

## 2. BIAS SETTING

2.1 The bias current is set by resistors R809, R811 (L.Ch) and R810, R812 (R.Ch). The original resistors must be removed from the PCB before re-biasing. New resistor values are chosen by measuring the voltage across dual emitter resistors R493 (L.Ch) and R494 (R.Ch). Resistors are selected to give a voltage reading of 22mV for a bias current of 50mA.

2.2 Ensure driver heatsinks (Driver heatsink 207/209) securely fixed with thermally conducting grease (eg. Dow Corning DC340).

2.3 Connect bias test leads by temporarily soldering to the PCB test pads (TP1-TP8). See drawing CST207-036.

### LEFT CHANNEL

TP1 to +ve DC voltmeter

TP3 to -ve DC voltmeter

TP5 to R809, R811

TP7 to R809, R811

### RIGHT CHANNEL

TP2 to +ve DC voltmeter

TP4 to -ve DC voltmeter

TP6 to R810, R812

TP8 to R810, R812

Note: Voltmeter inputs must not be grounded, use high input impedance meter.

2.4 Amplifier baseplate and cover should be in place, fixing screws need not be fitted. Test leads can be passed out under rear of cover or through slots in baseplate.

2.5 Select range on DC voltmeter to read 22mV  $\pm 20\%$

2.6 Resistors R809/R810 are generally selected from the range 2K0, 2K4, 2K7, 3K3, 3K9, 4K7, 6K8, 12K. R811/R812 are selected from the range 16K to 150K or O/C. Use good quality metal film resistors.

2.7 When changing bias resistors do not let the bias current exceed 100mA - a voltmeter reading of 44mV.

2.8 Connect correct voltage mains supply and switch on power.

2.9 After about 1 minute the bias current should be set to 100mA (44mV), after a few minutes it will fall to a steady value. Select resistors R809/R811 (L.Ch) and R810/R812 (R.Ch) to give a bias current of 50mA (Voltage reading 22mV). Generally the voltage can be set quite close to 22mV, but a tolerance of 20% is acceptable. Any sudden variations in bias current caused by changing the resistors must be allowed to stabilise before choosing the final resistor values.

2.10 Ensure bias current remains stable for 4-5 mins.

2.11 Disconnect mains power. Remove baseplate and cover.  
Disconnect test leads. Solder selected resistors onto rear of  
amplifier PCB.