



**ELECTRONIC INDUSTRIES LTD.** BULLETIN: SR/SS-1.

CAR RADIO DIVISION

126-130 GRANT STREET, SOUTH MELBOURNE, S.C.A

File: Receivers Auto

Date: 21-10-55.

## SERVICE BULLETIN

Page: 1.

### MODELS "SR" AND "SS"

#### 6-VALVE SUPERHETERODYNE CAR RADIO RECEIVERS

##### FOR OPERATION FROM:

Model ''SR'' 6-volt Accumulator  
Model ''SS'' 12-volt Accumulator

##### TUNING RANGE:

535-1610 Kilocycles      560.7-186.3 Metres

##### BATTERY CONSUMPTION: Manual Tuning.

Model ''SR'' 6 Amps      } does not include dial or indicator lamps.  
Model ''SS'' 3.25 Amps      }

##### BATTERY CONSUMPTION: Selectomatic Tuning.

Model ''SR'' 21 Amps      } does not include dial or indicator lamps.  
Model ''SS'' 9.25 Amps      }

**Note:** The 21 amps drawn by the Model ''SR'' consists of 6 amps for the receiver and 15 amps for the selectomatic tuning unit. The 15 amps is only instantaneous while the foot switch or tuning knob is pressed to operate the tuning unit mechanism.  
The 9.25 amps drawn by the Model ''SS'' consists of 3.25 amps for the receiver and 6 amps for the selectomatic tuning unit. The 6 amps is only instantaneous while the foot switch or tuning knob is pressed to operate the tuning unit mechanism.

Minimum voltage required to operate the selectomatic mechanism:

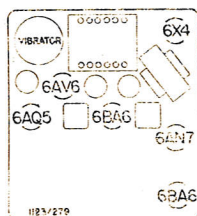
6 volt Model ''SR'' - 5.5 volts.  
12 volt Model ''SS'' - 11 volts.

Voltage measured between receiver metal can and end of battery lead supplied on receiver, Selectomatic tuning unit operating.

##### THIS BULLETIN CONTAINS:

1. Operation of Selectomatic Tuning Unit.
2. Receiver Operating Instructions.
3. Alignment Instructions.
4. Circuit Diagrams.
5. Electrical and Mechanical Parts List.
6. Connections for Transformers.
7. Valve Placement Diagram.
8. Instructions for Fitting a Foot Switch to the Car for Foot Operation of the Selectomatic Mechanism.
9. Circuit Modifications.

2.



## ANTENNA COMPENSATING CONDENSER ADJUSTMENT

(after the receiver has been installed in the car):

A control is provided to ensure correct matching of the antenna to the receiver for maximum long-distance reception.

This control is a small knob located on the side of the receiver case near where the antenna lead-in cable enters the receiver.

To adjust the control, extend the antenna to half its fully extended height, then tune the receiver to a barely audible distant station near the centre of the dial.

Slowly turn the small control knob in either direction for maximum volume of the signal.

If a barely audible distant station is not available, adjust the antenna matching control knob for maximum volume of the background noise between two stations near the centre of the dial.

For best results it should be adjusted in a locality free from interference from overhead power lines, etc.

Once the control has been set it should not require readjustment unless the receiver or antenna and lead-in cable have been moved or removed from the vehicle.

## OPERATION OF SELECTOMATIC TUNING UNIT

The Model SR/SS car radio incorporates a pre-settable station changing principle known as "Selectomatic" tuning.

The Selectomatic unit includes a permeability tuner similar to that used in the Model RL/RM, but with the addition of a six-position turret, embodying the pre-set tuning stops, and is powered by a solenoid. One of the turret positions is designated "Manual tuning", in which the receiver may be tuned by pulling out the tuning knob and turning it in the normal way. The other five turret positions are for pre-settable stations.

To operate the Selectomatic unit, the push switch contacts are closed by fully depressing the tuning spindle knob or by pressing a foot switch. This connects the solenoid coil across the car battery; the plunger is then drawn into the solenoid coil loading the turret operating mechanism. On releasing the push button the two main springs withdraw the plunger and the core carriage from the solenoid, at the same time completing the action of rotating the turret through one position. The core carriage is brought to a halt against the adjustable screwed stop on the turret.

In each of the six positions of the turret there is a lead screw on which is mounted a specially shaped nut which forms the stop.

By rotating any of the lead screws the stop is moved up and down the length of the screw. This length represents the broadcast tuning range, so that any of the adjustable stops may be tuned to any frequency on the broadcast band, although, generally, stations are set up in normal sequence as they occur.

On the end of each lead screw is a gear wheel which is intended to engage with the crown wheel on the tuning shaft.



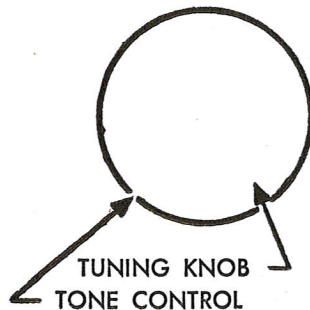
The manual tuning lead screw is of a coarser pitch and has a larger gear wheel than those attached to the pre-settable lead screws, so that when the manual position is opposite the tuning shaft, the tuning knob may be pulled out until the spindle rides over the indexing spring, whereupon the crown wheel is engaged with the gear wheel on the lead screw and the receiver is tunable in the normal way.

When any of the other five pre-settable positions are opposite the tuning shaft, the tuning shaft must be pulled out against spring tension to engage the gears while adjusting the stops for the desired station settings.

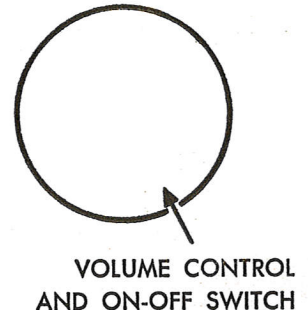
When these pre-settable positions are adjusted, the knob is released and the station is tuned, and will remain so throughout all subsequent automatic usage of the receiver until altered at will.

A cam is mounted on the end of the turret shaft and operates a pair of contacts, causing a light to show behind the receiver dial to indicate when the manual position may be engaged with the tuning shaft.

## RECEIVER OPERATING INSTRUCTIONS



White light indicates manual → •



• ← Red light indicates set-on

### TO SWITCH RECEIVER "ON":

Turn clockwise the knob for the combined "ON/OFF" switch and volume control. A red indicator light will show at the bottom of the dial, indicating that the receiver is switched "ON".

