

POWER SUPPLY ACTIVE LOAD NOTES

Transistor PN3568 replaced with 2N2222A
Transistor 2N6125 replaced with TIP32C
5V load power transistors remain 2N3055
Auxiliary load power transistors can be 2N3773

Power transistors should be heatsink mounted.

Power transistor emitter resistors can be made from paralleled 17W resistors when forced air cooled by fan/s.

Set current pot's 4K7

2 variants of this Boschert Inc designed load have been built based upon these schematics. Resistance's associated with the current meter were selected to match the meter used.

The variac, isolating transformer and AC metering were external to the load. The primary load rheostat was not included, as its purpose was to aid faultfinding of specific Boschert power supplies.

Note the current drawn is not constant. If loading one output of a power supply increased or decreased another, the current drawn from that output would alter.

The 5V load has satisfactorily loaded 3.3V, but at slightly reduced current.

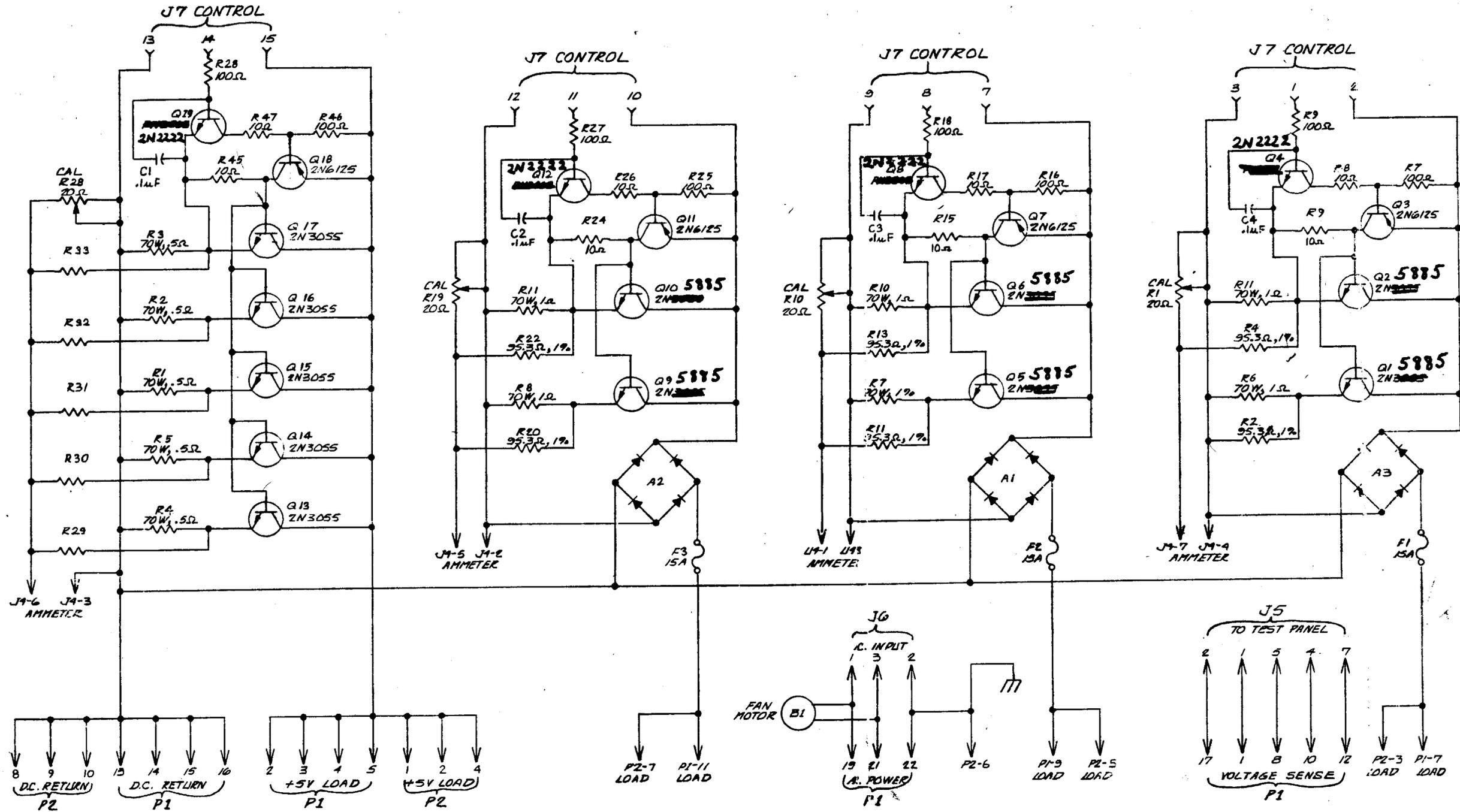
This has proven a reliable and cheap to produce active load.

