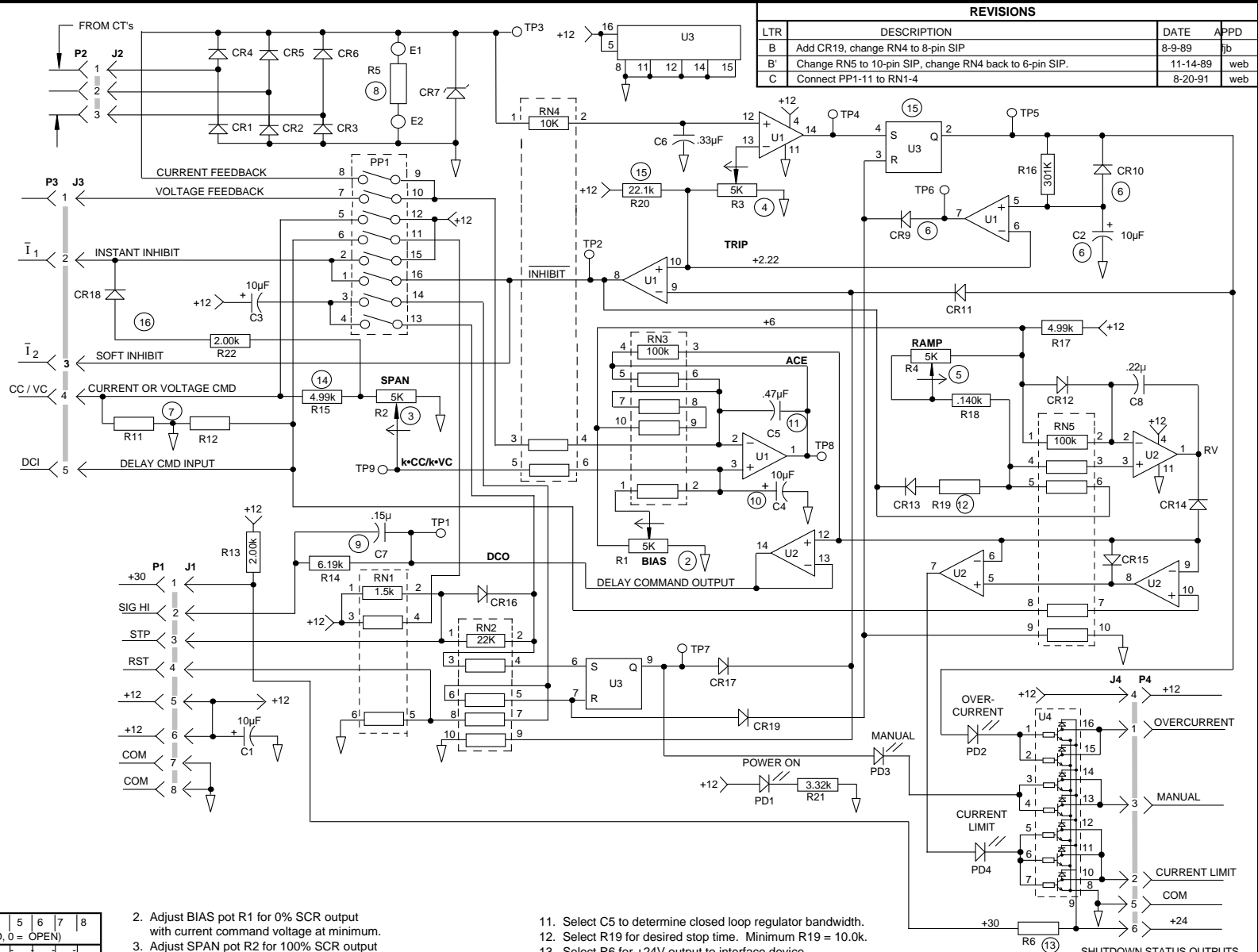


PART	DESCRIPTION
U1 - U2	LM224N
U3	MC14043BCP
U4	ULN2004A
RN1	750-63-R1.5k
RN2	750-103-R22k
RN3	750-103-R100k
RN4	750-63-R10k
RN5	750-103-R100k
R1	93P-R5K (2)
R2	93P-R5K (3)
R3	93P-R5K (4)
R4	93P-R5K (5)
R5	CW5 - 5% (8)
R6	CW2C - 5% (13)
R11	RN60 - Rxxxx (7)
R12	RN60 - Rxxxx (7)
R13	RN60 - R 2.00k
R14	RN60 - R 6.19k (9)
R15	RN60 - R 4.99k (4)
R16	RN60 - R 301k
R17	RN60 - R 4.99k
R18	RN60 - R .140k
R19	RN60 - R xxxk (2)
R20	RN60 - R 22.1k (5)
R21	RN60 - R .32k
R22	RN60 - R2.00k (16)
C1	ECS-F1CE106k
C2	ECS-F1CE106k (6)
C3	ECS-F1CE106k
C4	ECS-F1CE106k (10)
C5	MKS3 - .47μ (1)
C6	MKS3 - .33μ
C7	MKS3 - .15μ (9)
C8	MKS3 - .22μ
CR1-CR6	1N5402
CR7	1N5352
CR9-CR11	1N914B (6)
CR12-CR19	1N914B (16)
PD1	LN31GPH (GRN)
PD2-PD4	LN21RPH (RED)
PP1	436132-8
J1	640584-1
J2	1-350943-0
J3	1-350945-0
J4	640583-1
P1	640582-1
P2	350766-1
P3	350809-1
P4	640581-1
P1-P4 SCKTS	350689-3 (AWG 24-18)
PP1	436132-4
PP1 SCKT	641250-3
E1,E2	2004C SWAGE TERM.

REVISIONS			
LTR	DESCRIPTION	DATE	APPD
B	Add CR19, change RN4 to 8-pin SIP	8-9-89	jb
B'	Change RN5 to 10-pin SIP, change RN4 back to 6-pin SIP.	11-14-89	web
C	Connect PP1-11 to RN1-4	8-20-91	web



### NOTES

1. PROGRAMMING PLUG STATUS:

FUNCTION	1	2	3	4	5	6	7	8
SOFT-ON, INSTANT-OFF	X	0	-	-	-	-	-	-
SOFT-ON, SOFT OFF	0	X	-	-	-	-	-	-
120 VAC START	-	-	X	0	-	-	-	-
PUSH-BUTTON START	-	-	0	X	-	-	-	-
+12V C/V CMD INPUT	-	-	-	0	X	-	-	-
+11V DELAY CMD INPUT	-	-	-	-	0	X	-	-
CURRENT REGULATION	-	-	-	-	-	0	X	-
VOLTAGE REGULATION	-	-	-	-	-	-	-	X

- Adjust BIAS pot R1 for 0% SCR output with current command voltage at minimum.
