
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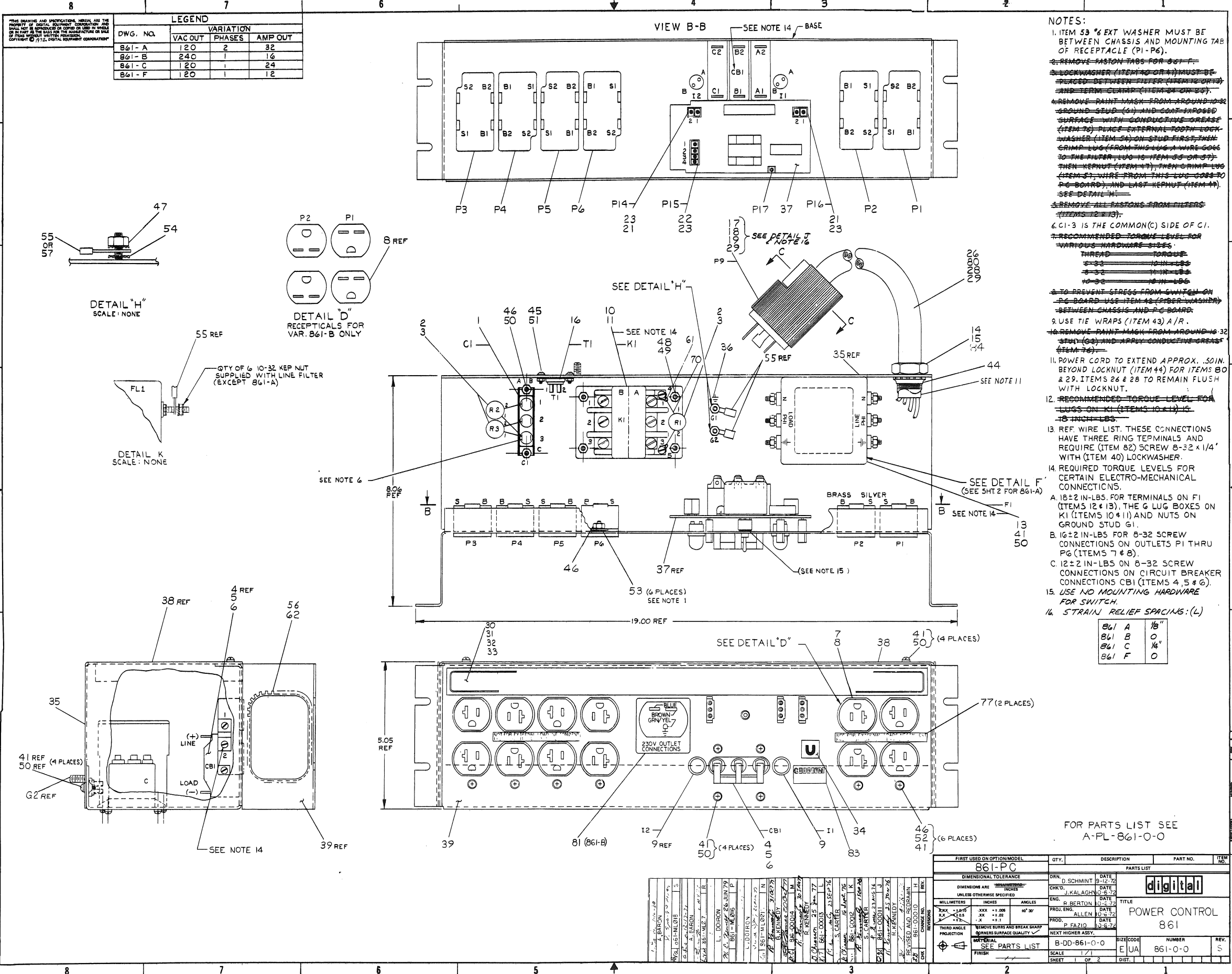






TITLE	SHEET	SIZE	CODE	NUMBER	REV
POWER CONTROL	2 OF 3	B	DD	861-0	R





DWG. NO.	VARIATION		
	VAC OUT	PHASES	AMP OUT
B61-A	120	2	32
B61-B	240	1	16
B61-C	120	1	24
B61-F	120	1	12

- NOTES:**
- ITEM 53 1/2 EXT WASHER MUST BE BETWEEN CHASSIS AND MOUNTING TAB OF RECEPTACLE (PI-P6).
  - REMOVE FASTON TABS FOR 861-F.
  - LOCKWASHER (ITEM 43) MUST BE PLACED BETWEEN FILTER (ITEM 10) AND TERMINAL CHASSIS (ITEM 11).
  - REMOVE PAINT MASK FROM AROUND GROUND STUD (4) AND CONTACT SURFACE WITH CONDUCTIVE GREASE (ITEM 7). PLACE EXTERNAL TIGHTENING WASHER (ITEM 54) ON STUD FIRST THEN GRIND LOG (FROM THIS LOG WIRE GOES TO THE FILTER LOG IS ITEM 55 OR 57) THEN NUT (ITEM 11), THEN GRIND LOG (ITEM 5), WIRE FROM THIS LOG GOES TO P-6 BOARD, AND LAST NUT (ITEM 11). SEE DETAIL H.
  - REMOVE ALL FASTONS FROM FILTERS (ITEMS 12-13).
  - C1-3 IS THE COMMON (C) SIDE OF C1.
  - RECOMMENDED TORQUE LEVEL FOR VARIOUS HARDWARE SIZES:
 

