

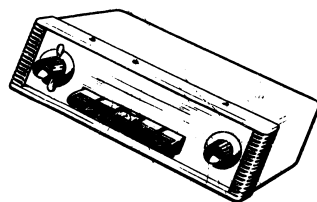
**SERVICE INFORMATION SHEET**

\* MODELS 4202 and 4203



"HIS MASTER'S VOICE" AUTOMOBILE RADIO  
**Models 4202 and 4203**

TWO VALVE CONTROL UNIT FOR 12 AND  
 6 VOLT BATTERIES RESPECTIVELY



**SMITHS RADIOMOBILE**

"In certain countries overseas, notably N. & S. America, this identical equipment is marketed as **EMITRON CAR RADIO**"

*In view of similarities and for convenience of description, this Sheet deals with the above two models. Unless otherwise stated, all details apply to both.*

**SPECIFICATION****Physical.**

Height	2 3/16 inches	(5.6 cm.)	} Overall.
Width	7 1/4 inches	(18.4 cm.)	
Depth	8 5/8 inches	(20.75 cm.)	
Weight	4 1/4 lb.	(2.2 kg.)	

**Low Tension Supply.**

Model 4202, 12 volt Battery.  
 Model 4203, 6 volt Battery.

**Fuse.**

Model 4202, 5 amps.  
 Model 4203, 10 amps.

**Scale Illumination Lamps.**

Model 4202, 12 volt, 0.2 amp.  
 Model 4203, 7.5 volt, 0.2 amp.

**Aerial Input Conditions.**

The trimmer provided gives adjustment for a range of aerial capacitors from 50-160 mmfd.

**Valves.**

Emitron - W77 R.F. Amplifier.  
 X78 Frequency Changer.

**Intermediate Frequency.**

465 kc/s.

**Wave Ranges.**

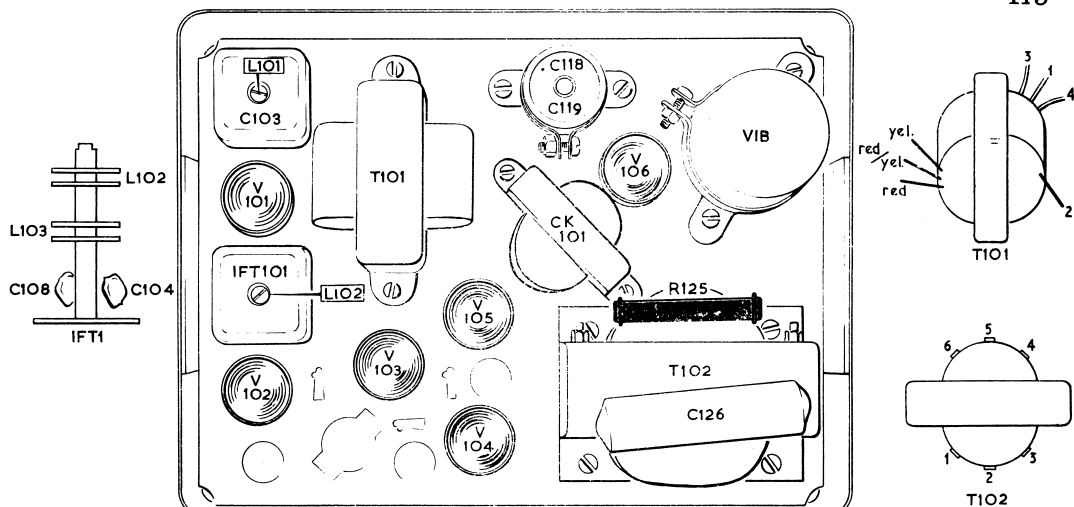
Medium Waves - 187-572 metres (1604 - 524.4 kc/s.)