- Adjust SPAN pot R2 for 100% SCR output with current command voltage at maximum.
- Adjust TRIP pot R3 for desired overcurrent trip level.
- Adjust RAMP pot R4 for desired ramp start time.
- Adjust SPAN pot R2 for 100% SCR output with current command voltage at maximum.
- For automatic overcurrent reset: install C2, CR9-CR10.
- For mA command signals: select R11 or R12 for 5.0 Vdc maximum signal levels.
- Select R5 for 1.00 Vdc full load current feedback signal.
- For increased stability margin: install C7, change R14 to 53.6 k $\Omega$ ; omit R41 and R52 on FCOG6100 SCR firing board.
- Install C4 to reduce current/voltage command signal bandwidth.

- Select C5 to determine closed loop regulator bandwidth.
- Select R19 for desired stop time. Minimum R19 = 10.0k.
- Select R6 for +24V output to interface device.
- Select R15 for 2.5V max. at TP9 with max. CC input.
- For higher overcurrent trip threshold: make R20 = 7.5 k $\Omega$ .
- Install CR18 and R22 for optional command pull-down on inhibit.
- If no external DCI: close PP1-7, install R12 =
- Refer to sheet #2 for description of operation for :
  - Soft-start/soft stop operation.
  - Current limiting mode with gate delay command output to firing board limited by amplified current error.
  - Current regulating mode with gate delay command output to firing board limited by gate delay command input.

SERIAL NOS.

**E371-1**

		CURRENT TRIP/REGULATOR	
		CT FEEDBACK SOFT START PWA	
dwn: jfb	10-25-88	PWA PN	Dwg No.
chk'd: web	3-15-89	CTRCT-2	<b>E371-1</b>
Sheet 1 of 2			