SPECIFICATIONS (continued)

SEMI-CONDUCTORS:

- SE1001 (Silicon NPN)—Frequency Changer
- SE1001 (Silicon NPN)—1st IF Amplifier
- SE1001 (Silicon NPN)—2nd IF Amplifier
- 2 SE4010 (Silicon NPN)—Audio Pre-Amplifiers / Equalisers
- 2 SE4002 (Silicon NPN)—Audio High Pass Filters
- 2 SE4002 (Silicon NPN)—Audio Amplifiers

SEMI-CONDUCTORS (continued)

- 2 SE6002 (Silicon NPN)—Audio Drivers
- 4 AY8103 (Silicon NPN)—Push-Pull Audio Output (2 matched pairs)
- 0A90 (Germanium Diode)—Signal Detector and AGC
- 0A90 (Germanium Diode)—Auxiliary AGC
- 2 AS25 (Silicon Diode)—Power Rectifiers
- 4 AB1102 (Silicon Diode)—Bias Stabilising Diodes

DIMENSIONS:

Model T3-45	Width	48"	50"	
	Height (including 7½" legs)	26¼"	20"	
	Depth	14¾"	17"	
Model T3-46 Main Unit	Width	18"	24"	including speaker cabinets
	Height (including 9" legs)	18"	28"	including speaker cabinets
	Depth	19"	22"	including speaker cabinets
Speaker Cabinets	Width	15"		
	Height	22"		
	Depth	10"		

WEIGHT:

Model T3-45	Gross	94 lb.
	Nett	80 lb.
Model T3-46	Gross	88 lb.
	Nett	72 lb.

SERVICE NOTES

Transistors can be permanently damaged by excessive external heat, or by heat generated within the circuit by excessive current flow. When servicing this equipment, the following precautions should be observed:

Supply polarity should never be reversed. Never remove or replace a transistor or circuit component without first switching off the power.

When soldering transistor leads, use a small iron. Solder as rapidly as possible, keeping the iron well clear of the transistor body. The use of a 240-volt soldering iron should be avoided, as leakage and capacitance effects can destroy a transistor. To avoid this problem, a low-voltage iron with a step-down transformer should be used.

To unsolder multi-terminal components (IF transformers, etc.), it is best to apply heat simultaneously to all terminals, using a special iron tip. If a normal tip is used, apply the iron to each soldered joint in turn, and brush away the solder with a stiff brush.

Disconnect transistors before making circuit checks with an ohm meter. Failure to do so will give misleading results and the transistors may be damaged by excessive conduction caused by the ohm meter battery. Check polarity of the ohm meter leads; electrolytic capacitors may be damaged if the ohm meter battery voltage is applied in reverse polarity.

When taking voltage measurements, avoid accidental short - circuits by the voltmeter probes.

Fault-finding can be carried out in the usual manner, keeping in mind that a transistor failure is unlikely.

When using a signal generator, a DC blocking capacitor should be used in the live lead to prevent disturbance of the transistor DC circuits.

Before connecting the generator, adjust its attenuator for minimum output. Signal generators designed for vacuum tube circuits can often deliver more signal than a transistor can safely handle.

The output must be correctly loaded with 15 ohms during these tests. If the output load is reduced below the correct value, the maximum dissipation of the output transistors will be exceeded at medium and high output levels.

DISMANTLING—Model T3-45

Remove the power plug from the mains supply socket. Raise the lids at each end of the cabinet. Place a piece of felt or similar material on top of the cabinet. Unscrew the two top chassis fixing screws, one at each end of the escutcheon. Loosen the two bottom screws, withdraw the chassis, and place it on the felt. The chassis is freed by removing the aerial, pickup, power and speaker cables.