

## 60 to 50 CYCLE CONVERSION FOR RIM DRIVE PHONO MOTORS

A spring sleeve is used to increase the diameter of the motor drive spindle, to compensate for the slower speed of the motor when used on a 50 cycle line.

Spring sleeves are available for the following models which comprise most of the motors using spindle drive manufactured to date.

To apply the spring sleeve to the motor spindle, lock the rotor manually and press the spring gently over end of spindle, twisting the free end of spring counter-clockwise (to unwind coil) until following end of spring is flush with end of spindle.

The ends of spring should not protrude and all coils should be close together, allowing a flat even surface on the motor spindle to contact the rubber drive.

Motor Stock No.	Spring Sleeve Stock No.
36254	39681
36984	39748

Motor Stock No.	Spring Sleeve Stock No.
38612	39749
S-3077	S-3249

## INCREASING FREQUENCY RANGE OF PUSH BUTTONS

It is sometimes desirable to increase the frequency range of the push buttons on those receivers limited to an end frequency of approximately 1500 k.c. This extension of the broadcast band may be incorporated permanently in the receiver by removing two turns of wire from one of the 1500 k.c. coils. The coil should then be realigned to track over the extended range.

## REFORMING ELECTROLYTICS

Wet electrolytic condensers may become unformed if left unused for a period of time. This change is normal and does not indicate inferiority of quality. Since unformed condensers pass a high leakage current they are often rejected erroneously as shorted. It should always be remembered that internal shorts rarely occur in wet electrolytic condensers.

It is recommended that all electrolytic condensers giving indication of excessive leakage current (more than 5 MA) be formed before being rejected. Reforming can be effected by applying rated D.C. voltage from a source capable of supplying 100-200 MA to the condenser for a period from 2 to 10 minutes. If abnormal heating occurs, interrupt process and repeat after condenser has cooled. A 1,000 ohm resistor should always be connected in series with the condenser during the process, to limit current.

**C A U T I O N:** Only unidirectional (DC) voltage should be impressed across electrolytic condensers as alternating voltage (straight AC) will cause permanent damage.

## PUSH BUTTON SWITCHES - TARNISHED CONTACTS

A noisy condition experienced with push button switch contacts may be traced to the proximity of rubber covered wires or material to the switch assembly. This condition may be remedied by cleaning the contacts and applying a small quantity of a good switch contact lubricant. Move all rubber covered wires or material away from the switch.

## DIAL DRIVE CORD REFERENCE CHART

Length shown is total length of cord or cable in(inches)but does not include portion used in forming end loops.

Stock No.	Length	Stock No.	Length	Stock No.	Length	Stock No.	Length
S-1028	9-1/8	S-2197	41-1/2	S-2837	39	3969	17-5/8
S-1077	25-1/2	S-2207	42-3/4	S-2897	53-1/2	6298	7-1/2
S-1128	9	S-2305	23-1/2	S-2926	21	14524	7
S-1193	17-1/2	S-2306	13-1/2	S-2979	26	14699	30-7/8
S-1271	8	S-2361	19	S-2980	52	14857	44
S-1980	32-1/2	S-2393	24-1/2	S-2985	45-1/2	30754	4-1/2
S-1981	17-1/2	S-2394	11-3/4	S-3027	27-5/8	30877	27
S-1982	14-1/8	S-2432	7-1/4	S-3028	59-1/2	31278	11
S-2074	14-7/8	S-2456	36	S-3037	39-3/4	31281	42-1/4
S-2083	14-1/4	S-2529	37-3/4	S-3125	47-5/8	31283	26
S-2107	11	S-2674	36	S-3126	49-1/4	31374	17-3/4
S-2166	14-1/4	S-2702	14	S-3174	34-3/4	31375	36
S-2167	4	S-2709	12	S-3177	40	31697	14
S-2169	16-3/4	S-2730	33-1/4	S-3211	47-1/4	32634	50
S-2188	43-1/2	S-2767	14-3/4	S-3383	59	32635	60

## LENGTH OF DIAL CORDS SHOWN IN SERVICE NOTES WHICH SPECIFY STOCK NO. 32634

Model No.	Length	Model No.	Length	Model No.	Length	Model No.	Length
A-20	46-7/8	VRA-45	43-1/4	VR-62	21	Master Nipper A	15-3/8
A-39	21	VR-58	43-1/4	VR-63	21	Pick-Me-Up	7-5/8
VR-40	15-3/8	VR-59	43-1/4	Cruiser	33-1/4	Royal	13-1/8
VR-44	43-1/4	VR-59A	43-1/4	Duo	9-1/2		
VR-44A	43-1/4	VR-60	43-1/4	Imperial	33-1/4		
VR-44C	43-1/4	VR-61	21	Master Nipper	15-3/8		

\* Universal type (approx. 50 inches long) may be cut to length to replace all silk cords listed except Stock Nos. S-2897, S-2980, S-3028 and S-3383.

\*\* Universal type (approx. 60 inches long) may be cut to length to replace any phosphor bronze cable.

**NOTE:** Replacement Parts List for some Service Notes show complete cord length including end loops.