[illegible]

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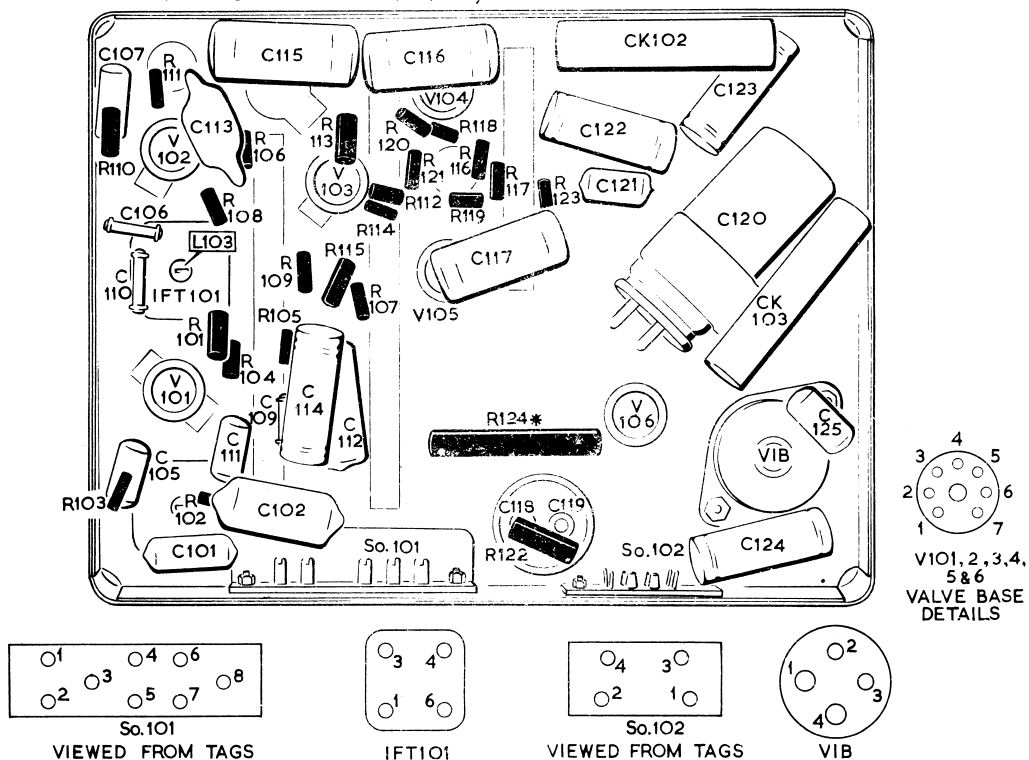
SH





## TOP-SIDE CHASSIS

\*R124 is used with 46O28B (12V) only



## UNDERSIDE CHASSIS

Intermediate Frequency.

465 kc/s.

Loudspeaker.

Various loudspeakers may be used to suit the particular installation; it is stressed however, that only loudspeaker units having either of the following impedance ranges may be used:-

- (a) 2.3 ohms at 1,000 c.p.s. connected to 1 and 3 of Sol02 (normally two E.M.I. speakers in parallel or 1 proprietary speaker).
- (b) 4-5 ohms at 1,000 cycles connected to 1 and 2 of Sol02 (normally one E.M.I. speaker or two proprietary speakers in series).

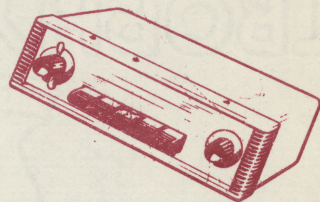
**SERVICE INFORMATION SHEET**

\* MODELS 4202 and 4203



"HIS MASTER'S VOICE", AUTOMOBILE RADIO  
**Models 4202 and 4203**

TWO VALVE CONTROL UNIT FOR 12 AND  
 6 VOLT BATTERIES RESPECTIVELY



**SMITHS RADIOMOBILE**

"In certain countries overseas, notably N. & S. America, this identical equipment is marketed as **EMITRON CAR RADIO**"

*In view of similarities and for convenience of description, this Sheet deals with the above two models. Unless otherwise stated, all details apply to both.*

### **SPECIFICATION**

#### **Physical.**

Height	2 $\frac{3}{16}$ inches	(5.6 cm.)	} Overall.
Width	7 $\frac{1}{4}$ inches	(18.4 cm.)	
Depth	8 $\frac{1}{8}$ inches	(20.75 cm.)	
Weight	4 $\frac{3}{4}$ lb.	(2.2 kg.)	

