

Singing Cat Services

Service Report

Work Completed: May 2023

ARP2600 s/n-2602/0208

Power supply caps were originals-2 x 1 000uf 50V Axial (replaced with 1 000uf 63V) and obsolete 150uf 50V (replaced with 220uf 63V) plus 2 x obsolete But 25V caps (replaced with 1 0uf 25V) .. these all original read ok on meter but are 40+ years old. General interior condition is very good though all connectors required de-ox.

Full test scheduled 1-4-23 with sequencer.

Removed all 3.5mm nuts/slider caps for cleaning/de-ox/clean panel & interior/ check Reverb springs & mountings .. de-ox all screws/bolts.

Move/clean trimmers as per service routine & recalibrate afterwards.

NB Mains plug on ARP2600 was wired with White to Live/Black to Neutral/Green to Earth when it should have been Black (Live), White (Neutral), and Green (Earth)

This was discovered prior to power-up test.

Rewired plug & tested power successfully.

Power up test was AOK though key, Mains & etc connectors needed overnight soak for de-oxidising.

3 x VCO & VCF needed rescale/recalibrate.

Internal/external cabinet clean.

De-ox panel sockets & internal connection pillars & wire-wraps (abraid where necessary).

De-ox & lube 2 x RCA jacks, sockets & Earth tags on Reverb Tank.

Removed 2600 panel for full inspection-VG Condition but PSU caps are originals & have been re-ordered 13/4/23 as caps previously sent were 35V (should be 50V or 63V) ... TB installed on arrival before recalibrations.

Replaced power supply caps successfully with 63V versions on all lines. both Tantalum caps are AOK/Military Spec so no replacement required.

Cleaned out contacts on (custom) Mains cable & socket connections as +ve/-ve were both oxidised on plug/all three connections on socket. .. same procedure for Keyboard connector.

Re-loom & secure Reverb Audio wiring away from Power Supply looms as per Service Directive to reduce hum/RF & other noise.

Recommendations .. This is a late ARP 2600, so most of the modules are not sealed in resin boxes (including the "post-lawsuit" 4027 VCF) & are therefore more easily repairable .. there are some ics/transistors that are becoming hard to find as of 2012 &, as with the Sequencer, (& in particular) sliders, though knobs/caps & some other hardware parts are also difficult to find.

ARP3260 keyboard

Cleaned & relubed all sliders, switches & sockets then De-Ox

Key Connectors, Bus-Bars & Key Contacts.Full internal/casing/keys clean, reassembled & recalibrated using TTSH2600 & ARP2600 successfully.

Keyboard & all functions now test AOK in all modes (Mono/Duo/TRANS/Lock)-all onboard functions tested AOK with no problems found during 2 x 1 hr full ops testing with the 2600 and a 2600.

Problem found with Portamento causing keyboard pitch to zero when key released though control was working ok .. 1458/TL081 /C4 s/hold cap/Porta full & Momentary switches were checked .. also checked CD4011 Memory Gate (old Cmos) for possible partial failure of gate B .. IMF & 2 x 2N Fet plus Z3 alb opamp ic were also checked ok as problem only appears when Portamento switch is on.

Portamento problem was caused by flux-contamination of Key CV/Portamento

tracks on PCB-removed all contamination & cleaned PCB with IPA.

Cleaned/abraded PTB Momentary & Portamento switch plus Jack contacts to deoxidise/remove age-tarnishing.

Reassembled & re-calibrated as per manual recommendations by using the 2600 and my own 2600 as references for post-initial calibrations.

Recommendations (same as Arp 2600, including 3 x specialised dual transistors that are now long-obsolete).