CHANNEL #1

CHANNEL #4

CHANNEL #3

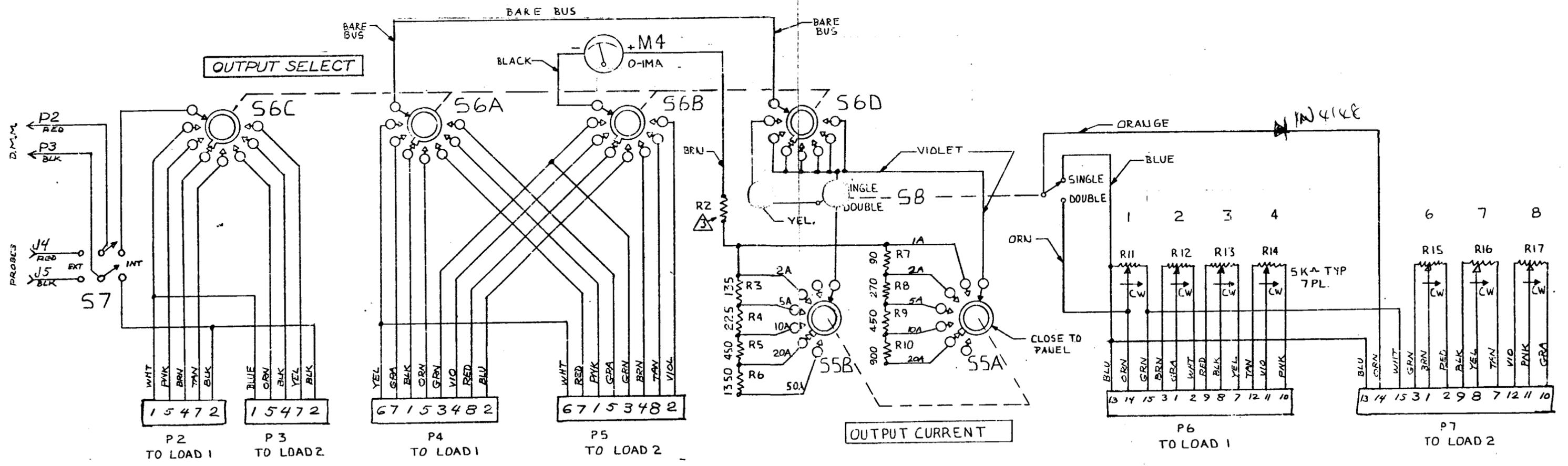
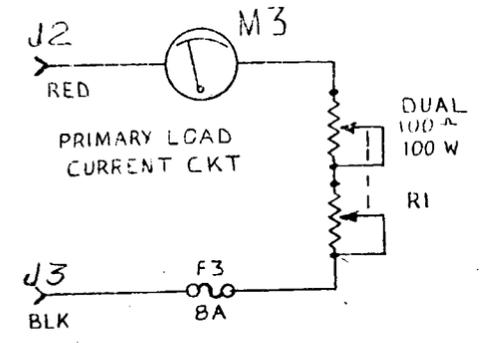
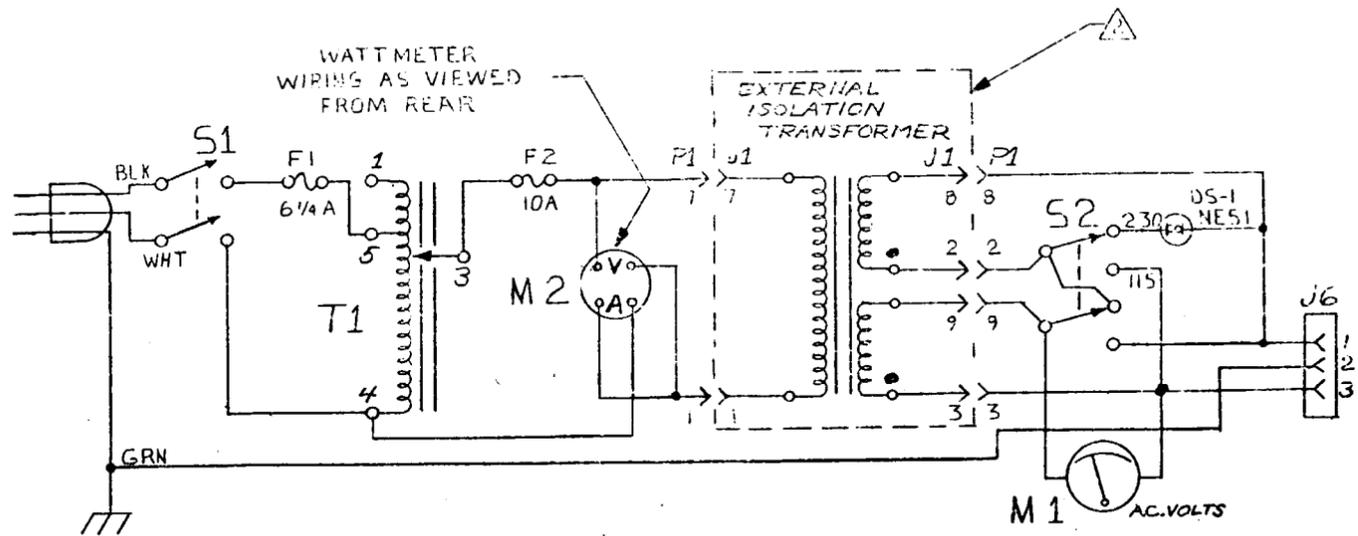
CHANNEL #2



