

+5V/-24V POWER SUPPLY BOARD

REV. D

	APPLICATION	P.C. BD. NO.	BD. NO.	SER NO.
<u>SCHEMATIC 4136J29</u>	<u>4136J60-G01</u>	<u>4136J40-1</u>		

TEST: INSTRUCTIONS 1284J74EQUIPMENT: 4136J60 TEST KIT

DATE _____

1.0 INSPECTION

.1 Identification _____	.3 Solder/Wire _____	.5 Key Slot <u>7 & 27</u>
.2 Comp./Conn. _____	.4 Temp. Cycle _____	.6 _____
		.7 _____

REMARKS:

2.0 PREPARATION

- 2.1 CONNECT +26 VDC AND COMM. (SET THE +26V CURENT LIMIT BETWEEN 1 - 1.2 AMPS.)
- 2.2 ADJUST +5V LOAD FULL CCW.
- 2.3 ADJUST -24V LOAD FULL CCW.
- 2.4 SET R5 AND R16 CCW.
- 2.5 ADD 2 (AGC - 1 AMP FUSES TO BOARD).
- 2.6 PLUG BOARD INTO TEST KIT.

3.0 CHECKOUT

- 3.1 ADJUST R5 ① FOR +5.00 VDC AT +5V OUTPUT.
ADJUST R16 ② FOR -24.0 VDC AT -24V OUTPUT.
K1 AND K2 CONTACT LEDS SHOULD BE LIT.
- 3.2 THE +5V METER SHOULD READ APPROXIMATELY .1 A.
THE -24V METER SHOULD READ APPROXIMATELY .05 A.
- 3.3 USING R5, CHECK THAT 5V OUTPUT IS ADJUSTABLE BETWEEN (+4.7 TO +5.3 VDC) AND RESET TO +5.00 VDC. LED 1 (ON BOARD) MUST BE ON.
- 3.4 USING R16, CHECK THAT -24V OUTPUT IS ADJUSTABLE BETWEEN (-21 TO -24.3 VDC) AND RESET TO -24.00 VDC. LED2 (ON BOARD) MUST BE ON.
- 3.5 INCREASE +5.0 VOLT OUTPUT BY TURNING R5 CW UNTIL THE OUTPUT DROPS OFF TO APPROXIMATELY +.4 VOLT D.C. THIS SHOULD OCCUR BETWEEN +5.4 AND +6.5 VDC.
K1 CONTACTS LED SHOULD BE OFF.
- 3.6 SET R5 CCW.
DISCONNECT THE +26 VDC MOMENTARILY, THEN RE-APPLY.
ADJUST R5 FOR +5.00 VDC.
- 3.7 INCREASE -24.0 VOLT OUTPUT BY TURNING R16 CW UNTIL THE OUTPUT DROPS OFF TO APPROXIMATELY -.4 VOLT D.C. THIS SHOULD OCCUR BETWEEN -24.4 AND -28 VDC.
K2 CONTACTS LED SHOULD BE OFF.
- 3.8 SET R16 CCW.
DISCONNECT +26 VDC MOMENTARILY, THEN RE-APPLY.
ADJUST R16 FOR -24 VDC.
- 3.9 ADJUST +5V LOAD RESISTOR FOR A POSITIVE CURRENT OF (+.49 TO +.51 A).
THE POSITIVE VOLTAGE SHOULD READ (+4.95 TO +5.05 VDC).
THE A.C. RIPPLE AT THE +5V OUTPUT SHOULD BE LESS THAN .4V PEAK TO PEAK.
- 3.10 TURN +5V LOAD UNTIL THE +5 VDC OUTPUT READS APPROXIMATELY +4.8 VDC.
THE +5V CURRENT SHOULD READ (+.6 TO +1.0 AMP).

VDC

VDC

VDC

VDC

AMP

3.11 TURN +5V LOAD FULL CW.

THE POSITIVE CURRENT SHOULD READ (APPROX. +1.5 AMPS.)

TURN +5V LOAD CCW.

3.12 TURN -24V LOAD FOR (+.15 AMPS).

THE -24 VOLT OUTPUT SHOULD READ (-23.5 TO -24.2 VDC).

THE A.C. RIPPLE AT THE -24V OUTPUT SHOULD BE LESS THAN 1.0V PEAK TO PEAK

3.13 TURN -24V LOAD UNTIL THE -24V OUTPUT READS APPROXIMATELY -23 VDC.

THE -24V CURRENT SHOULD READ (APPROX. .25 AMPS).

3.14 TURN -24V LOAD FULL CW.

THE -24V CURRENT SHOULD READ (APROX. 1.0 AMPS).

3.15 TURN -24V LOAD CCW.

CONNECT AN EXTERNAL SUPPLY TO +5V EXTERNAL INPUT.

ADJUST THE POSITIVE EXTERNAL VOLTAGE UNTIL TP2 JUST STARTS TO INCREASE.

THE EXTERNAL VOLTAGE SHOULD BE APPROX. +5.7 VDC.

K1 CONTACTS LED SHOULD BE ON.

DISCONNECT THE +5V EXTERNAL SUPPLY AND CONNECT UP A -24V EXTERNAL SUPPLY TO -24V EXTERNAL INPUT.

ADJUST THE NEGATIVE EXTERNAL VOLTAGE FOR -24.9 VDC.

TP-4 SHOULD READ (APPROX. -24.2 VDC).

K2 CONTACTS LED SHOULD BE ON.

TEST COMPLETE.

AMP

AMP

VDC

VDC

AMP

AMP

VDC

VDC