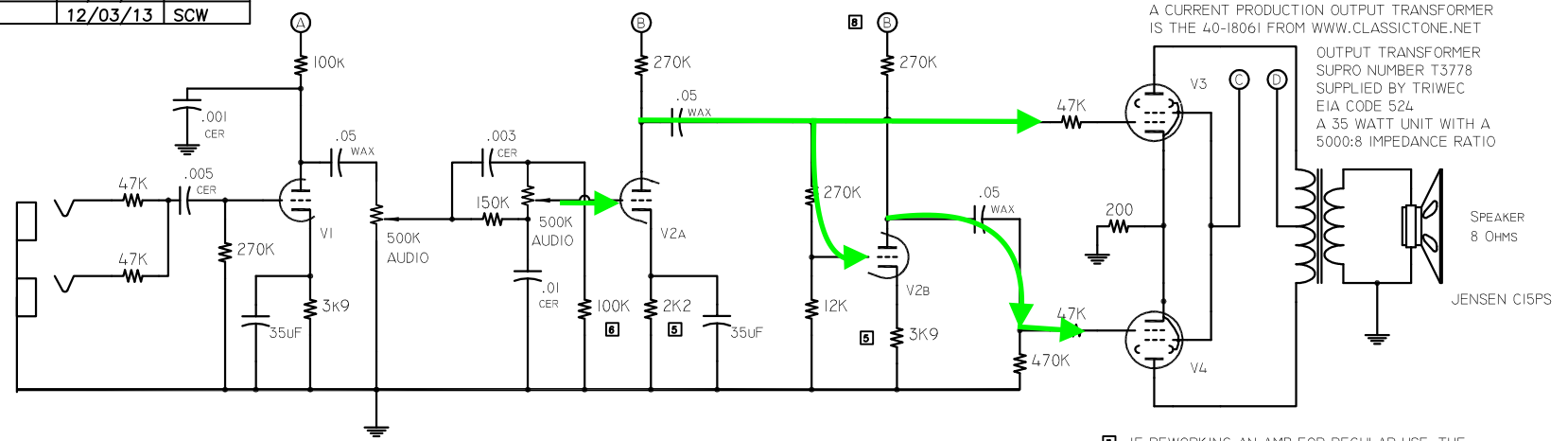


Rev.	Revision note	Date	By
1	ADDED VOLTAGE NOTES	04/05/06	SCW
2	ADDED FILTER CAP NOTE	04/05/06	SCW
3	ADDED CATHODE RES. NOTE	04/05/06	SCW
4	REVISED VOLTAGE ESTIMATES	04/06/06	SCW
5	CORRECTED CATHODE RESISTOR VALUES	04/24/06	SCW
6	CORRECTED RESISTOR VALUE	04/24/06	SCW
7	ADDED NOTE ABOUT SOCKET WIRING	09/13/06	SCW
8	CORRECTED PHASE INVERTER WIRING	11/27/07	SCW
9	CORRECTED VOLTAGE AT NODE A	12/03/13	SCW

USE ONLY 5881, 6L6GB OR 6L6GC TUBES.
 EL34/6CA7, 7027, OR 6550 SHOULD NOT BE USED. OUTPUT TRANSFORMER IMPEDANCE IS NOT CORRECT FOR THESE TUBES. THESE OTHER TUBES MAY ALSO OVERSTRESS THE FILAMENT WINDING OF THE POWER TRANSFORMER.



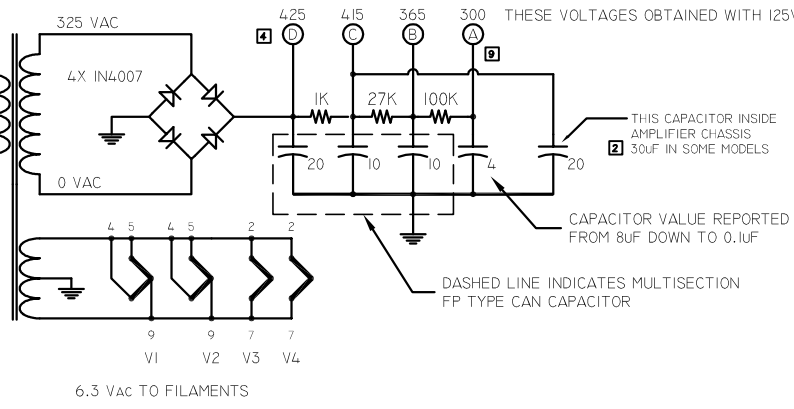
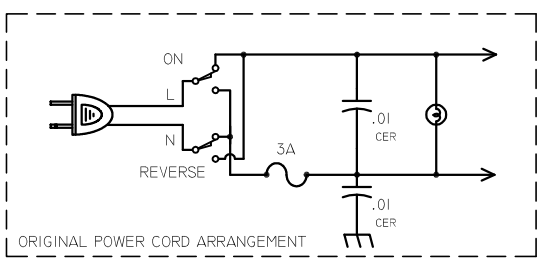
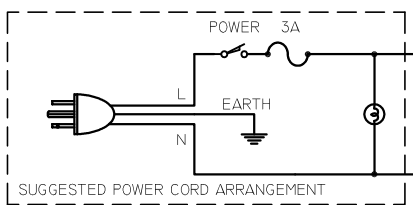
A CURRENT PRODUCTION OUTPUT TRANSFORMER IS THE 40-18061 FROM WWW.CLASSICTONE.NET
 OUTPUT TRANSFORMER SUPRO NUMBER T3778 SUPPLIED BY TRIWEC EIA CODE 524 A 35 WATT UNIT WITH A 5000:8 IMPEDANCE RATIO