### MANUAL TUNING:

A white light at the bottom of the dial indicates that the receiver is in the manual tune position. If the light does not show, press and release the tuning knob several times until the light comes on, then pull the tuning knob out as far as it will go.

Stations may now be tuned in just the same as with an ordinary car radio.

### SELECTOMATIC TUNING:

If the manual tuning white indicator light is seen at the bottom of the dial, firmly press the tuning knob fully in until the light goes out and which will automatically set the receiver in the first Selectomatic position.

To change from station to station set by the Selectomatic tuning, press and immediately release the floor switch on the car floor or the tuning knob.

### TO CHANGE A STATION TUNED BY THE SELECTOMATIC:

1. Press and immediately release the tuning knob or the foot switch until the dial pointer indicates and the station to be changed is heard.
2. Pull the tuning knob out as far as it will go and with the knob pulled out tune in the station required, just the same as with an ordinary car radio.
3. Press the tuning knob firmly and straight in as far as it will go while the station is being received, until the Selectomatic mechanism is heard to click into position.

4.

4. Any of the stations tuned by the Selectomatic mechanism may be changed to different stations by following the above procedure.

**Note:** Make sure to push the tuning control knob firmly in where it is mentioned in the instructions. Failure to do so may lock the mechanism. Firm pressure on the tuning knob will clear it.

## ALIGNMENT INSTRUCTIONS

### Equipment:

Signal generator:

Output meter:

Alignment tools: Part No. M195 and PM581.

Mica capacitor: 0.01 MF Part No. PC145 for IF. trans. alignment.

Dummy antenna: 65 MMF Part No. M341.

IF. Attenuator: Part No. M174.

This attenuator consists of a 0.004 MF condenser and a 10K. ohm non-inductive resistor connected in series and having clips fitted for attaching to the receiver.

### Alignment Conditions:

Supply voltage - Model 'SR' 6 volt accumulator.

Model 'SS' 12 volt accumulator.

Volume control - maximum volume (fully clockwise).

Output level - 50 Milliwatts.

Load impedance - 5,000 ohms.

Tone control - treble position.

Intermediate frequency - 455 Kc/s.

Do not use a screwdriver or an alignment tool with an iron point for adjusting the variable iron cores. Special tools - Part Nos. M195 and PM581 are available from the factory for alignment purposes.

Operation No.	Generator Connection	Generator Frequency	Dummy Antenna	Instructions
1.	Remove top and bottom sections of metal can to align IF. transformers.			
2.	To control grid of 6BA6 IF. valve (pin No. 1)	455 Kc/s.	0.01 MF Mica cond. in series with generator.	Peak 2nd IF. trans. pri. and sec. for maximum output.
3.	To control grid of 6AN7 valve (pin No. 2)	455 Kc/s.	0.01 MF Mica cond. in series with generator.	Turn tuning control knob until perm. tuner iron cores are fully out of the windings on the coil formers and the unit is hard against the stop. Peak 1st IF. trans. pri. and sec. for maximum output.
4.	Repeat operations No. 2 and 3.			
5.	Refit top section of metal can during alignment of RF. signal circuits to eliminate variations in oscillator setting.			
6.	Connect attenuator Part No. M174 between 6BA6 IF. valve control grid pin No. 1 and the metal chassis.			
7.	Turn control head tuning knob to bring iron cores fully out of windings and perm. tuner unit against stop. Make sure the centre of the dial pointer aligns with the centre of the end of travel spot on the dial reading at the high frequency end.			



8. To antenna 1000 Kc/s. Dummy antenna part No. M341 (65 MMF) in series with generator. Turn control head tuning control knob until centre of dial pointer aligns with centre of alignment spot on receiver dial reading at 1000 Kc/s. Leave the perm. tuner and dial pointer set in this position, then peak osc. coil trimmer condenser for max. output, then peak RF. trans. trimmer condenser for maximum output and antenna trans. trimmer condenser for maximum output.
9. Repeat operation No. 8.
10. Remove IF. attenuator and refit bottom section of metal can.
11. Tuning range after alignment 535 to 1610 Kc/s.
- Note: The iron cores of the perm. tuner are pre-set at the factory to an exact dimension of  $1.677'' \pm .005''$  between the extreme end of the former protruding through the rubber grommet and the end of the iron core in the former when the unit is turned fully anti-clockwise and is hard against the stop. If incorrect logging and misalignment are to be avoided, no adjustment of the iron cores must be made to vary this dimension. The iron cores must have the same color identification spot on the end of the iron core.

Circuit No.	Description	Tol. $\pm$	Rating	Part No.	
1.	1 MF Metallised paper cond. (used on Universal 6-volt control head only)	20%	200V. DCW	PC997	SR only
	1 MF Paper cond. (used on all 6-volt control heads except the 6-volt Universal head)	20%	100V. DCW	C160	SR only
2.	.5 MF Paper cond.	20%	200V. DCW	PC987	
3.	.25 MF Paper cond.	20%	100V. DCW	PC988	SS only
4.	.25 MF Paper Cond.	20%	100V. DCW	PC988	
5.	.25 MF Paper cond.	20%	100V. DCW	PC988	
6.	.1 MF Paper cond.	20%	400V. DCW	PC989	
7.	.1 MF Paper cond.	20%	400V. DCW	PC989	
8.	.05 MF Paper cond.	20%	400V. DCW	PC990	
9.	.05 MF Paper cond.	20%	200V. DCW	PC991	
10.	.05 MF Paper cond.	20%	200V. DCW	PC991	
11.	.05 MF Paper cond.	20%	200V. DCW	PC991	
12.	.05 MF Paper cond.	20%	200V. DCW	PC991	
13.	.05 MF Paper cond.	20%	200V. DCW	PC991	
14.	.01 MF Paper cond.	20%	400V. DCW	PC992	
15.	.01 MF Paper cond.	20%	400V. DCW	PC992	
16.	.004 MF Paper cond.	20%	600V. DCW	PC969	
17.	.004 MF Paper cond. refer page 14	20%	600V. DCW	PC969	
18.	.002 MF Paper cond.	20%	600V. DCW	PC993	
19.	.008 MF Paper cond.	20%	2000V. DCW	PC840	
20.	.001 MF Silvered mica cond.	5%	500V. DCW	C109	
21.	.00055 MF Silvered mica cond.	5%	500V. DCW	PC999	
22.	.00022 MF Silvered mica cond.	2½%	500V. DCW	C112	
23.	.0002 MF Silvered mica cond.	10%	500V. DCW	PC995	
24.	.0002 MF Silvered mica cond.	2½%	500V. DCW	C169	
25.	.0001 MF Silvered mica cond.	10%	500V. DCW	PC994	

6.