#### **Low Tension Supply.**

Model 4202, 12 volt Battery.  
 Model 4203, 6 volt Battery.

#### **Fuse.**

Model 4202, 5 amps.  
 Model 4203, 10 amps.

#### **Scale Illumination Lamps.**

Model 4202, 12 volt, 0.2 amp.  
 Model 4203, 7.5 volt, 0.2 amp.

#### **Aerial Input Conditions.**

The trimmer provided gives adjustment for a range of aerial capacitors from 50-160 mmfd.

#### **Valves.**

Emitron - W77 R.F. Amplifier.  
 X78 Frequency Changer.

#### **Intermediate Frequency.**

465 kc/s.

#### **Wave Ranges.**

Medium Waves - 187-572 metres (1604 - 524.4 kc/s.)



## PROVISIONAL SERVICE INFORMATION

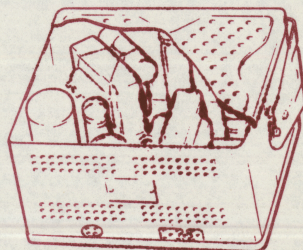
\* A &amp; C AMPLIFIER



"HIS MASTER'S VOICE" AUTOMOBILE RADIO  
**A & C AMPLIFIER**

FOUR VALVE AMPLIFIER FOR 12 & 6 VOLT  
 BATTERIES RESPECTIVELY

**SMITHS RADIOMOBILE**



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*In view of similarities and for convenience of description, this Sheet deals with the above two models. Unless otherwise stated, all details apply to both.*

### SPECIFICATION

#### Physical.

Height	4 $\frac{1}{2}$ inches (11.5 cm.)	} Overall.
Width	7 $\frac{15}{16}$ inches (20.2 cm.)	
Depth	6 inches (15.3 cm.)	
Weight	6 lbs. (2.7 kg.)	

#### Low Tension Supply.

'A' Amplifier, 12 volt Battery	} Positive earthed supply
'C' Amplifier, 6 volt Battery	

#### High Tension Supply.

Non-synchronous vibrator with hard valve rectifier.

#### Power Output.

3 watts maximum. (2 watts at 10% distortion).

#### Valves.

W77	I.F. Amplifier.
DH77	Detector, A.G.C. and A.F. Amplifier.
N78	Power Output.
U78	Full-wave Rectifier.