THREAD	TORQUE
8-32	10 IN-LBS
8-32	11 IN-LBS
10-32	10 IN-LBS
  - TO PREVENT STRESS FROM SWITCH ON P-6 BOARD USE ITEM 48 (FIBER WASHER) BETWEEN CHASSIS AND P-6 BOARD.
  - USE TIE WRAPS (ITEM 43) A/R.
  - REMOVE PAINT MASK FROM AROUND 10-32 STUD (6) AND APPLY CONDUCTIVE GREASE (ITEM 7).
  - POWER CORD TO EXTEND APPROX. .50 IN. BEYOND LOCKNUT (ITEM 44) FOR ITEMS B0 & 29. ITEMS 26 & 28 TO REMAIN FLUSH WITH LOCKNUT.
  - RECOMMENDED TORQUE LEVEL FOR LUGS ON K1 (ITEMS 10 & 11) IS 10 INCH-LBS.
  - REF. WIRE LIST. THESE CONNECTIONS HAVE THREE RING TERMINALS AND REQUIRE (ITEM 82) SCREW 8-32 X 1/4" WITH (ITEM 40) LOCKWASHER.
  - REQUIRED TORQUE LEVELS FOR CERTAIN ELECTRO-MECHANICAL CONNECTIONS:
 

A	18 ± 2 IN-LBS. FOR TERMINALS ON FI (ITEMS 12 & 13), THE G LUG BOXES ON K1 (ITEMS 10 & 11) AND NUTS ON GROUND STUD G1.
B	16 ± 2 IN-LBS FOR 8-32 SCREW CONNECTIONS ON OUTLETS PI THRU P6 (ITEMS 7 & 8).
C	12 ± 2 IN-LBS ON 8-32 SCREW CONNECTIONS ON CIRCUIT BREAKER CONNECTIONS CBI (ITEMS 4, 5 & 6).
  - USE NO MOUNTING HARDWARE FOR SWITCH.
  - STRAIN RELIEF SPACING: (L)
 

B61 A	1/8"
B61 B	0
B61 C	1/4"
B61 F	0

REV.	DATE	BY	CHKD.	DESCRIPTION
1	9-12-76	D. SCHMINT		DRN
2	10-2-77	J. KALAGHOS		CHKD.
3	10-2-77	D. BERTON		ENG.
4	10-2-77	ALLEN		PROJ. ENG.
5	10-9-77	P. FAZIO		PROD.
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FIRST USED ON OPTION/MODEL		QTY.	DESCRIPTION	PART NO.	ITEM NO.																				
861-PC																									
PARTS LIST																									
<table border="1"> <tr> <td>DRN</td> <td>D. SCHMINT</td> <td>DATE</td> <td>9-12-76</td> </tr> <tr> <td>CHKD.</td> <td>J. KALAGHOS</td> <td>DATE</td> <td>10-2-77</td> </tr> <tr> <td>ENG.</td> <td>D. BERTON</td> <td>DATE</td> <td>10-2-77</td> </tr> <tr> <td>PROJ. ENG.</td> <td>ALLEN</td> <td>DATE</td> <td>10-2-77</td> </tr> <tr> <td>PROD.</td> <td>P. FAZIO</td> <td>DATE</td> <td>10-9-77</td> </tr> </table>						DRN	D. SCHMINT	DATE	9-12-76	CHKD.	J. KALAGHOS	DATE	10-2-77	ENG.	D. BERTON	DATE	10-2-77	PROJ. ENG.	ALLEN	DATE	10-2-77	PROD.	P. FAZIO	DATE	10-9-77
DRN	D. SCHMINT	DATE	9-12-76																						
CHKD.	J. KALAGHOS	DATE	10-2-77																						
ENG.	D. BERTON	DATE	10-2-77																						
PROJ. ENG.	ALLEN	DATE	10-2-77																						
PROD.	P. FAZIO	DATE	10-9-77																						
DIMENSIONAL TOLERANCE		UNLESS OTHERWISE SPECIFIED																							
DIMENSIONS ARE IN INCHES																									
MILLIMETERS		INCHES																							
XXX ± 0.015		XX ± 0.01																							
XX ± 0.01		X ± 0.01																							
X ± 0.01		± 0.01																							
THIRD ANGLE PROJECTION		REMOVE BURRS AND BREAK SHARP EDGES SURFACE QUALITY																							
NEXT HIGHER ASSY.		SEE PARTS LIST																							
FINISH		SCALE 1/1																							
		SHEET 1 OF 2																							

