

## ALBA Models 698I, 699I/B, 698I/C, 690I

**General Description:** Five-valve (including rectifier), three-waveband auto-radiogramophones. These models use a similar radio chassis.

**Power Supplies:** A.C. mains, 190–260 volts.

**Valve Analysis:** Following readings taken with set on M.W. and gang fully meshed. Mains input 240 volts to appropriate mains tapping. Total mains current 200 mA.

Valve		Anode, volts	Screen, volts	Cathode, volts
V <sub>1</sub>	ECH8I . . . . .	220	100	2.5
	(osc.) . . . . .	115	—	—
V <sub>2</sub>	EF85 . . . . .	150	80	1.6
V <sub>3</sub>	EABC80 . . . . .	105	—	1.3
V <sub>4</sub>	EL84 . . . . .	200	220	6.5
V <sub>5</sub>	EZ80 . . . . .	280 A.C.	—	300

**Circuit Modifications:** Some early 698I models used a different valve range: ECH42; EF4I; EBC4I; EL84; EZ80.

**Alignment Procedure:** Remove chassis from cabinet by removal of front knobs and disconnecting aerial, earth, gram. motor and pick-up leads. Withdraw the chassis-board retaining screws.

**I.F.:** Short-circuit oscillator section of tuning gang. Set dial pointer to pip location on dial (2000 m.) and connect signal generator via 0.1- $\mu$ F. capacitor to pin 2 of V<sub>1</sub> and to chassis. Inject a 470-kc/s. signal and adjust T<sub>2</sub> followed by T<sub>1</sub> top and bottom cores for maximum output. Repeat until no further improvement results. Remove short-circuit from tuning gang.

**R.F.:** Set gang at maximum and ensure that cursor is identified with high-wavelength end of scale. Connect generator leads via dummy aerial to aerial and earth sockets.

**S.W.:** Set pointer to 50 m., inject a 6-Mc/s. signal and L<sub>7</sub> and then L<sub>2</sub> for maximum output. Set pointer to 16.6 m., inject an 18-Mc/s. signal and adjust CX<sub>4</sub> and CX<sub>1</sub> for maximum. Repeat sequence of operations until no further improvement results.

**M.W.:** Set pointer to 500 m., inject a 600-kc/s. signal and adjust L<sub>9</sub> and L<sub>4</sub> for maximum output. Set pointer to 200 m., inject a 1500-kc/s. signal and adjust CX<sub>5</sub> and CX<sub>2</sub>. Repeat sequence until no further improvement results.

**L.W.:** Set pointer to 1900 m., inject a 154-kc/s. signal and adjust L<sub>10</sub> and L<sub>6</sub>. Set pointer to 1100 m., inject a 375-kc/s. signal and adjust CX<sub>6</sub> and CX<sub>3</sub>. Repeat sequence until no further improvement results.

