VIKING SERVICE INFORMATION FOR MODEL

RCS-505AR
RCS-534

8 TUBE AM-FM RADIO PHONOGRAPH

FOR OPERATION ON 110-120V. A.C., CYCLE AS MARKED

When writing for Service Information or Parts, please quote Model Number, Serial Number, Cycle and Finish of Cabinet.

SPECIFICATIONS - AM-FM TUNER

Standard Broadcast Range - 535 to 1650 Kc.

Frequency Modulation Range - 88 to 108 Mc.

I.F. Frequency	AM - 455 Kc.
	FM - 10.7 Mc.
Sensitivity	AM - 14 uv. for 100 mv. at Detector
	FM - 3 uv. for 20 db quieting
Selectivity	AM - 18 Kc. Bandwidth at 10X down. Tuner Selector
	FM - 250 Kc. Bandwidth at 2X down. Switch at FM Position

AMPLIFIER (Specifications per channel)

Frequency Response - 150 cps to 15,000 at Phono Input ± 2 db.

Music Power Output - 3 W per channel ±1 db.

Peak Power Output - 6 W ±1 db.

Measurements with tone controls in flat position, level and balance controls fully clockwise.

Level Balance Control..... Designed to provide 15 db. lift at 30 cps when control is 60° removed from CCW position with reference to response at 1000 cps and at the same time provide 11 db lift at 15,000 cps.

Bass Tone Control Dual Element..... Designed to provide 15 db. cut at 50 cps. Covers sound spectrum from 20 - 1000 cps.

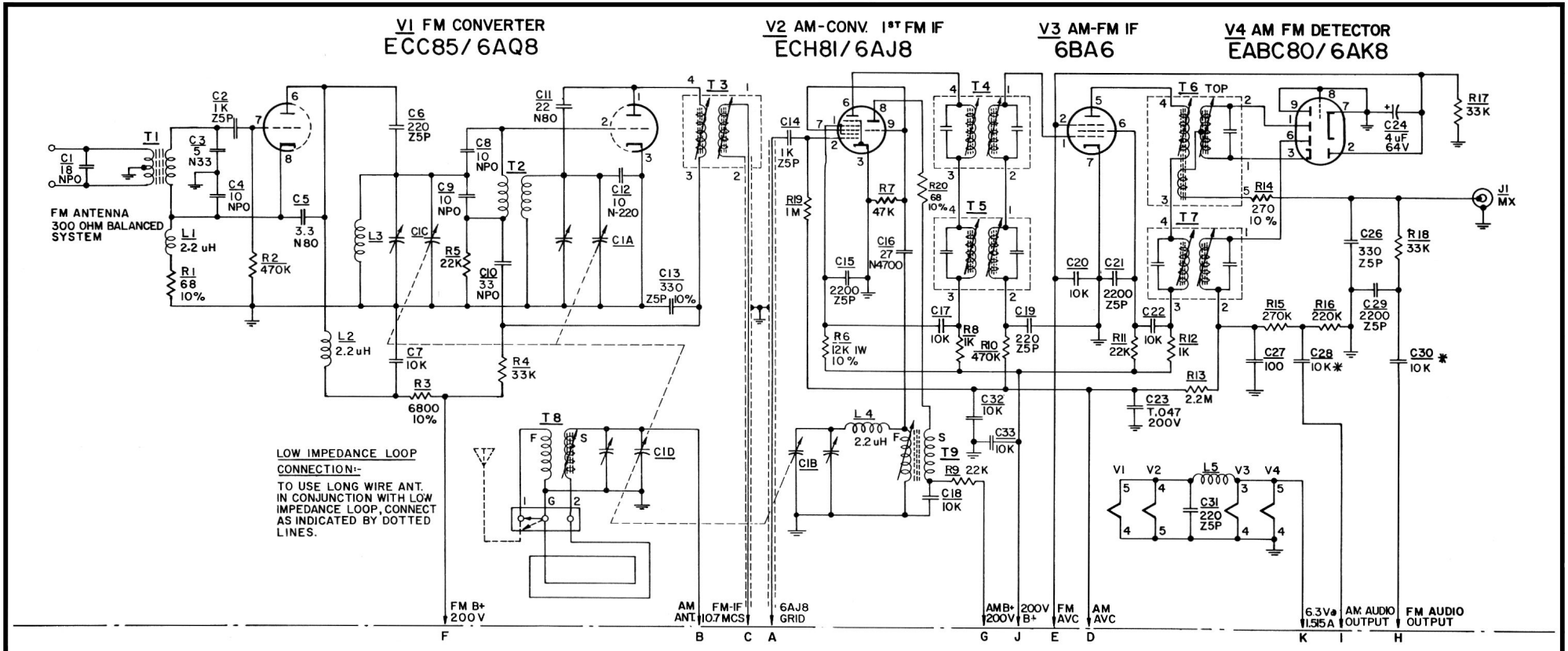
Treble Tone Control Dual Element ..... Designed to provide 15 db. cut at 10,000 cps. Covers sound spectrum from 1000 - 15,000 cps.