FOR PARTS LIST SEE A-PL-861-0-0

digital  
POWER CONTROL  
861

SIZE CODE E UA NUMBER 861-0-0 REV. S

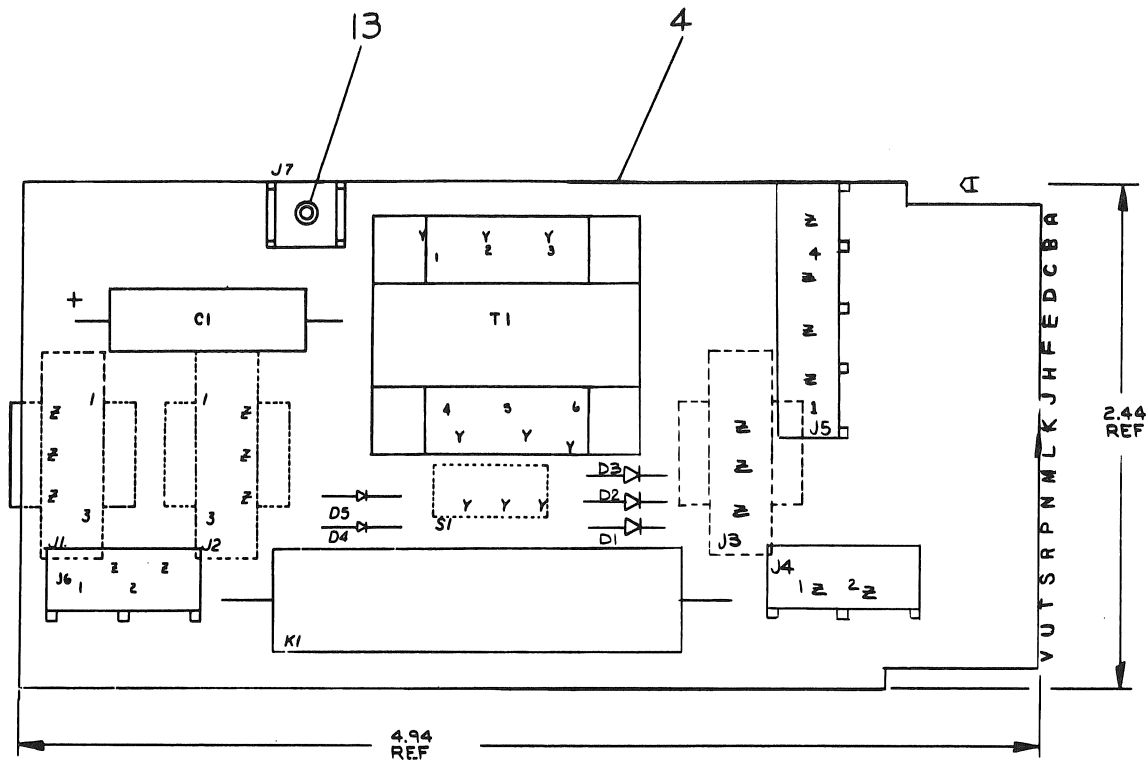
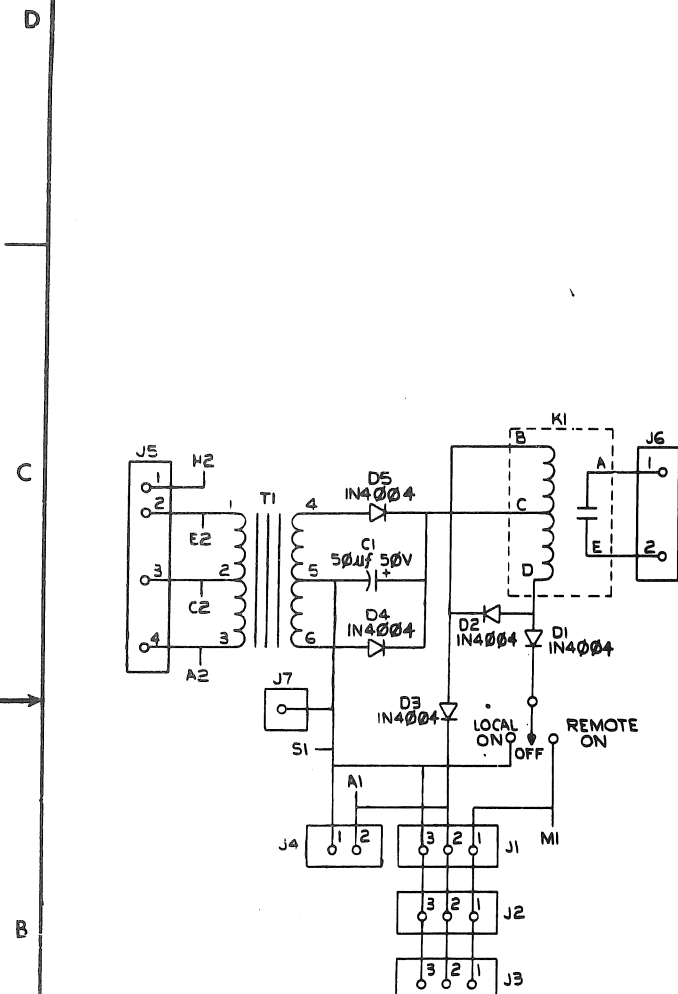


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NOTES:

DCS5411522-0-1

REF	X-Y COORDINATE HOLE LOCATION	K-CO-5411522-0-4	1	
REF	ASSY/DRILLING HOLE LAYOUT	D-AH-5411522-0-5	2	
REF	MODULE ECO HISTORY	B-MH-5411522-0-6	3	
I	ETCHED CIRCUIT BOARD	5011521	4	
1	KI	RELAY, REED, 48 V COIL, 2.5 A CMT	5	
1	T1	TRANSFORMER MMC 5415	6	
1	C1	CAP 50 MFD 50V TANT	7	
5	D1-D5	DIODE IN4004	8	
1	S1	SWITCH	9	
3	J1-J3	HOUSING, SOCKET	10	
1	J5	CONN, UNIVERSAL, 4 PIN HEADER	11	
2	J4, J6	CONN, UNIVERSAL, 2 PIN HEADER	12	
1		EYELET	9006732-00	13
9		TERMINAL, SOCKET CONTACT	1209456-01	14
1	J7	TERMINAL, SOLDERLESS	9007113-00	15



QTY	REF DESIGNATION	DESCRIPTION	PART NO.	ITEM NO.