Circuit No.	Description	Tol. $\pm$	Rating	Part No.	
26.	.0001 MF Silvered mica cond.	10%	500V. DCW	PC994	
27.	.0001 MF Silvered mica cond.	10%	500V. DCW	PC994	
28.	.0001 MF Silvered mica cond.	10%	500V. DCW	PC994	
29.	.0001 MF Mica cond.	10%	1000 VT	PC571	
30.	50 MMF Ceramicon cond.	5%	500V. DCW	C104	
31.	1000 PF Ceramidisc button cond.	500 PF	500V. DCW	C108	
32.	1000 PF Ceramidisc button cond.	500 PF	500V. DCW	C108	SR only
33.	3-30 MMF Trim. cond. wire wound			PC663	
34.	Trimmer cond. (antenna compensating)			PC954	
35.	25 MF Electrolytic cond.	20%	40 PV	PC996	
36.	16 MF Electrolytic cond.	20%	525 PV	PC952	
37.	8 MF Electrolytic cond.	20%	525 PV	PC986	
38.	3-55 MMF Trimmer cond.			PC899	
39.	.05 MF Paper cond. - refer page 14	20%	200V. DCW	PC991	
40.	10 Megohm Carbon resistor	10%	$\frac{1}{2}$ W.	R1062	
41.	10 Megohm Carbon resistor	10%	$\frac{1}{2}$ W.	R1062	
42.	1.5 Megohm Carbon resistor	10%	$\frac{1}{2}$ W.	R1552	
43.	1 Megohm Carbon resistor	10%	$\frac{1}{2}$ W.	R1052	
44.	.47 Megohm Carbon resistor	10%	$\frac{1}{2}$ W.	R4742	
45.	.47 Megohm Carbon resistor	10%	$\frac{1}{2}$ W.	R4742	
46.	.22 Megohm Carbon resistor	10%	1 W.	Z2242	
47.	100,000 Ohm Carbon resistor	10%	$\frac{1}{2}$ W.	R1042	
48.	47,000 Ohm Carbon resistor	10%	$\frac{1}{2}$ W.	R4732	
49.	47,000 Ohm Carbon resistor	10%	$\frac{1}{2}$ W.	R4732	
50.	47,000 Ohm Carbon resistor	10%	$\frac{1}{2}$ W.	R4732	
51.	47,000 Ohm Carbon resistor	10%	$\frac{1}{2}$ W.	R4732	
52.	33,000 Ohm Carbon resistor	10%	1 W.	Z3332	
53.	22,000 Ohm Carbon resistor	10%	$\frac{1}{2}$ W.	R2232	
54.	11,000 Ohm Carbon resistor 3W. consists of three 33,000 Ohm 1 watt resistors $\pm$ 10% Part No. Z3332 wired in parallel				
55.	10,000 Ohm Carbon resistor	10%	1 W.	Z1032	
56.	2,200 Ohm Carbon resistor	10%	$\frac{1}{2}$ W.	R2222	
57.	1,500 Ohm Carbon resistor 2 watt consists of a 2,700 Ohm resistor $\pm$ 10% 1W. Part No. Z2722 and a 3,300 Ohm resistor $\pm$ 10% 1W. Part No. Z3322 wired in parallel				
58.	390 Ohm Carbon resistor	10%	$\frac{1}{2}$ W.	R3912	
59.	270 Ohm Carbon resistor	10%	$\frac{1}{2}$ W.	R2712	
60.	270 Ohm Carbon resistor	10%	$\frac{1}{2}$ W.	R2712	
61.	270 Ohm Carbon resistor	10%	1 W.	Z2712	
62.	100 Ohm wire wound resistor	10%	1 W.	PR519	SS only
63.	40 Ohm wire wound resistor	10%	3 W.	PR625	SS only
64.	47 Ohm wire wound resistor	10%	$\frac{1}{2}$ W.	PR853	
65.	39 Ohm wire wound resistor	10%	1 W.	PR852	SS only
66.	22 Ohm wire wound resistor	10%	$\frac{1}{2}$ W.	PR733	
67.	20 Ohm wire wound resistor	10%	1 W.	PR674	SR only
68.	20 Ohm wire wound resistor	10%	$\frac{1}{2}$ W.	PR231	
69.	4.7 Ohm wire wound resistor	10%	$\frac{1}{2}$ W.	PR858	
70.	4.7 Ohm wire wound resistor	10%	1 W.	PR859	



71. 100,000 Ohm Carbon potentiometer. Part number is different for different shaft lengths:-
- |   |       |
|---|-------|
| Ford BN                                   | PR836 |
| Rover 75 & 90                             | PR699 |
| Pontiac                                   | PR839 |
| Vauxhall 5E                               | PR843 |
| Holden 6-volt                             | PR841 |
| Holden 12-volt                            | PR839 |
| Plymouth, Dodge, De Soto                  | PR850 |
| Ford-Astor & Air Chief-Universal receiver | PR847 |
| Chevrolet                                 | PR839 |
| Jaguar Mk. VII                            | PR843 |
72. (refer page 14)
- .5 Megohm Carbon potentiometer tapped at 40K. ohms DP.ST switch attached
- Part No. is different for different shaft lengths:-
- |  |       |
|--|-------|
| Ford BN                                    | PR667 |
| Rover 75 and 90                            | PR857 |
| Pontiac                                    | PR845 |
| Vauxhall 5E                                | PR842 |
| Holden 6-volt                              | PR840 |
| Holden 12-volt                             | PR845 |
| Plymouth, Dodge, DeSoto                    | PR849 |
| Ford-Astor and Airchief Universal receiver | PR846 |
| Chevrolet 10-19                            | PR845 |
| Jaguar Mk. VII                             | PR842 |
- 1.2 Megohm Carbon potentiometer tapped at 40K. ohms DP.ST switch attached
- Part No. is different for different shaft lengths:-
- |  |       |
|--|-------|
| Ford BN                                    | PR905 |
| Rover 75 and 90                            | PR906 |
| Pontiac                                    | PR903 |
| Vauxhall 5E                                | PR902 |
| Holden 6-volt                              | PR901 |
| Holden 12-volt                             | PR903 |
| Plymouth, Dodge, DeSoto                    | PR910 |
| Ford-Astor and Airchief Universal receiver | PR904 |
| Chevrolet 10-19                            | PR903 |
| Jaguar Mk. VII                             | PR902 |
- 73.
74. Choke L190
75. Vibrator transformer 6-volt 150 cycle PT232 SR only
76. Vibrator transformer 12-volt 150 cycle PT182 SS only
77. Choke - layer wound L137
78. Choke - spiral wound PT439
79. Choke - spiral wound PT439 SS only
80. Choke - spiral wound L138 SR only
81. Iron cored choke PT796
82. Choke - spark filter L130
83. Speaker input trans. 5,000 - 3.5 Ohms impd. code No. KBG112 PT871
84. IF. Transformer 455 Kc/s. PT872
85. IF. Transformer 455 Kc/s. PT872
86. 6-volt non-sync. vibrator 150 cycle 4-pin (6-pin spacing) M337 SR only
87. 12-volt non-sync. vibrator 150 cycle 4-pin (6-pin spacing) M338 SS only
88. Lamp 6V. .15A. min. bay. base (G3½ bulb) PM220 SR only
89. Lamp 12V. 2.2W. 0.182A. min. bay. base (G3½ bulb) M370 SS only
90. On/Off switch - part of volume control circuit No. 72