IF REWORKING AN AMP FOR REGULAR USE, THE BIASING OF THE OUTPUT TUBES SHOULD BE VERIFIED. THE 200 OHM RESISTOR CAN BE EXCHANGED FOR A 220 OR 240 OHM UNIT. INCREASING THE RESISTOR VALUE WILL DECREASE THE HARMONIC RICHNESS OF THE AMPLIFIER OUTPUT, BUT WILL GIVE EXTENDED TUBE LIFE. THE SOUND IS NOTICEABLY COLDER WITH A 240 OHM RESISTOR.

ORIGINAL AMPS DESIGNED FOR 117VAC LINE POWER
 SEVERAL PEOPLE HAVE REPORTED GREATLY DIFFERENT VALUES, ESPECIALLY IN THE PREAMP
 VOLTAGE MEASUREMENTS ARE ± 20%

THE 40-18060 FROM CLASSICTONE.NET CANNOT BE USED AS A REPLACEMENT POWER TRANSFORMER FOR THE SOLID STATE RECTIFIER MODEL. THE BEST OPTION FOR REPLACEMENT IS THE HEYBOER HTS-4664. WHEN FITTING A GROUNDED CORD, SECURE GROUND WIRE UNDER TRANSFORMER BOLT

390 385 340 275 THESE VOLTAGES OBTAINED WITH 117VAC LINE
 425 415 365 300 THESE VOLTAGES OBTAINED WITH 125VAC LINE



THE 1964 AND 1965 MODELS WERE COVERED IN A BLUE MATERIAL AND FEATURED A TUBE RECTIFIER THE 1966 MODEL WAS COVERED IN BLACK AND HAD A SOLID STATE RECTIFIER FITTED AFTER MID YEAR.

THE S6420 THUNDERBOLT WAS DISCONTINUED SOMETIME IN 1967. THE S6920 MODEL IS GREATLY DIFFERENT.

NOTES: V1 (12AX7) ONE TRIODE LEFT UNUSED
 CAPACITOR VALUES IN uF
 FILTER CAPACITORS ARE 450 V
 VOLTAGE MEASUREMENTS DC UNLESS SPECIFIED
 VOLTAGE MEASUREMENTS REFERENCED TO CHASSIS

VOLTAGE CHART

VALUES BY MIKE SCARVELIS

	1	2	3	4	5	6	7	8	9	
12AX7	247	0	2.2	3.3AC	3.3AC	-	-	-	3.3AC	V1
12AX7	210	0	2.0	3.3AC	3.3AC	172	0	1.5	3.3AC	V2
6L6GC	-	3.3AC	415	412	0.35	-	3.3AC	31.5	-	V3
6L6GC	-	3.3AC	415	412	0.35	-	3.3AC	31.5	-	V4

MANY THANKS TO GREG SIMON, CJ POULUS, URIAH THERIAULT, JIM MITCHELL AND MIKE SCARVIN FOR THEIR ASSISTANCE IN GATHERING THIS INFORMATION

Weatherford Amplifiers

SCALE: NONE	DRAWN BY: S. WEATHERFORD
DATE: 12/18/2012	
THIS SCHEMATIC REDRAWN FROM A VERSION PROVIDED BY SCHEMATIC HEAVEN. WEATHERFORD AMPLIFIERS CLAIMS NO RIGHTS TO ANY OF THE INFORMATION CONTAINED IN THIS DRAWING. THE QUALITY OF THE ORIGINAL WAS POOR AND SOME VALUES WERE DIFFICULT TO DETERMINE.	
1966 SUPRO THUNDERBOLT	DRAWING NUMBER S6420