IC TYPE                          GND                          + 5V

GND AND 5V ARE USUALLY PIN 7 AND 14 RESPECTIVELY EXCEPTS ARE STATED ABOVE

IC PIN LOCATIONS

FIRST USED ON OPTION MODEL  
861-D / 861-E

PARTS LIST

DRN <i>R.F. Allen</i>	DATE 2/4/75	<p><b>digital</b> EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS</p> <p>TITLE PILOT CONTROL</p> <p>SIZE CODE NUMBER REV DCS5411522-0-1 B</p>	
CHK'D <i>W.F. McC...</i>	DATE 2/11/75		
ENG <i>John Deane</i>	DATE 2/11/75		
PROJ. ENG. <i>John Deane</i>	DATE 2/11/75		
PROD. <i>John Deane</i>	DATE 2/11/75		
REVISIONS			
CHK	CHANGE NO.	REV	
861-D / 861-E	861-D / 861-E	1	
DEC. NO.	EIA NO.	DEC. NO.	EIA NO.
SEMICONDUCTOR CONVERSION CHART			
SCALE	NONE		
SHEET	1 OF 1		

DCS5411522-0-1

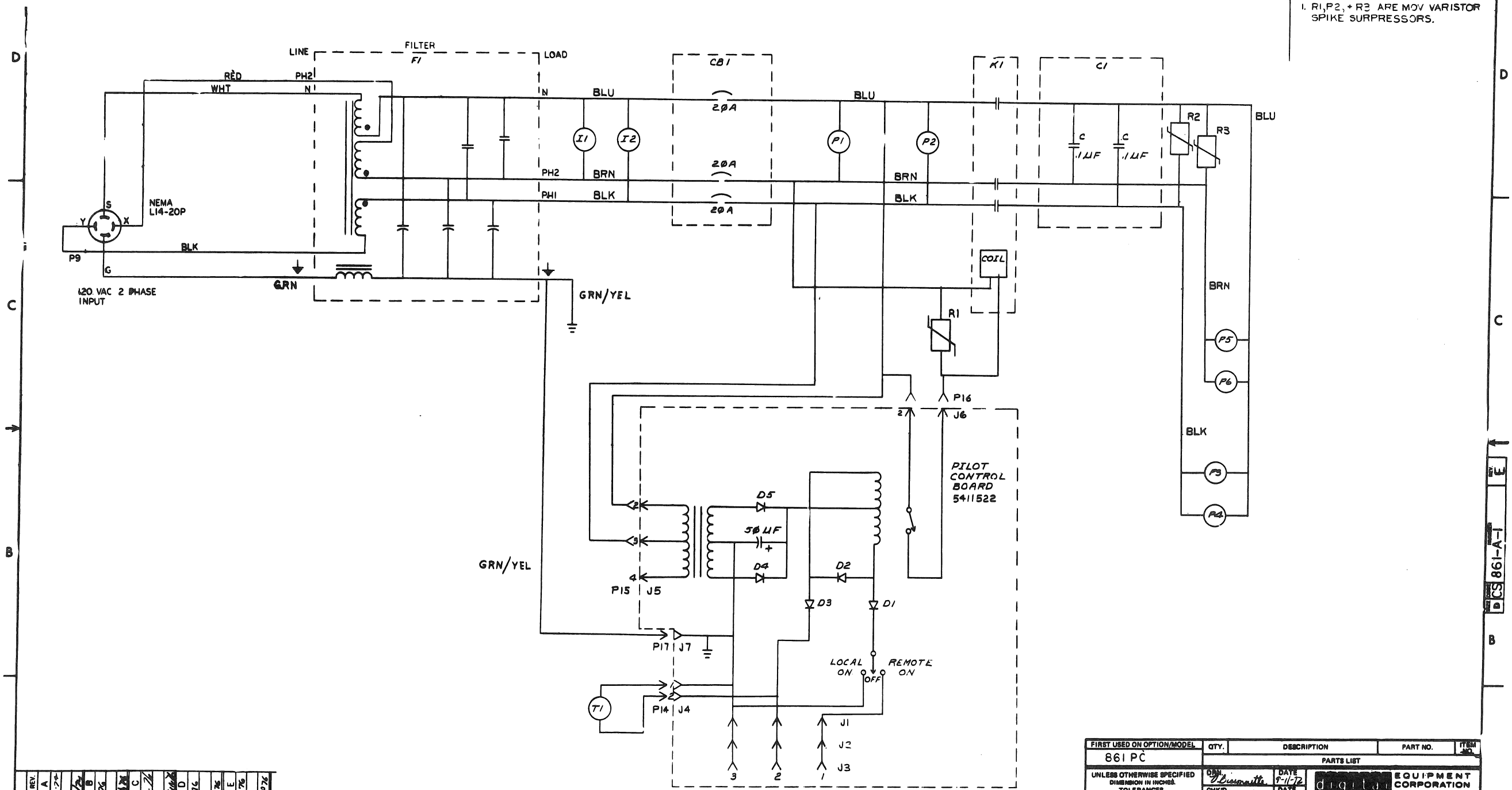
1



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1-7-1981 SC 2

NOTE:  
1. R1, P2, + R3 ARE MOV VARISTOR SPIKE SUPPRESSORS.