All information printed in this leaflet is up to date as of February 1, 1962. Subsequent changes covered by bulletin.

THE T. EATON Co LIMITED
CANADA

54-1412-02 500 2/62 D.E.I. PRINTED IN CANADA

AM-FM TUNER



LEGEND:

RESISTORS

HALF WATT UNLESS OTHERWISE NOTED.
20% TOLERANCE UNLESS OTHERWISE NOTED.
K= 1,000
M= 1,000,000

CAPACITORS

TUBULAR, CAPACITY IN ufd., AND D.C.W.V. CURVED LINE, OUTSIDE FOIL.

ELECTROLYTIC. CAPACITY IN ufd., AND D.C.W.V.

CERAMIC, MICA OR OTHER TYPES WITH NO OBVIOUS OUTSIDE OR GROUND SIDE. CAPACITY IN uufd., TOLERANCE IF CRITICAL AND D.C.W.V.

SPECIAL CAPACITORS SUCH AS TEMPERATURE COMPENSATING TYPES ARE IDENTIFIED BY A NOTE AT CAPACITOR LOCATION
eg- OF = OIL FILLED
S.M. = SILVER MICA
M = MICA
NP = NON POLARIZED
TEMPERATURE COEFFICIENTS - (NPO, N-, P-.)

00-463-01

Issue 4

NOTE:-

FOR ALIGNMENT INSTRUCTIONS SEE D.E.I. DRAWING NO. 00-1906-01.

* C2700 ON SOME MODELS

AM-FM TUNER ALIGNMENT

STEP	DUMMY ANTENNA	SIGNAL APPLIED TO	FREQ.	MODULATION	BAND SWITCH SETTING	DIAL POINTER SETTING	INDICATING METER	ADJUST	REMARKS	NOMINAL SENSITIVITY
1	.05 uf	Pin #1 V3 6BA6	455 Kc/s	400 C.P.S. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "I"	T7 2nd AM-IF	Adjust for maximum output	2500 uv. for 40 Mv. output
2	.05 uf	Pin #2 V2 6AJ8	455 Kc/s	400 C.P.S. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "I"	T5 1st AM-IF	Adjust for maximum output	25 uv. for 40 Mv. output
3	200 uuf	AM Ant. Term. Strip #1	600 Kc/s	400 C.P.S. AM at 30%	AM	600 Kc/s	AC-VTVM To Point "I"	T9 and T8 AM-Osc. & AM Ant.	Connect for long wire ant. Adjust for Max. output. **	12 uv. for 40 Mv. output
4	200 uuf	AM Ant. Term. Strip #1	1400 Kc/s	400 C.P.S. AM at 30%	AM	1400 Kc/s	AC-VTVM To Point "I"	C1B & C1D Trimmers	Connect for long wire ant. Adjust for Max. output. **	15 uv. for 40 Mv. output
5	Repeat steps 3 and 4, check band coverage at 535 Kc/s - 1650 Kc/s and for tracking at 950 Kc/s.									
6	-	Pin #2 V2 6AJ8	10.7 Mc/s	-	FM	Point of no Interference	DC-VTVM Pin #2 T5	T4 2nd. FM-IF	Adjust for maximum meter deflection	9000 uv. for 1 volt.
7	-	C1C FM Gang	10.7 Mc/s	-	FM	Point of no Interference	DC-VTVM Pin #2 T5	T3 1st. FM-IF	Adjust for maximum meter deflection	
8	-	Pin #2 V2 6AJ8	10.7 Mc/s	-	FM	Point of no Interference	DC-VTVM Junction R14 and C26	T6 Primary Bottom Wdg.	Adjust for maximum meter deflection	2500 uv. for 3 volts.
9	-	Pin #2 V2 6AJ8	10.7 Mc/s	-	FM	Point ot no Interference	" ***	T6 Secondary Top Wdg.	Adjust for zero voltage	
10	*	FM-Ant. Term.	90 Mc/s	22.5 Kc/s Dev. @ 400 C.P.S.	FM	90 Mc/s	AC-VTVM to Point "H"	L3 and T2 FM-RF and Osc. Coils	Adjust for maximum output	40 uv. for 100 Mv.
11	*	FM-Ant. Term.	106 Mc/s	22.5 Kc/s Dev. @ 400 C.P.S.	FM	106 Mc/s	AC-VTVM to Point "H"	C1C & C1A trimmers	Adjust for maximum output	50 uv. for 100 Mv.
12	Repeat steps 10 and 11 and check for 20 db. quieting sensitivity.									5-6 uv.