8.		
91.	Speaker - 5" permag. type 5C	K196
	6" permag. type 6H	K138
	6" permag. type 6L	K176
	6x9 oval permag. type 6x9L	K158
92.	6-pin oblong plug	A102/366
93.	6-pin oblong socket	A101/366
94.	15 amp fuse	PM219 SS only
95.	30 amp fuse	M385 SR only
96.	Foot switch (interim type) complete less lead	M391
	Switch - less base plate and mount screws	M390
	Base plate	309/81
	Connecting lead 3 ft.	PA506
	Connecting lead 4 ft.	PA507
	Screw (2) $\frac{3}{8}$ " x $\frac{1}{8}$ " Csk. hd.	11/560-6
	Washer (2) $\frac{1}{8}$ " int. S/P.	1/562-4
	Nut (2) $\frac{1}{8}$ " Whit.	3/478-2
	Foot switch (final type) complete with rubber cover cap	M395
	(1/391) less lead and mount screw	35/560-32
	Mount screw $1\frac{1}{2}$ " x No. 10 Bdr. hd. self-tapping	PA512
	Connecting lead 3 ft.	PA513
	Connecting lead 4 ft.	L122 SR only
97.	Solenoid 6-volt (part of tuning unit)	L123 SS only
98.	Solenoid 12-volt (part of tuning unit)	L133 SR only
99.	Selectomatic tuning unit 6-volt	L134 SS only
100.	Selectomatic tuning unit 12-volt	L135
101.	Antenna coil - less iron core	11/766-2
	Antenna coil iron core (blue spot)	11/766-3
	Antenna coil iron core (brown spot)	11/766-1
	Antenna coil iron core (white spot)	L135
102.	RF. coil - less iron core	11/766-2
	RF. coil iron core (blue spot)	11/766-3
	RF. coil iron core (brown spot)	11/766-1
	RF. coil iron core (white spot)	L136
103.	Osc. coil - less iron core	11/766-2
	Osc. coil iron core (blue spot)	11/766-3
	Osc. coil iron core (brown spot)	11/766-1
	Osc. coil iron core (white spot)	269/81
	Knob - antenna matching control on side of receiver case	PM146
	Vibrator Socket - 6-pin	A104/58
	Valve Socket - 7-pin	279/250
	Valve Socket - 9-pin	64/635
	Valve Shield 6AN7	42/98
	Vibrator Earth Clip	7/670
	Clip for mounting IF. trans.	364/250
	Speaker Socket - 2-pin	336/30C
	Speaker Plug - 2-pin - refer page 14	267/250
	Press Stud - earth lead - speaker - refer page 14	11/245
	Fuse Holder - long section	14/245
	Fuse Holder - short bayonet section	15/245
	Fuse Insulator - cardboard tubing	17/245
	Eyelet and Washer Assy. (2) moulded bakelite - fuse holder	89/30C-2
	Spring - fuse holder	PC545
	.5 MF 200V. DCW metal-clad generator armature terminal	PC545-1
	by-pass condenser	PR314
	.5 MF 200V. DCW metal-clad ignition coil battery terminal	WM15
	by-pass condenser	3/478-14
	Suppressor - 12,500 Ohm screw-in type	
	A+ Cable 19/.012" T/C wire	
	Rear Mount Nut for rear mount stud 5/16" Whit.	

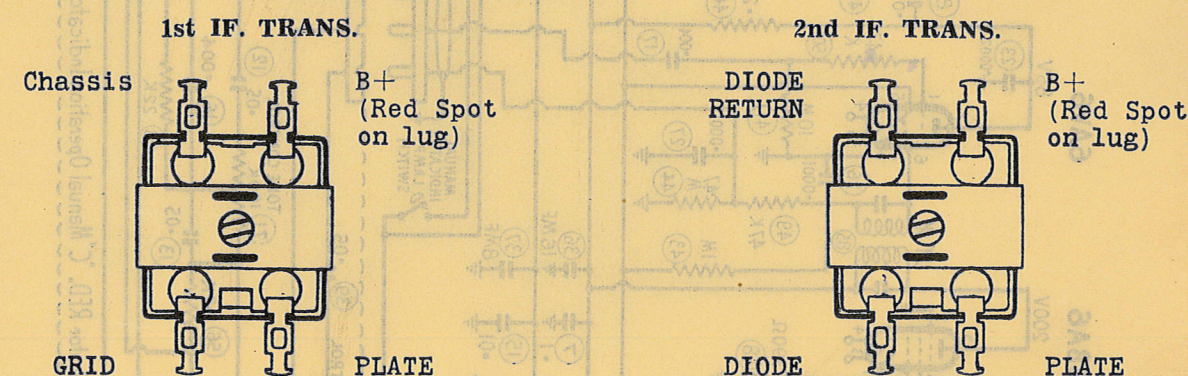


8.