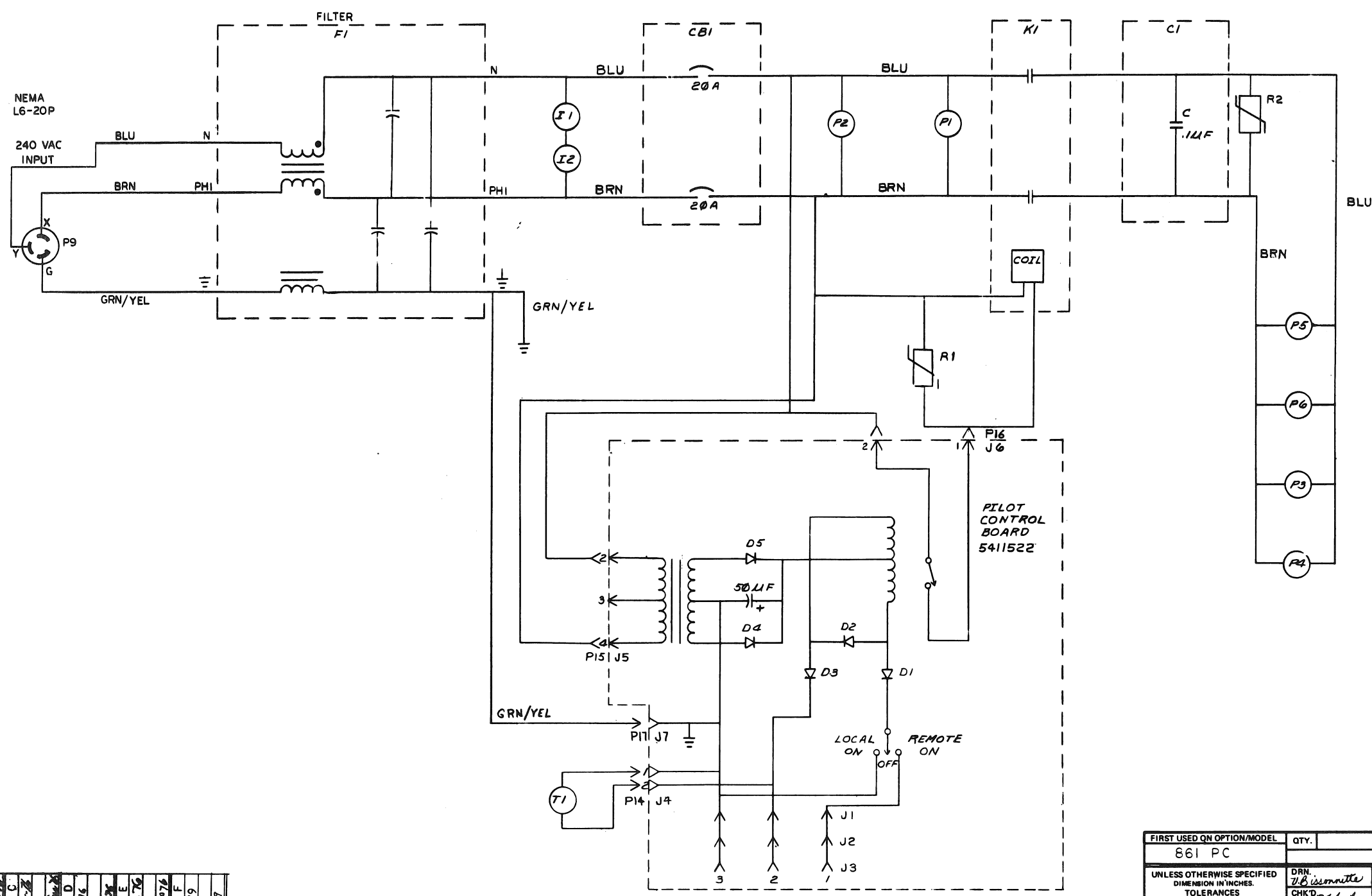


REV.	NO.	DATE	BY	CHKD.
A	1	12/18/74	R. KENNEDY	
B	2	12-18-74	R. KENNEDY	
C	3	12-18-74	R. KENNEDY	
D	4	12-18-74	R. KENNEDY	
E	5	12-18-74	R. KENNEDY	

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
861 PC				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES		DATE 9-11-72	DIGITAL EQUIPMENT CORPORATION	
DECIMALS	ANGLES	DATE 12-3-72	TITLE	
.XXX = .008	± 0° 30'	DATE 12-3-72	CIRCUIT SCHEMATIC (861-A PC.)	
.XX = .001		DATE 12-3-72		
.X = .0005		DATE 12-3-72		
REMOVES BURRS AND BREAK SHARP CORNERS SURFACE QUALITY				
MATERIAL	NEXT HIGHER ASSEMBLY	SCALE	NUMBER	REV.
	B-DD-861-0	1	DCS 861-A-1	E
FINISH	SHEET	OF	DIST.	

