SLM Electronics, Inc. Saint Louis, Missouri, USA

#### June 4, 2001

## **#TIB0003**

### **Units Affected:**

<u>Model</u> SVT-2PRO	<u>Serial Numbers</u> T2PDxxxxxxxx ATLDxxxxxxxx BJIDMAxxxxxxx	<u>Model</u> SVTAV	<u>Serial Numbers</u> AXVDxxxxxxxx
SVT-2PROJ	T2PJxxxxxxxx ATLJxxxxxxxx BJJJMAxxxxxx	SVTAVJ	BAHJxxxxxxxxx
SVT-2PROU	ATLUxxxxxxxx BJKUMAxxxxxx	SVTAVU	BAIUxxxxxxxx
SVT-2PROW	T2PWxxxxxxxx ATLWxxxxxxxx BJMWMAxxxxxxx	SVTAVW	AXVWxxxxxxxx
SVT-CL	TCLDxxxxxxxxx BCYDxxxxxxxxx BJNDMAxxxxxxx	SVT-CLJ	TCLJxxxxxxxxx BCYJxxxxxxxxx BJOJMAxxxxxxx
SVT-CLW	TCLWxxxxxxxx BCZWxxxxxxxx		

#### **Purpose:**

(1) To extend the life of the amplifier's power tubes.

#### **Recommended Actions:**

(1) Remove six 1N4007 diodes from power amp tube circuit.

(2) Replace six 22 ohm resistors in power amp tube circuit with 220 ohm, 1/2W 5% flame-proof resistors (SLME p/n 77-221-03).

#### **Tools Needed:**

- #2 phillips screwdriver
- 5/64" allen wrench
- wire cutters

soldering iron



CAUTION! DISCONNECT THE AMPLIFIER FROM ANY SOURCE OF AC POWER BEFORE PROCEEDING!

SLM Electronics, Inc. Saint Louis, Missouri, USA

### **Corrective Action:**

### SVT-2PRO:

(1) Place the amplifier on the work surface, right side up, front panel facing you.

(2) Remove the 12 screws from the top cover. Remove the top cover and set it aside.

### Proceed to step 7.

## SVT-CL/SVT-AV:

(1) Place the amplifier on the work surface, on one end, cabinet bottom facing you.

(2) Remove four of the five large bolts from the bottom of the cabinet, leaving the upper bolt in place. (Refer to the adjacent picture.)

(3) Lower the amplifier onto its feet on the work surface. Position the amplifier so the end with the remaining bolt hangs over the edge of the work surface. (Refer to the adjacent picture.) Remove the remaining bolt from the bottom of the cabinet.



(4) Reposition amp on work surface, right side up, front panel facing away from you.

(5) Remove the seven screws from the rear grille screen. Remove the screen and set it aside.

(6) Slowly and carefully work the amplifier assembly about 2/3 of the way out of the cabinet – far enough to allow access to the tubes and the tube board. Avoid putting excessive strain on the connecting cables!

(7) Grasp one of the power tube retainers by itstop ring. Lift the retainer up and away from thepower tube, then slowly lower it to the plate at thebase of the tubes as shown in the adjacent pictures.Repeat for the remaining tube retainers.



SLM Electronics, Inc. Saint Louis, Missouri, USA

**CAUTION:** The tension on the retainers' springs may cause them to snap back towards the base of the tubes, possibly cracking their glass casings slowly lower each retainer down to the base of the tubes to avoid such damage.



(8) Carefully remove each of the power tubes by gently rocking it side to side while lifting it straight up. Set the tubes aside.

(9) Each tube retainer is secured to the tube socket with two 5/64" allen head screws. Remove the screws, then remove the tube retainers and set them aside.

(10) Remove the eight screws from the tube plate. Remove the tube plate and set it aside.

(11) Lift the power tube circuit board assembly up slightly and disconnect the white two-wire connector from the two-pin header on the edge of the board as shown in the adjacent picture.

(12) Lift the tube board assembly further up until the ribbon connector beneath it is accessible. Disconnect the ribbon connector from the multi-pin header on the circuit board beneath as shown in the adjacent picture.





(13) Disconnect the remaining five wires from the underside of the tube board assembly. Place the tube board assembly on the work surface so the printing reads right side up.

(14) Locate, cut and remove the six 1N4007 diodes (D1, D2, D3, D7, D8, D9) from the tube board. (These are located in the highlighted areas of the adjacent picture.)

(15) Locate, desolder and remove the six 22 ohm resistors (R2, R4, R6, R7, R9, R11) from the tube board. (These are also located in the highlighted areas of the adjacent picture.)



SLM Electronics, Inc. Saint Louis, Missouri, USA

(16) Install a 220 ohm 1/2 watt 5% flame proof resistor (SLME p/n 77-221-03) in place of each resistor removed in step 15.

(17) Return the tube board assembly to its place in the amplifier. Connect the five wires to the tabs on the underside of the circuit board as shown in the adjacent picture.

(18) Carefully reconnect the ribbon cable to the multi-pin header on the circuit board beneath the tube amp board. Make certain that the connector is properly aligned and oriented with the header as shown in the adjacent picture so that all of the pins mate into the connector.





(19) Reconnect the white two-wire connector to the two-pin header on the edge of the tube board.

(20) Rest the tube board assembly in place and set the tube plate over the board assembly so the tube sockets line up with the large holes in the plate.

(21) Install each of the tube retainers. Orient the tabs of the retainers so their elevated tabs (where the springs are attached) are furthest from the socket as shown in the adjacent picture.



(22) Install the eight screws which secure the tube plate and tighten them firmly.

(23) Replace each of the power tubes into the tube sockets and secure each one with its tube retainer.

## SVT-2PRO:

(24) Replace the top cover and install the 12 screws which secure it to the amplifier chassis. Tighten the screws firmly.

## Proceed to step 28.

## SVT-CL/SVT-AV:

(24) Carefully return the amp assembly into its original position within the cabinet. Push the chassis all the way into the cabinet.

SLM Electronics, Inc. Saint Louis, Missouri, USA

(25) Turn the cabinet so one end hangs over the edge of the work surface. (Refer to the adjacent picture.) Insert one of the large bolts into the mounting hole in the cabinet. Work the bolt and the amplifier around as needed until the bolt threads into the amp chassis. Avoid cross-threading the bolt! Tighten the bolt securely into the amplifier.



(26) Stand the amplifier on one end, with the bolt installed in step 25 towards the top. Insert the remaining four bolts into their mounting holes and thread them into the chassis. Avoid cross-thread-ing the bolts! Tighten each bolt securely.

(27) Replace the rear grille screen and install the seven screws which secure it to the cabinet. Tighten each screw firmly.

(28) Connect the AC line cord and turn the amplifier on. Verify illumination of the front panel LED. Look through the rear grille and verify each power tube glows slightly near its top. (If the LED does not illuminate, or if the power tubes do not have a slight glow, disconnect the AC line cord, open the unit up and double check all wiring. If the problem persists contact your Ampeg Service Center.)

(29) Repack the amplifier into its original shipping carton.

A Division of St. Louis Music, Inc. • 11880 Borman Drive • St. Louis, MO 63146 Phone (314) 569-0141 • Fax (314) 567-7278 • Service Department (800) 738-7563