91. Speaker - 5" permag. type 5C K196  
 6" permag. type 6H K138  
 6" permag. type 6L K176  
 6x9 oval permag. type 6x9L K158
92. 6-pin oblong plug A102/366  
 93. 6-pin oblong socket A101/366  
 94. 15 amp fuse PM219 SS only  
 95. 30 amp fuse M385 SR only  
 96. Foot switch (interim type) complete less lead M391  
 Switch - less base plate and mount screws M390  
 Base plate 309/81  
 Connecting lead 3 ft. PA506  
 Connecting lead 4 ft. PA507  
 Screw (2)  $\frac{3}{8}$ " x  $\frac{3}{8}$ " Csk. hd. 11/560-6  
 Washer (2)  $\frac{1}{8}$ " int. S/P. 1/562-4  
 Nut (2)  $\frac{1}{8}$ " Whit. 3/478-2
- Foot switch (final type) complete with rubber cover cap M395  
 (1/391) less lead and mount screw 35/560-32  
 Mount screw  $1\frac{1}{2}$ " x No. 10 Bdr. hd. self-tapping PA512  
 Connecting lead 3 ft. PA513  
 Connecting lead 4 ft. L122 SS only  
 97. Solenoid 6-volt (part of tuning unit) L123 SS only  
 98. Solenoid 12-volt (part of tuning unit) L133 SR only  
 99. Selectomatic tuning unit 6-volt L134 SS only  
 100. Selectomatic tuning unit 12-volt L135  
 101. Antenna coil - less iron core 11/766-2  
 Antenna coil iron core (blue spot) 11/766-3  
 Antenna coil iron core (brown spot) 11/766-1  
 Antenna coil iron core (white spot) L135  
 102. RF. coil - less iron core 11/766-2  
 RF. coil iron core (blue spot) 11/766-3  
 RF. coil iron core (brown spot) 11/766-1  
 RF. coil iron core (white spot) L136  
 103. Osc. coil - less iron core 11/766-2  
 Osc. coil iron core (blue spot) 11/766-3  
 Osc. coil iron core (brown spot) 11/766-1  
 Osc. coil iron core (white spot) 269/81
- Knob - antenna matching control on side of receiver case PM146  
 Vibrator Socket - 6-pin A104/58  
 Valve Socket - 7-pin 279/250  
 Valve Socket - 9-pin 64/635  
 Valve Shield 6AN7 42/98  
 Vibrator Earth Clip 7/670  
 Clip for mounting IF. trans. 364/250  
 Speaker Socket - 2-pin 336/30C  
 Speaker Plug - 2-pin - refer page 14 267/250  
 Press Stud - earth lead - speaker - refer page 14 11/245  
 Fuse Holder - long section 14/245  
 Fuse Holder - short bayonet section 15/245  
 Fuse Insulator - cardboard tubing 17/245  
 Eyelet and Washer Assy. (2) moulded bakelite - fuse holder 89/30C-2  
 Spring - fuse holder PC545  
 .5 MF 200V. DCW metal-clad generator armature terminal by-pass condenser PC545-1  
 .5 MF 200V. DCW metal-clad ignition coil battery terminal by-pass condenser PR314  
 Suppressor - 12,500 Ohm screw-in type WM15  
 A+ Cable 19/.012" T/C wire 3/478-14  
 Rear Mount Nut for rear mount stud 5/16" Whit.

9.

- Rear Mount Stud shakeproof washer 5/16" int. 1/562-13  
 Indicator Light Button - "Clear" 3/386-3  
 Indicator Light Button - "Red" 3/386-2  
 Rubber Sleeve - foot switch connector 43/386  
 Contact Pin - foot switch connector 23/386  
 Contact Sleeve - foot switch connector 42/386  
 Universal Coupling - tuning spindle 53/813  
 Split Pin - tuning spindle 392/250  
 Receiver Metal Can - top section - blue duco A123/366-2  
 Receiver Metal Can - top section - silver duco A123/366-1  
 Receiver Metal Can - bottom section - blue duco A114/321-3  
 Receiver Metal Can - bottom section - blue duco dunked corner A115/321-2  
 Receiver Metal Can - bottom section - silver duco A114/321-2  
 Receiver Metal Can - bottom section - silver duco dunked corner A115/321-3



ANTENNA COIL

Blue, Red or Green - Chassis  
 White or Yellow - Antenna

RF. COIL

Blue, Red or Green - A.V.C.  
 White or Yellow - Grid

OSCL. COIL

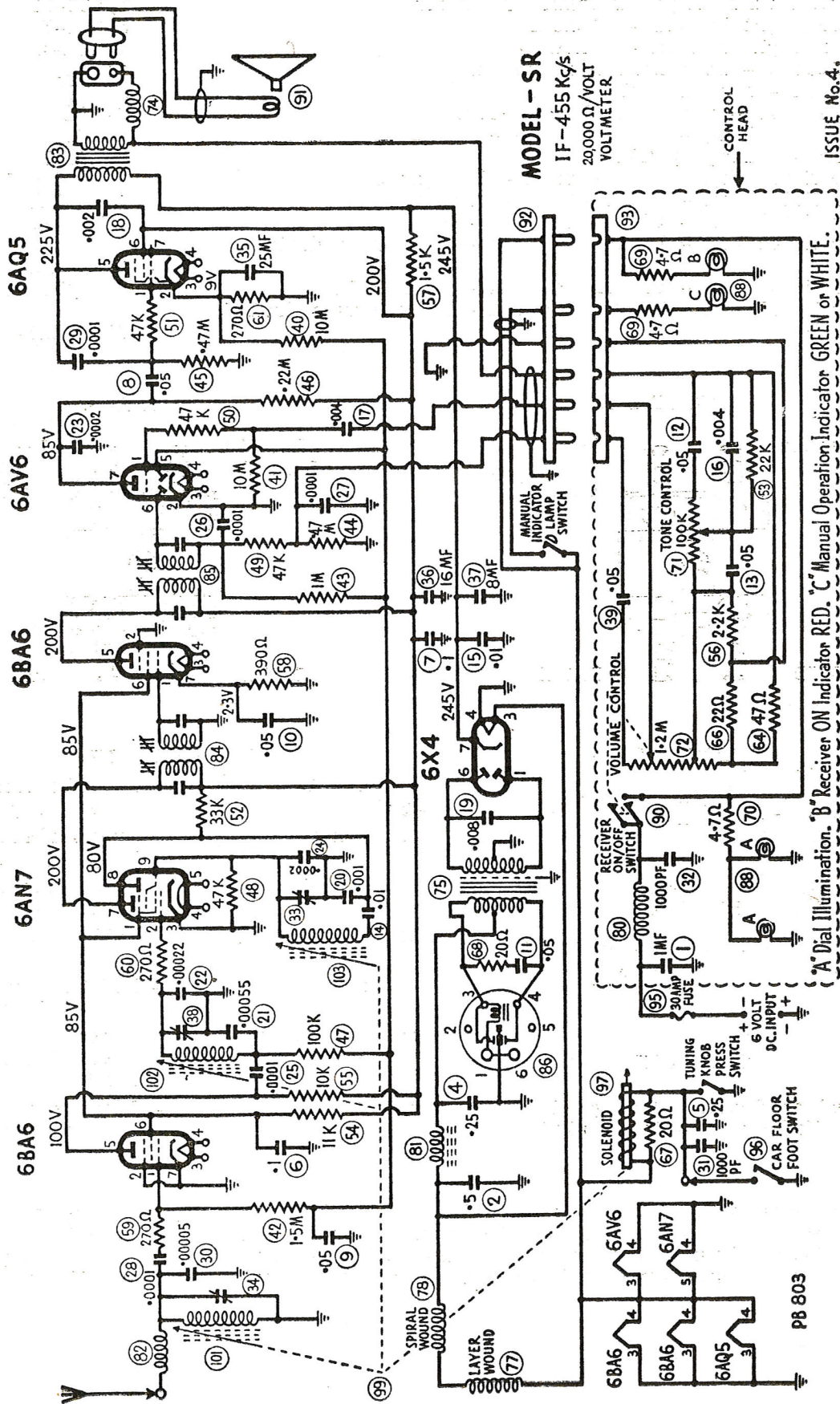
Blue, Red or Green - Osc. grid  
 White or Yellow - Oscl. plate

