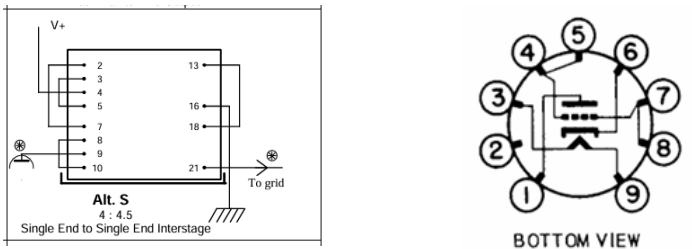
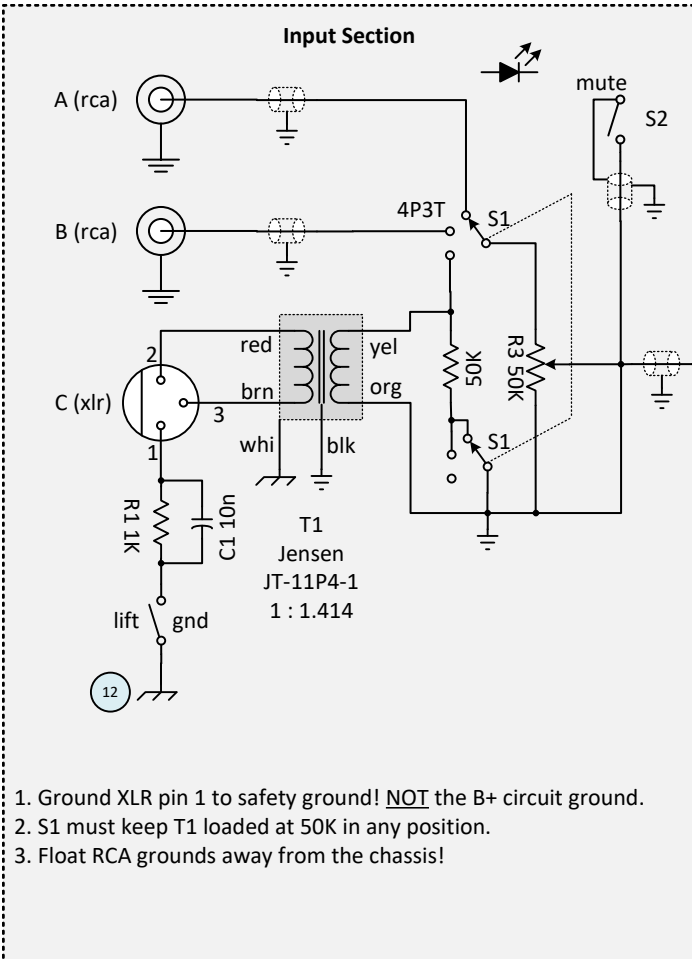


**Test Point tip Jacks (in red):**  
TP1A – red/blk – 300B filament voltage 1  
TP1B – red/blk – 300B filament voltage 2  
TP2A – blu/yel – 300B pass current 1  
TP2B – blu/yel – 300B pass current 2  
TP3 – blu/yel – driver tube pass current  
TP4 – blu/yel – bias voltage  
TP5 – red/yel – 300B anode voltage  
TP6 – red/yel – B+ voltage  
TP7 – red/yel – driver B+ voltage  
TP8 – red/yel – driver anode voltage  
TP9 – grn chassis (mains) ground  
TP10 – yel circuit ground  
TP11 – driver cathode voltage

IT secondary or capacitor out side  
IT primary or capacitor in side

**Calibration Procedure (verify this after buid):**  
TP6 – set PSU to 0V  
TP4 – set coarse bias fully counter clockwise (max negative bias)  
TP1A – set Coleman to 5V  
TP1B – set Coleman to 5V  
TP6 – set PSU to 380V  
Set grid balance control to approximately middle  
TP2A and TP2B – set coarse bias so these are nearly matched at .7V  
TP2A and TP2B – set fine bias so these are nearly matched at .7V  
Adjust grid balance control for nearest .7V match  
TP6 – Verify that B+ is still 380, re-adjust variac to 380V if needed  
Repeat above four steps to get .7V match at 380V B+  
TP3 – verify driver current it should be about .1V  
TP4 – verify bias voltage it should be about -85V (verify after)?  
Verify all other test points for reasonableness



**Switches:**  
S1 Input select  
S2 Mute  
S3 Spkr / Hdph  
All switches are implemented with relays (except headphone switch). LED indicators powered from umbilical pins 4,6 12V.

PCB's shown in yellow all other wiring is point to point.