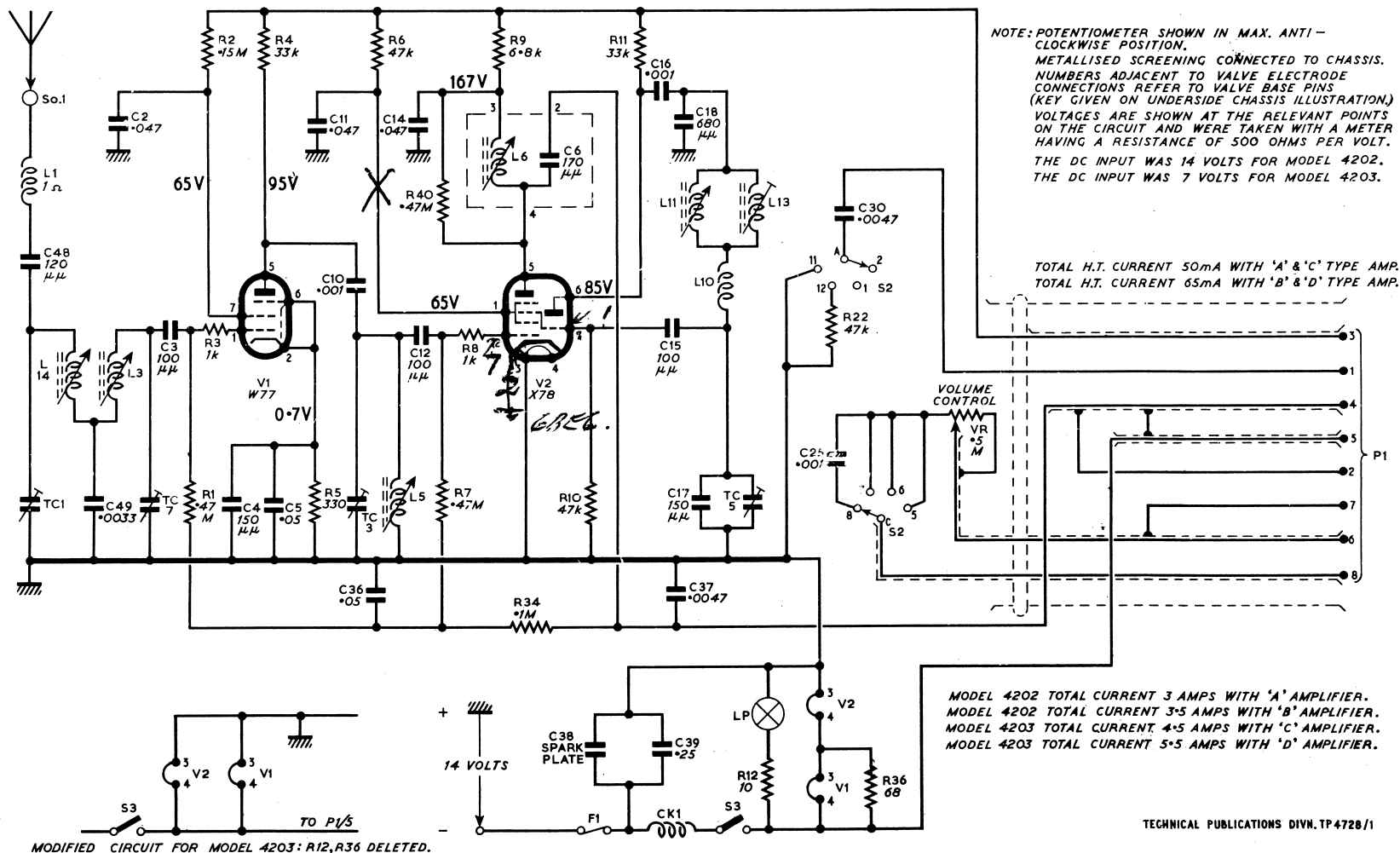
#### Intermediate Frequency.

465 kc/s.

#### Loudspeaker.

Various loudspeakers may be specified to suit the particular installation; it is stressed however, that only units whose impedances are between 3 and 5 ohms at 1,000 cycles are suitable.