POWER TRANS.

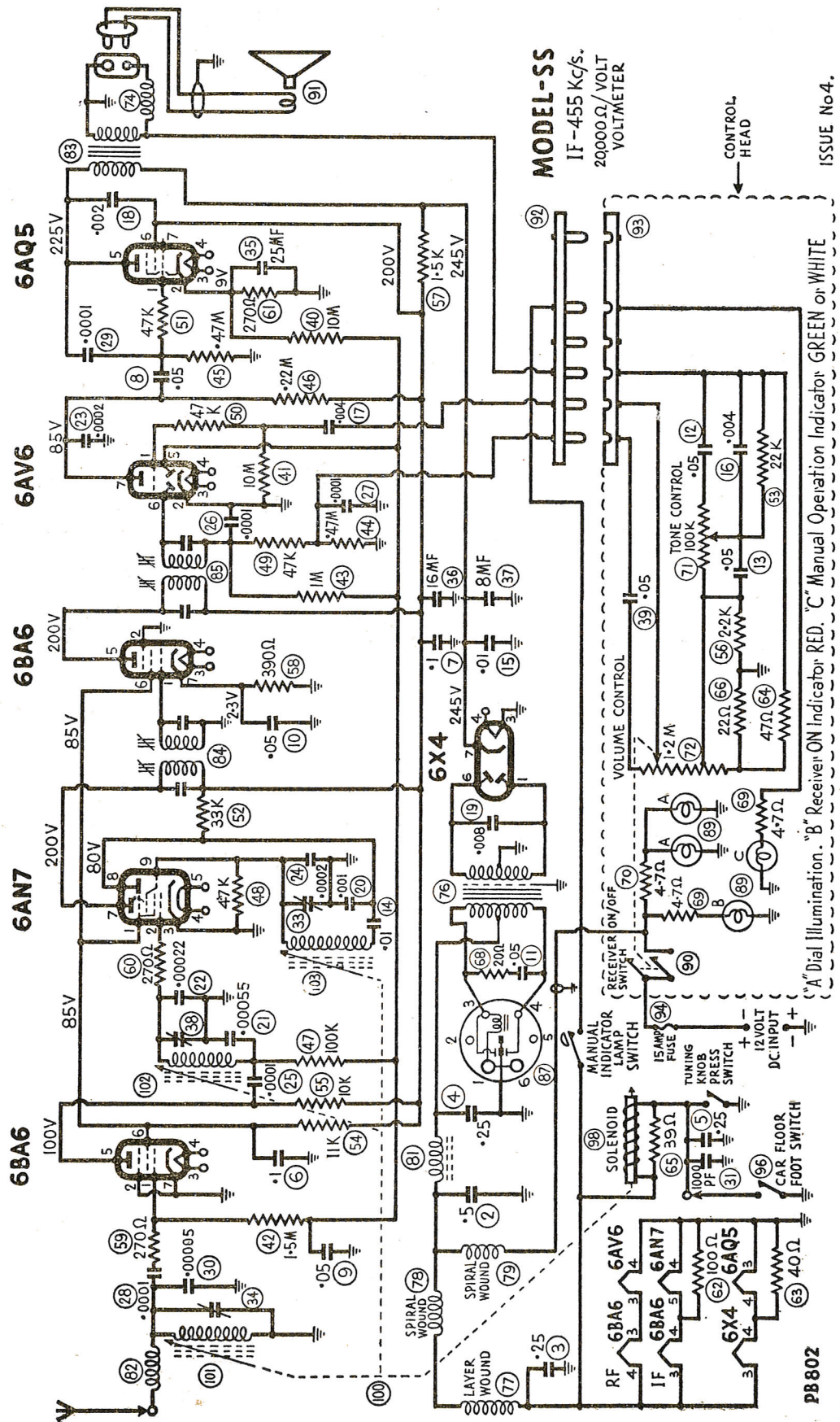
Pri. start - Red sleeving on heavy gauge wire.  
 Pri. centre tap - Green sleeving on heavy gauge wire.  
 Pri. finish - Black sleeving on heavy gauge wire.  
 Elect. Static Shield - Yellow, stranded wire.  
 Sec. start - Red cotton covered stranded lead.  
 Sec. centre tap - Green cotton covered stranded lead.  
 Sec. finish - Black cotton covered stranded lead.

Note: The antenna, RF. and oscl. coil coloured leads are shown above as having a particular coloured lead for connection to a specific point. Either coloured lead may be connected to either of the specified points for the respective coil without any detrimental effect to the receiver.