* For FM Dummy antenna connect one 150 ohms carbon resistor from grounded side of sig. gen. to ant. term. and one 120 ohm carbon resistor from hot side of sig. gen. to ant. term.

** For AM-RF alignment purpose. The low impedance loop, installed in the cabinet or its electrical equivalent must be connected to the set as shown in the schematic.

*** With ground lead of DC-VTVM connected to junction of two 100K ohm resistors, which are to be connected across C24.

SERVICE REPLACEMENT PARTS LIST

RCS-505AR, RCS-534

FINAL ASSEMBLY

Part No.	Description
16-120047-01	45 RPM Inserts
16-120050-01	50 cycle hub (50 cycle models)
19-70011-01	Speaker - 6x9" PM with whizzer 8 ohm VC (RCS-505 AR)
19-30003-05	Speaker - 3½" PM 8 ohm VC (RCS-534)
19-100006-02	Speaker - 10" PM 8 ohm VC (RCS-534)
30-198-01	Control Panel
53-485-07	Switch Knob - Mode Selector, Level Balance
53-503-02	Control Panel Retaining Strip
53-507-04	Knob Tuning
53-507-05	Knob - Selector Treble
53-507-06	Knob - Bass, Lever Balance

AMPLIFIER CHASSIS ASSEMBLY

Symbol	Part No.	Description
T3	24-10034-01	Power Transformer 50/60 cycle
T3	24-20034-01	Power Transformer - 25 cycle
T1,T2	24-80035-03	Output Transformer - 8 ohm VC
CB1	26-65-02	Circuit Breaker 1.6 Amp.
SW2	26-88-01	Selector Switch
	27-1-01	Pilot Lamp 6-8V No. 44.25A
	30-200-01	Dial Scale
R2,R11	41-122-06	Control - Dual, Level Balance 1 meg.
R6,R15,SW3	41-150-02	Control - Dual, Bass and Mode Switch
R5,R14,SW1	41-164-02	Control - Dual, Treble and Push Pull Off-On
R20	42-21-69	Resistor - W.W. 470 ohm ± 10% 5W.
C16,C17	44-40-04	Electrolytic Tubular - 50 ufd x 25V
C9	44-113-01	Electrolytic - Dual - Can 80, 40 ufd x 350V
C18	44-118-01	Electrolytic Triple - Can 40,40,40 ufd x 350V