TO Replace XT8 with 6BE6



CIRCUIT FOR 4202-3 CONTROL UNIT

TECHNICAL PUBLICATIONS DIVN. TP 4728/1

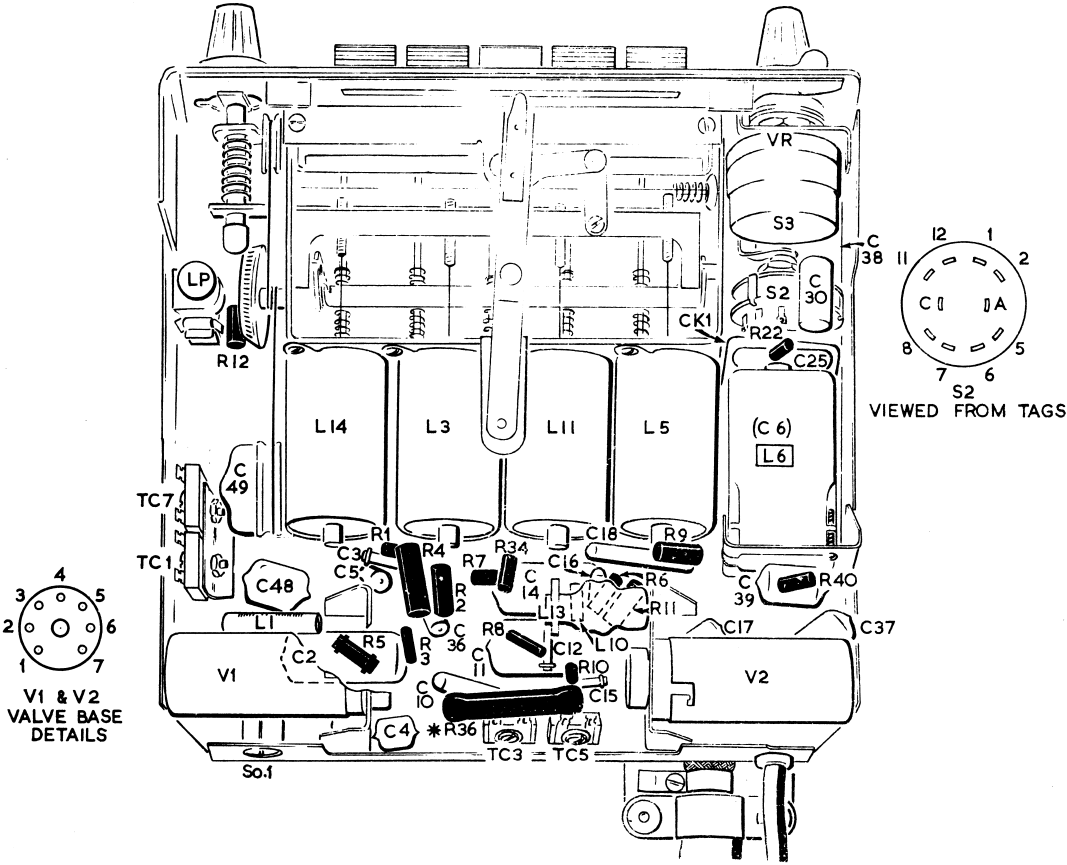
MODEL 4202/3 CONTROL UNITP r o v i s i o n a l   S e r v i c e   M a n u a lR.F. ALIGNMENT

- 1) Set volume control fully clockwise and bring tuning carriage right out (i.e., towards the front panel).
- 2) Inject a modulated signal at frequency indicated in table below (modulated at 400 cycles to 30 per cent) via the dummy aerial to the aerial socket.

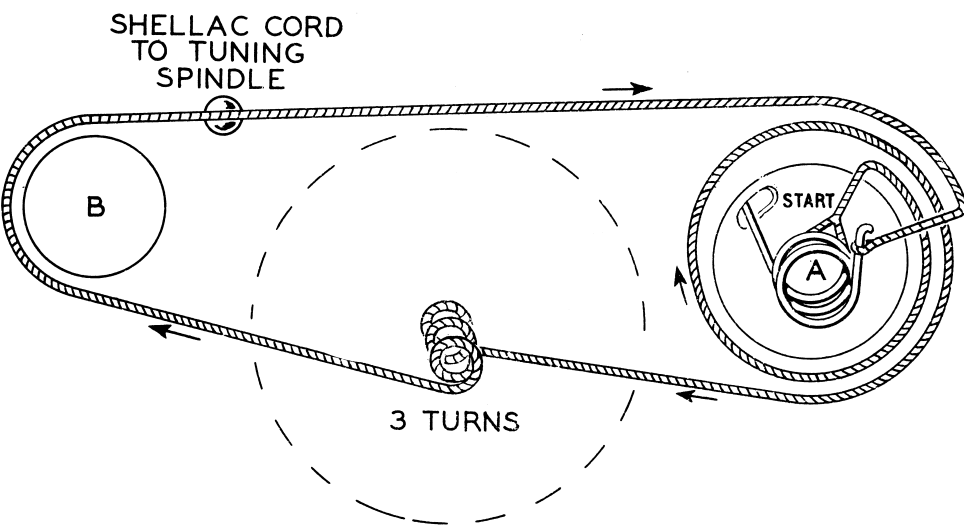
Op. No.	Ganged Induc- tances or Tuning Pointer Setting	Tune Test Oscillator to		Operation
		m.	kc/s.	
1	182.6 m.	182.6	1,643	Adjust TC5 for maximum output.
2	500 m.	500	600	Adjust core of L13 for maximum output.
3	-	-	-	Repeat operations 1 and 2 then reseal TC5.
4	250 m.	250	1,200	Adjust TC1 and TC3 for maximum output and reseal.