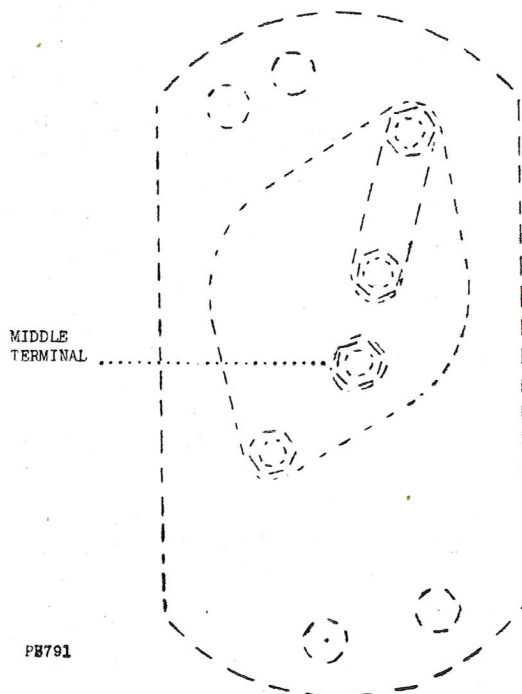


12.

## INSTRUCTIONS FOR FITTING A FOOT SWITCH TO THE CAR FOR FOOT OPERATION OF THE SELECTOMATIC TUNING

### Interim Type Foot Switch:

1. Hold switch and switch mount base together, then select a mount position on car floor or lower section of car firewall. The switch mount position is to be such that when the foot of the car driver is operating the switch, it is clear of the control pedals of the vehicle.
2. Place switch on mount base at selected position and, using the two large mount screw holes in the switch and mount base as a template, mark and drill two 9/64" dia. holes through the car trim and car body.
3. Connect plug on end of long flexible lead supplied with receiver to the connector attached to short lead protruding from side of receiver metal base near where the receiver serial number is stamped. Make sure that metal sections of connector are fully covered by the rubber sleeve.
4. Feed long flexible lead to the selected switch position. Cut lead to length, and remove approx. 1/4" of covering from end of lead. Attach spade lug supplied with receiver to the bared wire, then solder the lead-lug connection.
5. Loosen the middle terminal nut on the switch, refer diagram.
6. Feed lead through large opening in the switch mount base.
7. Slide spade lug under the shakeproof washer of the switch middle terminal, then securely tighten the nut.
8. Place switch at the selected position and make sure that the lead passes through lead entry arch at side of mount base.
9. Insert a 1 1/2" x No. 10 self-tapping screw through each of the two holes in switch, switch mount base, car trim covering, and 9/64" dia. holes in car body. Securely tighten the two screws.



PR791

FOOT SWITCH VIEWED  
FROM UNDERSIDE.



**Note:** If the selected mount position of the switch is on a section of the car which is not connected electrically to the main body of the car (i.e., wooden floor boards or insulated metal panels), it will be necessary to connect a length of heavy gauge wire (as short as possible) from the metal body of the switch to a grounded section of the car.

## FINAL TYPE FOOT SWITCH

1. Select a mount position on car floor or lower section of car firewall. The switch mount position is to be such that when the switch is being pressed by the car driver's foot, his foot will be well clear of the control pedals.
2. From foot switch, peel off rubber dust cover.
3. At selected mount position, mark and drill a 9/64" dia. hole in car trim and car body.
4. Approx. 2" from 9/64" dia. hole towards top of car, pierce a 1/4" slot in car trim.
5. On one end of flexible lead supplied with receiver is a "push on" clip. Connect this clip to metal tongue at base of foot switch, then cover clip connection with rubber sleeving.
6. Feed free end of flexible lead through 1/4" slot pierced in trim until foot switch is in position for mounting and all excess lead is behind trim.
7. Fashion lead from switch up behind trim to small connector socket on lead protruding from side of receiver metal can near serial number.
8. Cut the lead to required length, then withdraw from the car the foot switch, and the lead from behind car trim.
9. Remove approx. a 1/4" of covering from free end of lead, tin the bared wire end, then insert tinned end into small contact pin supplied with receiver. Solder contact pin connection and remove all excess solder from ball end of pin.
10. Feed contact pin end of lead through 1/4" slot pierced in trim until foot switch is again in position for mounting and all excess lead is behind trim.
11. Insert a 1 1/2" x No. 10 self-tapping screw supplied with receiver, down through hole in foot switch and 9/64" dia. hole drilled in car. Securely tighten the screw, then refit rubber dust cover to switch; make sure edge of dust cover seats into groove at base of switch.
12. Fashion lead from switch up behind car trim and insert contact pin on end of lead into small socket on short lead from receiver. Make sure metal sections of plug connector are fully covered with rubber sleeving.

## DIAL LAMPS - MODEL "SR" 6-VOLT

When 12-volt 0.182 amp. min. bay. base, G3 1/2 size bulb dial lamps Part No. M370 are used in the dial illumination, "set on" indicator and manual operation indicator positions, no series resistor is required in series with the lamps.

When 6-volt 0.15 amp. min. bay. base, G3 1/2 size bulb dial lamps Part No. PM220 are used:-

- (A) One 4.7 Ohm 1/2 watt resistor Part No. PR858 is wired in series with each of the "set on" indicator and "manual operation" indicator lamps.
- (B) A 4.7 Ohm 1 watt resistor Part No. PR859 is wired in series with the two parallel connected dial illumination lamps.

## DIAL LAMPS - MODEL "SS" 12-VOLT

When 24-volt 0.125 amp. min. bay. base, G3 1/2 size bulb dial lamps Part No. M282 are used in the dial illumination, "set on" indicator and manual operation indicator positions, no series resistor is required in series with the lamps.

When 12-volt 0.182 amp. min. bay. base, G3 1/2 size bulb dial lamps Part No. M370 are used:-



14.

- (A) One 4.7 Ohm  $\frac{1}{2}$  watt resistor Part No. PR858 is wired in series with each of the "set on" indicator and "manual operation" indicator lamps.
- (B) A 4.7 Ohm 1 watt resistor Part No. PR859 is wired in series with the two parallel connected dial illumination lamps.

### **CIRCUIT MODIFICATION (26-10-55)**

A small spiral wound choke Part No. L190 circuit No. 74 has been included in the circuit to eliminate ignition noise which may enter the receiver via the speaker lead.

The small choke is wired inside the receiver metal can on the speaker socket and is connected in the active lead of the speaker trans. secondary.