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NOTE :  
1. R1+R2 ARE MOV VARISTOR SPIKE SURPRESSORS.



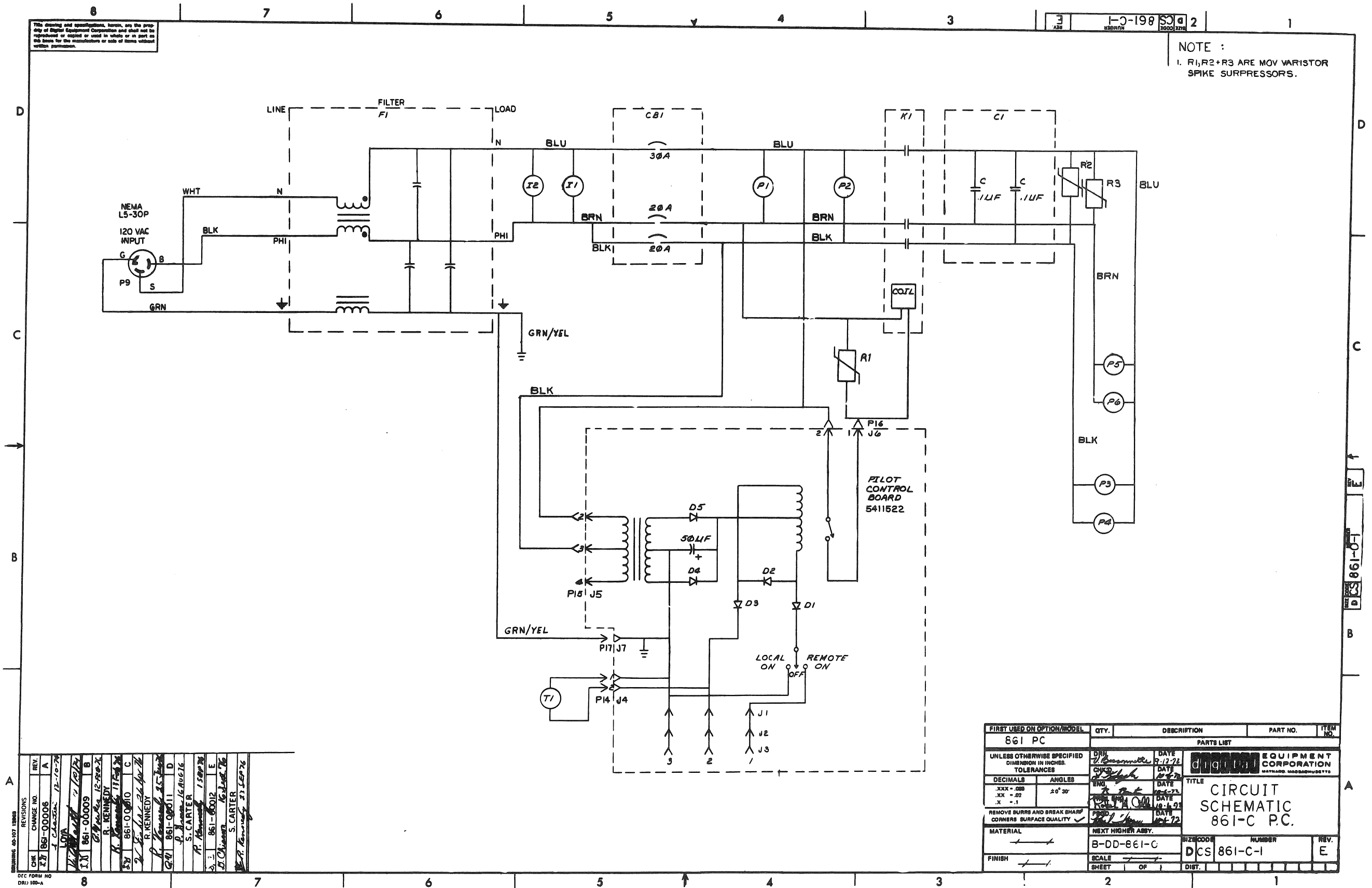
REV.	CHANGE NO.	DATE	BY	CHK'D
1	000001	12-10-70	J. Chittenden	J. Chittenden
2	000002	12-10-70	J. Chittenden	J. Chittenden
3	000003	12-10-70	J. Chittenden	J. Chittenden
4	000004	12-10-70	J. Chittenden	J. Chittenden
5	000005	12-10-70	J. Chittenden	J. Chittenden
6	000006	12-10-70	J. Chittenden	J. Chittenden
7	000007	12-10-70	J. Chittenden	J. Chittenden
8	000008	12-10-70	J. Chittenden	J. Chittenden
9	000009	12-10-70	J. Chittenden	J. Chittenden
10	000010	12-10-70	J. Chittenden	J. Chittenden
11	000011	12-10-70	J. Chittenden	J. Chittenden
12	000012	12-10-70	J. Chittenden	J. Chittenden
13	000013	12-10-70	J. Chittenden	J. Chittenden
14	000014	12-10-70	J. Chittenden	J. Chittenden
15	000015	12-10-70	J. Chittenden	J. Chittenden
16	000016	12-10-70	J. Chittenden	J. Chittenden
17	000017	12-10-70	J. Chittenden	J. Chittenden
18	000018	12-10-70	J. Chittenden	J. Chittenden
19	000019	12-10-70	J. Chittenden	J. Chittenden
20	000020	12-10-70	J. Chittenden	J. Chittenden