\* R36 USED ON MODEL 4202 ONLY.

H5



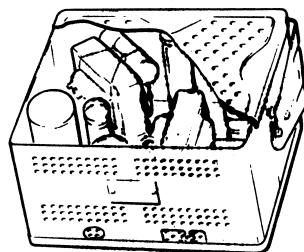
GENERAL CHASSIS VIEW



CORD DRIVE





**PROVISIONAL SERVICE INFORMATION****\* A & C AMPLIFIER****"HIS MASTER'S VOICE" AUTOMOBILE RADIO****A & C AMPLIFIER****FOUR VALVE AMPLIFIER FOR 12 & 6 VOLT  
BATTERIES RESPECTIVELY****SMITHS RADIOMOBILE**

*"In certain countries overseas, notably N. & S. America, this identical equipment is marketed as EMITRON CAR RADIO"*

*In view of similarities and for convenience of description, this Sheet deals with the above two models. Unless otherwise stated, all details apply to both.*

**SPECIFICATION****Physical.**

Height	4 $\frac{1}{2}$ inches (11.5 cm.)	} Overall.
Width	7 15/16 inches (20.2 cm.)	
Depth	6 inches (15.3 cm.)	
Weight	6 lbs. (2.7 kg.)	

**Low Tension Supply.**

'A' Amplifier, 12 volt Battery	} Positive earthed supply
'C' Amplifier, 6 volt Battery	

**High Tension Supply.**

Non-synchronous vibrator with hard valve rectifier.

**Power Output.**

3 watts maximum. (2 watts at 10% distortion).

**Valves.**

W77	I.F. Amplifier.
DH77	Detector, A.G.C. and A.F. Amplifier.
N78	Power Output.
U78	Full-wave Rectifier.

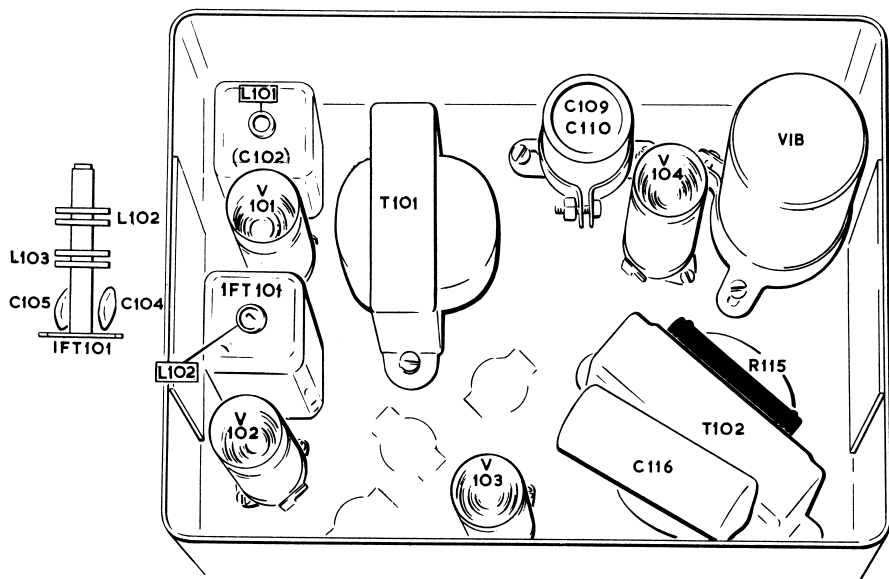
**Intermediate Frequency.**

465 kc/s.

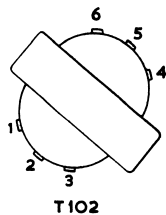
**Loudspeaker.**

Various loudspeakers may be specified to suit the particular installation; it is stressed however, that only units whose impedances are between 3 and 5 ohms at 1,000 cycles are suitable.