### **CIRCUIT MODIFICATION (18-5-55)**

To improve the peaking position of the antenna compensating condenser, the 27 MMF cond. circuit No. 30 has been changed to a 50 MMF ceramicon cond. tol.  $\pm 5\%$  Part No. C104.

A 27 MMF cond. PC892 and a 25 MMF cond. PC802 wired in parallel were used until 50 MMF conds. C104 were available.

### **WIRING CHANGE (14-1-56)**

Model "SS" (12-volt) receivers have the .004 MF condenser circuit No. 17 wired in the control head. The .004 MF condenser will be wired on the receiver chassis instead of the control head on future production of the 12-volt receivers. The change is to eliminate minimum volume effect.

There is a small quantity of 12-volt receivers in the field which have the .004 MF cond. wired in the receiver unit, and also a .004 MF cond. wired in the control head, making two .004 MF condensers in series. This is quite in order, although different from the standard circuit, and will have no effect on the performance of the receiver.

### **CIRCUIT MODIFICATION (15-2-56)**

The .5 megohm tapped volume control has been changed to a 1.2 megohm tapped volume control to improve the smoothness of the control.

A list of the part numbers for the .5 megohm and 1.2 megohm volume controls are detailed on page 7.

When the 1.2 megohm volume control is used as a replacement for the .5 megohm volume control, a .05 MF cond. Part No. PC991 circuit No. 39 has to be wired in the circuit in the control head.

### **SPEAKER LEADS (20-2-56)**

- (A) Speaker cables which consist of two leads connected to a two-pin plug and have an outer shield braid over the leads with a press stud on one end of the braid for fastening on to the side of the metal case. These cables have been changed to a single lead shielded with braid. The shield braid is used as the earth return in that one end of the braid is soldered to one side of the speaker voice coil and on the other end of the braid is connected a press stud for fastening to the button on the outside of the metal can.
- (B) The two-pin plug on all speaker leads has been changed to a single pin Part No. 421/250 for inserting into the small hole in the two-pin speaker socket on the side of the receiver.
- (C) In the case of long leads to speakers mounted at the rear of the car, one lead is connected to the single pin 421/250 and the other lead is connected to a press stud Part No. 246/250 for fastening to the button on the outside of the metal can.



## MODIFICATION TO MODEL "SR" AND "SS" SELECTOMATIC CAR RADIO CONTROL HEADS (16-3-56)

A modified type of Pointer Assembly has been produced to give improved movement to the Linkage Arm between Solenoid Tuner and Control Head. This improved movement eliminates the possibility of excessive friction between Pointer Holder and Slide Rail.

The new parts required, which are listed below, will enable a change-over to be effected from the existing to the modified type of Pointer Assembly.

1 Off - Pointer Holder Assembly	Al53/387) Al27/813) See Note Al37/352)
1 Off - Pointer Guide Wire	97/813
2 Off - Pointer Guide Wire Mount Bracket	98/813
1 Off - Felt Washer	54/55-2

**Note:** There are three basic types of Pointer Holder Assemblies mounted to Control Heads of "SR-SS" Car Radio. The car groups to which the Pointer Holder Assembly numbers quoted above apply, are listed below:-

- Al53/387 - Holden (6-volt).
- Al27/813 - C.D.D. Astor, C.D.D. Mopar, Chevrolet, Pontiac, Astor  
Universal, Airchief Universal, Rover 90.
- Al37/352 - Vauxhall 5E, Jaguar Mk. VII.

### MODIFICATION PROCEDURE:

It is necessary on some Control Heads to remove the Control Knobs, Felt Washers, Barrel Nuts, Chrome Washers, Escutcheons and the Dial.

Remove the Tuning Spindle and the necessary self-tapping screws to lower the front plate away from the back plate of the Control Head.

From slot at top of Control Head Back Plate, remove the "U"-shaped Spring Clip which secures the Linkage Arm to Spigot of existing Pointer Holder Assembly.

Remove the two screws, Shakeproof Washers and Nuts securing Pointer Rail to Control Head. Discard the Pointer Rail and existing Pointer Holder Assembly.

The Control Head is now ready to have the modified type of Pointer Holder Assembly attached.

Insert the thread of each of the two Screws previously removed, through slot in each of the "L"-shaped Pointer Guide Wire Mount Brackets, so that the threads of the Screws are pointing in same direction as side of Pointer Guide Wire Mount Bracket which contains two small holes.

From the underside of the Mount Lugs of Back Plate, insert the threads of the two Screws through corresponding holes from which they were previously removed. Position the Pointer Guide Wire Mount Brackets so that sides of both Brackets are on the Tuning Spindle side of Mount Lugs. Place a Nut on to each of the threads of the two Screws and make Nuts fingertight. Before tightening each nut, ensure that Pointer Guide Wire Mount Bracket at Volume Control End of Control Head is parallel to and against the edge of Mount Lug and that Pointer Guide Wire Mount Bracket at Tuning Spindle end of Control Head is parallel to but spaced approximately 1/16" away from edge of Mount Lug. Use a 1/8" spintight to securely tighten both Nuts.

Place Pointer Guide Wire through both loop holes in Pointer Holder Assembly, then insert one end of Pointer Guide Wire through top hole in one of the Pointer Guide Wire Mount Brackets, so that Pointer is facing to front of Control Head. Insert other end of Pointer Guide Wire through top hole in other Pointer Guide Wire Mount Bracket and securely solder one end of Pointer Guide Wire to its Mount Bracket.



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**Note:** On the Vauxhall 5E and Jaguar Mk. VII Control Heads only, it is necessary to insert the Guide Wire through the lower holes in Pointer Guide Wire Mount Brackets.

Rotate and move Pointer Holder Assembly so that its Spigot enters hole in Insulator Arm of Linkage Assembly. Move this complete assembly so that Spigot is sighted through slot at top of Control Head Back Plate. Place the Felt Washer supplied over the Spigot and refit to the Spigot, the 'U'-shaped Spring Clip which was previously removed.

Refit Front Plate to Back Plate of Control Head and secure these parts together with the self-tapping screws previously removed. Securely tighten all these screws. Refit and secure in position, the Tuning Spindle which was previously removed.

Refit to Control Head, the parts which were found necessary to remove previously to gain internal access to Control Head, i.e., Dial to Control Knobs.

Re-logging of Pointer should not be necessary, as Pointer setting should not have been altered throughout this change-over process.