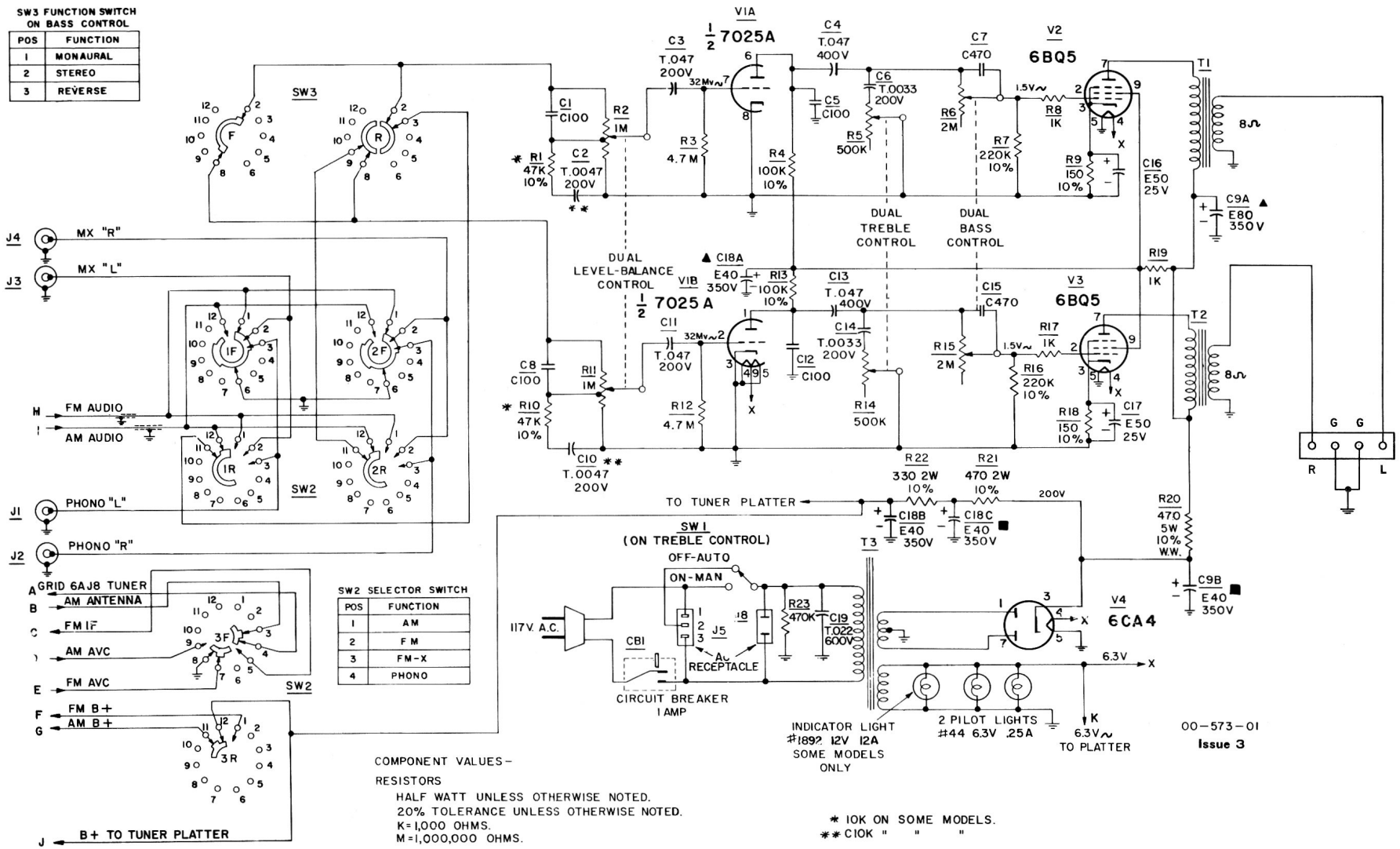
TUNER PLATTER CHASSIS

Symbol	Part No.	Description
T5	21-300-01	Heater Choke
T8	21-410-04	BC Antenna Coil
T9	21-421-01	BC Oscillator Coil
T5,T7	21-432-02	AM IF Transformer - 1st/2nd
T4	21-433-02	FM IF Transformer - 2nd
T3	21-433-05	FM IF Transformer - 1st
L1,L2,L4	21-439-02	RF Choke 2.2 uh
T6	21-441-01	Ratio Detector
T2	21-445-01	FM Feedback Coil
T2	21-476-01	FM Oscillator Coil
L3	21-477-01	FM RF Coil
T1	21-471-01	FM Antenna Matching Transformer
C24	44-88-01	Electrolytic - Single Tubular 4 ufd x 64 WV
	45-52-01	AM - FM Gang Condenser
	45-36-01	FM Trimmer

CHANGER ASSEMBLY

Part No.	Description
16-90024-03	Garrard Autoslim Changer
16-250017-10	Cartridge - Astatic 86TSBD
16-120028-05	Replacement Stylus - Astatic H7-7D
16-120028-02	Replacement Stylus - Astatic N8-3S