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
861 PC				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES. TOLERANCES		DRN. <i>J. Chittenden</i> DATE 9-11-70	<b>digital</b> EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
DECIMALS	ANGLES	CHK'D. <i>J. Chittenden</i> DATE 10-6-72		
.XXX - .005	± 0° 30'	ENG. <i>J. Chittenden</i> DATE 10-6-72	TITLE <b>CIRCUIT SCHEMATIC (861-B.P.C.)</b>	
.XX - .02		PROJ. ENG. <i>J. Chittenden</i> DATE 10-6-72		
.X - .1		PROD. <i>J. Chittenden</i> DATE 10-6-72	NEXT HIGHER ASSY. B-DD-861-0	
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY ✓				
MATERIAL		SCALE	SIZE CODE	NUMBER
FINISH		SHEET	DCS	861-B-1
		OF	DIST.	REV. F

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1-0-198 SCS 2

NOTE :  
1. R1, R2+R3 ARE MOV VARISTOR SPIKE SUPPRESSORS.



REV.	CHANGE NO.	DATE	BY
A	1861-00006	12-10-74	J. Chas. 12-10-74
B	1861-00009	11-12-74	J. Chas. 11-12-74
C	1861-00010	11-12-74	R. Kennedy 11-12-74
D	1861-00011	11-12-74	R. Kennedy 11-12-74
E	1861-00012	11-12-74	S. Carter 11-12-74
	1861-00013	11-12-74	S. Carter 11-12-74
	1861-00014	11-12-74	S. Carter 11-12-74
	1861-00015	11-12-74	S. Carter 11-12-74
	1861-00016	11-12-74	S. Carter 11-12-74
	1861-00017	11-12-74	S. Carter 11-12-74
	1861-00018	11-12-74	S. Carter 11-12-74
	1861-00019	11-12-74	S. Carter 11-12-74
	1861-00020	11-12-74	S. Carter 11-12-74

FIRST USED ON OPTION/MODEL	QTY.	DESCRIPTION	PART NO.	ITEM NO.
861 PC				
PARTS LIST				
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES	DATE	DATE	EQUIPMENT CORPORATION	
TOLERANCES	DATE	DATE	MAYFIELD, MASSACHUSETTS	
DECIMALS	ANGLES	DATE	TITLE	
.XXX = .000	±0° 30'	DATE	CIRCUIT SCHEMATIC	
.XX = .02		DATE	861-C P.C.	
.X = .1		DATE		
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	DATE	DATE		
MATERIAL	NEXT HIGHER ASSY.	DATE		
FINISH	B-DD-861-G	DATE		
SCALE	DCS 861-C-1	DATE		
SHEET	OF	DATE		
DIST.		DATE		

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DIGITAL EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS					
PACKAGING INSTRUCTION			REV: <u>A</u>	DATE: <u>4/73</u>	
TITLE			<u>B</u>	<u>8/78</u>	
INSTR PKG POWER CONTROL 861, ATR 16					
MATERIAL REQUIREMENTS					
QUANTITY	PURCHASE SPECIFICATIONS NO.	DESCRIPTION			
1	9905229	Full Overlap Carton			
2	9905228	Expanded Polystyrene Foam Insert			
A/R		3-inch wide Glasflex Tape			
PACKAGING INSTRUCTIONS					
STEP	PROCEDURE				
1.	Set up the Full Overlap Carton (9905229) using one strip of tape across the bottom and extending up the sides approximately three inches. See Figure 1.				
2.	Place one expanded Polystyrene Foam Insert (9905228) in each end of the carton with the slots in the foam facing inward.				
3.	Place the 861 or ATR 16 Power Control in the carton with the ears of the upright sliding into the slots in the foam.				
4.	Coil the Power Cord so that it fits into the cavity in the rear of the Power Control.				
5.	Close and seal the carton with one piece of tape across the top of the carton and extending down the sides approximately three inches.				
ENG	APPD.	SIZE	CODE	NUMBER	REV
<i>Alfred West</i>	<i>Kirk Blaine</i>	A	SP	3700083-0-0	B