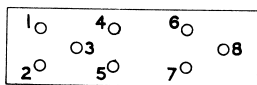
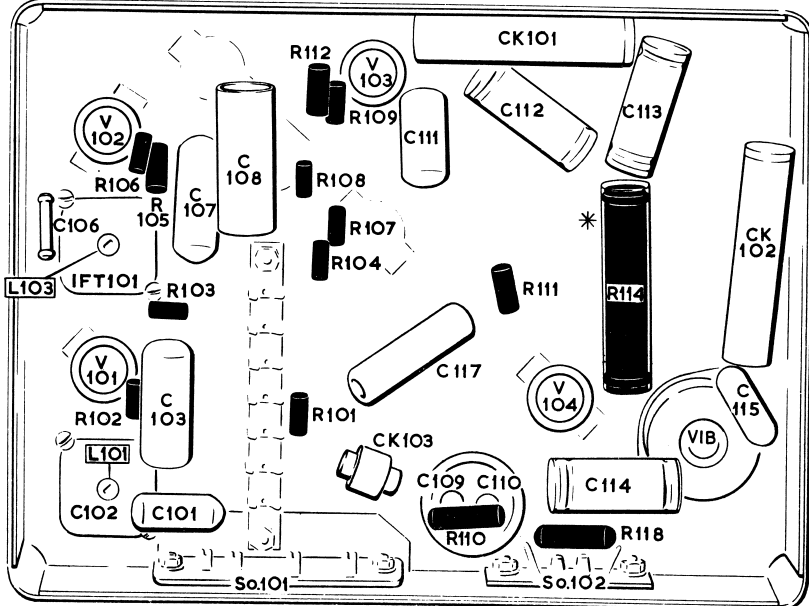




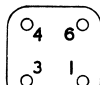
TOP-SIDE CHASSIS



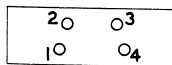
\* R114 is used with 46O28A (12V) only.



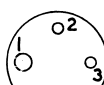
So 101  
VIEWED FROM TAGS



IFT101



So 102  
VIEWED FROM TAGS



VIB

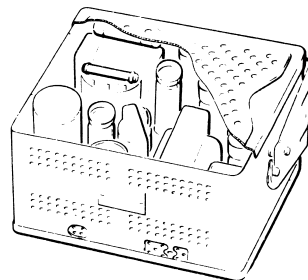
UNDERSIDE CHASSIS

**SERVICE INFORMATION SHEET**

\* B &amp; D AMPLIFIER



"HIS MASTER'S VOICE" AUTOMOBILE RADIO

**B & D AMPLIFIER**SIX VALVE AMPLIFIER FOR 12 & 6 VOLT  
BATTERIES RESPECTIVELY**SMITHS RADIOMOBILE***"In certain countries overseas, notably N. & S. America, this identical equipment is marketed as EMITRON CAR RADIO"**In view of similarities and for convenience of description, this Sheet deals with the above two models. Unless otherwise stated, all details apply to both.***SPECIFICATION****Physical.**

Height	4½ inches	(11.5 cm.)	} Overall.
Width	7 15/16 inches	(20.2 cm.)	
Depth	6 inches	(15.3 cm.)	
Weight	7¼ lbs.	(3.3 kg.)	

**Low Tension Supply.**

'B' Amplifier, 12 volt Battery	} Positive earthed supply *
'D' Amplifier, 6 volt Battery	

\* These amplifiers cannot be adapted for use with vehicles having a negative earthed supply, and on no account should the connections to the electrolytic condensers be reversed.

**High Tension Supply.**

Non-synchronous vibrator with hard valve rectifier.

**Power Output.**

7 watts maximum. (5 watts at 5% distortion).

**Valves.**

W77	I.F. Amplifier.
DH77	Detector, A.G.C. and L.F. Amplifier.
DH77	Phase Splitter.
N78)	Push-pull Output.
N78)	
U78	Full-wave Rectifier.