



REPAIR/SERVICE REPORT

CSR NO.	DATE: 23/04/13	
Customer Name Richard Nelson	Address: Woodforde Lodge, Union Drift, Dereham Norfolk, NR20 3AZ	
NATURE OF PROBLEM		
Problem Reported: Intermittent loss of left channel and crackling.		
Make Sugden	Model A88	Serial No. 0037
SERVICE DETAILS		
<p>Tested with tone into resistive load with output observed on oscilloscope. Severe crossover distortion evident on left channel plus ~30Khz low level parasitic oscillation present. Bias incorrect on both channels (25mA through left channel fuse and 57mA through right – should be in region of 160mA)</p> <p>All electrolytic capacitors on power amplifier, preamplifier and power supply boards replaced with new Vishay BC components. Main power supply capacitors and speaker output capacitors replaced with new BHC (now Kemet) components. New trimmers also used for midpoint voltage and bias adjustment on both PA boards</p> <p>Midpoint voltages and quiescent currents adjusted as per Sugden specification for both channels and found left channel bias would still not adjust. Found transistor Q6 faulty and bias now adjusting normally once replaced. Numerous poor solder joints and frayed wire connections between boards reterminated. More importantly a dry solder joint found on the left channel transformer which could be moved on it's connection post as it was almost devoid of solder (suspect not soldered properly by factory!). This was resoldered and probably contributed to the problems experienced by customer. Replacement power switch fitted as supplied.</p> <p>Volume, tone and balance controls flushed clean and lubricated with Caig DeOxit Faderlube to prolong life and reduce any noisiness in operation. All switches lubricated with Caig DeOxit D5 switch cleaner/treatment. New green LED soldered in and mounted in panel.</p> <p>Tested into resistive load and all original defects now corrected.</p> <ul style="list-style-type: none"> • Driven with 1Khz tone – power out into 8 prior to clipping-78W per channel - both channels driven. • Frequency response -1db 10Hz to 45Khz. • Distortion – 200Hz/0.04%, 1Khz 0.05%, 16Khz 0.1% (measured on HP339A distortion analyser power as per Sugden spec at +10dB above 2.82V) <p>Disc input checked and response within specification.</p> <p>Tested into speaker on all inputs including being driven from Dual CS505 turntable with MM cartridge and given a 2 day test with no other anomalies observed.</p>		
INVOICING/PAYMENT		
Repair/ Servicing - £205 – Invoiced via Paypal 23/04/13. All work carried out and parts used guaranteed for 3 months.		