DEC 8-(551)-1031-1-R671  
DRA - 129

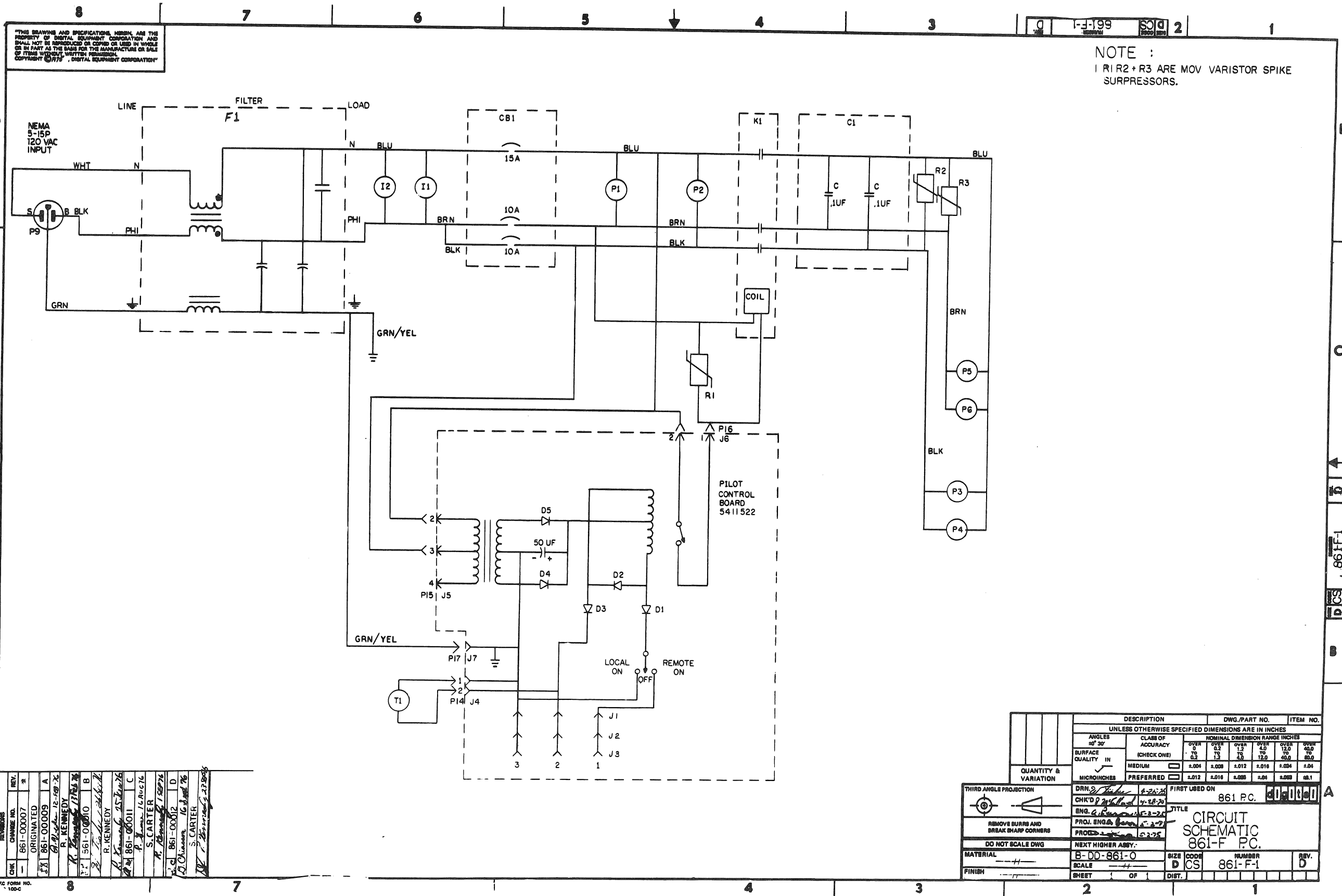
SHEET 1 OF 2

PACKAGING INSTRUCTION			REV: <u>A</u>	DATE: <u>4/73</u>
TITLE			<u>B</u>	<u>8/78</u>
INSTR PKG POWER CONTROL 861, ATR 16				
FIGURE 1				
<p>NOTE Make changes to the "C" size original only and rephotograph.</p>				
ENG.	APPD.	SIZE	CODE	NUMBER
<i>Alfred West</i>	<i>J. D. Lawrence</i>	A	SP	3700083-0-0

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DRC-107

SHEET 2 OF 2



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NOTE :  
R1 R2 + R3 ARE MOV VARISTOR SPIKE SURPRESSORS.

REV.	NO.	DATE	BY	CHKD.	DESCRIPTION
1	861-00007				ORIGINATED
2	861-00009	12-19-74	R. KENNEDY		REVISED
3	561-00010		R. KENNEDY		REVISED
4	861-00011	14 AUG 76	S. CARTER		REVISED
5	861-00012		S. CARTER		REVISED
6	861-00013		S. CARTER		REVISED
7	861-00014		S. CARTER		REVISED

QUANTITY & VARIATION		DESCRIPTION	DWG. PART NO.	ITEM NO.
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES				
ANGLES	30° 30'	CLASS OF ACCURACY	NOMINAL DIMENSION RANGE INCHES	
SURFACE QUALITY	IN	MEDIUM	OVER 0	OVER 0.2
			OVER 0.2	OVER 0.5
MICROINCHES	PREFERRED	±.004	±.008	±.012
		±.016	±.020	±.024
THIRD ANGLE PROJECTION		FIRST USED ON 861 P.C.		
REMOVE BURRS AND BREAK SHARP CORNERS		TITLE		
DO NOT SCALE DWG		CIRCUIT SCHEMATIC		
MATERIAL		861-F P.C.		
SCALE		B-DD-861-0		
FINISH		SIZE CODE NUMBER		
		D CS 861-F-1		
		SHEET 1 OF 1		
		DIST.		