ADD C1, C2, C3, C4
ACROSS EMITTER-BASE JUNCTIONS
AS SHOWN ON THIS ON TRACE.
SIDE OF THE PC BOARD. THIS
SHOULD ELIMINATE THE PROBLEM.
IF NOT CHANGE 2N6125'S
TO 5885'S. ALSO MAKE CHANGE
TO THE TEST PANEL AS EXPLAINED
BELOW.

ALSO NOTE ON THE
DRAWING 50049 (SCHEMATIC,
TEST PANEL, SERIES B) THAT
A DIODE HAS BEEN ADDED.
THIS ELIMINATES A LOOPING
PROBLEM THAT SOMETIMES
CAUSES OSCILLATIONS ON
POWER SUPPLY OUTPUTS
WHEN USING THE STATION
IN THE DOUBLE MODE. THIS
DIODE CAN BE ANY GENERAL
PURPOSE DIODE (1N4148
1N914).

REV	DATE	DESCRIPTION
A	1-2-77	CHG. WIRE FOR METER DENIS
B	5-16-79	ADDED SINGLE DUAL LOAD FUSE
C	1-18-79	CHANGED RESISTANCES AND ADDED WIRE.



REFERENCE DESIGNATORS	LAST USED	NOT USED
F3		
K17		
S8		S3, S4
M4		
T		

NOTES:

1. ALL ROTARY SW DIAGRAMS ARE SHOWN FROM THE BACK.

2. SELECT R2 SO THAT $M4 + R2 = 81.0 \Omega \pm .5 \Omega$.

3. FOR REF ONLY.

QTY	RECD	PCB	PART OR IDENTIFYING NO.	DESCRIPTION OR IDENTIFICATION	MATERIAL SPECIFICATION
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:			CONTRACT NO.		
FRACTIONS DECIMALS ANGLES			DATE		
ASSEMBLY			APPROVALS		
DRAWN			DATE		
CHECKED			DATE		
REVISIONS			DATE		
NEXT ASSY			USED ON		
APPLICATION			DO NOT SCALE DRAWING		
SCALE			SHEET 1 / 1		

BOSCHERT

SCHEMATIC, TEST PANEL, SERIES 3

DWG. NO. 50049

REV. C