AM-FM AMPLIFIER SCHEMATIC



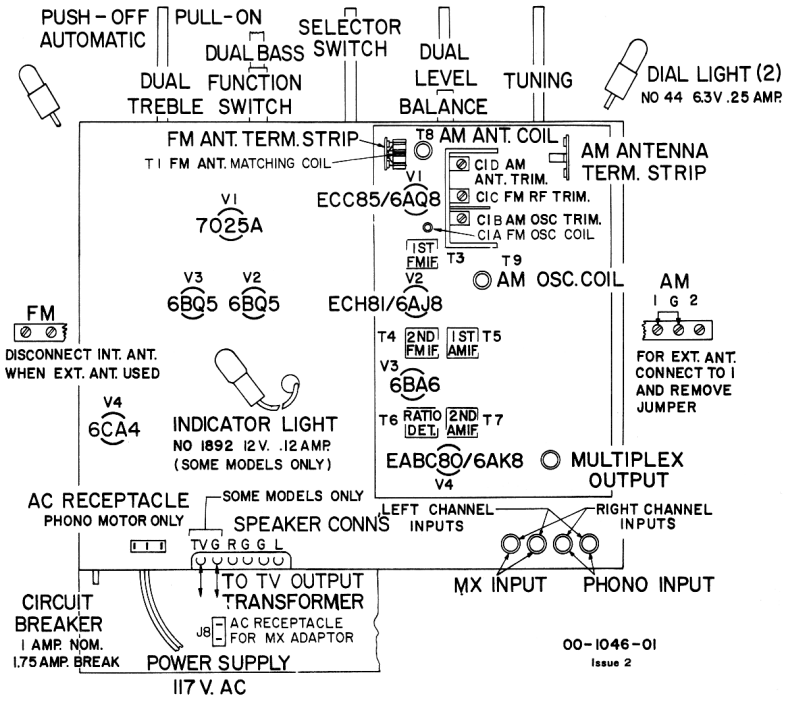
COMPONENT VALUES–

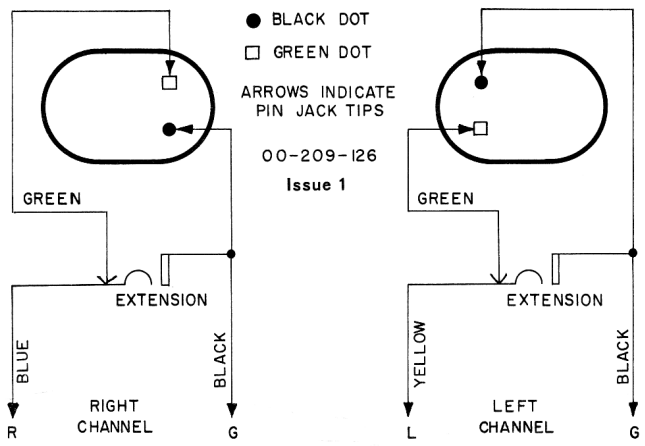
RESISTORS

HALF WATT UNLESS OTHERWISE NOTED.
20% TOLERANCE UNLESS OTHERWISE NOTED.
K=1,000 OHMS.
M=1,000,000 OHMS.

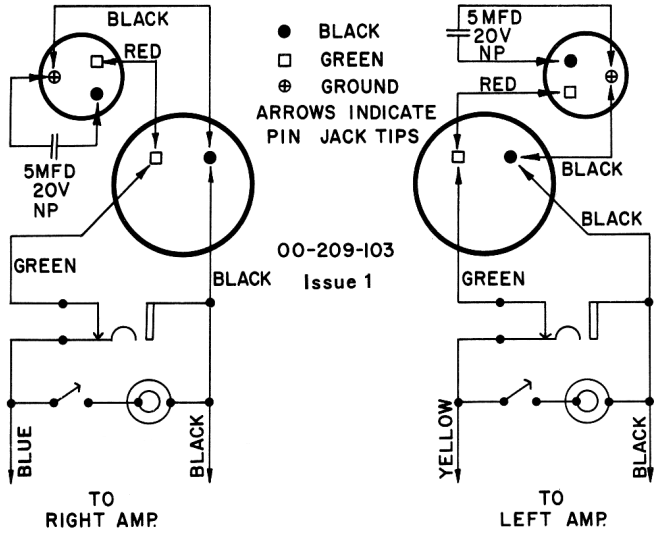
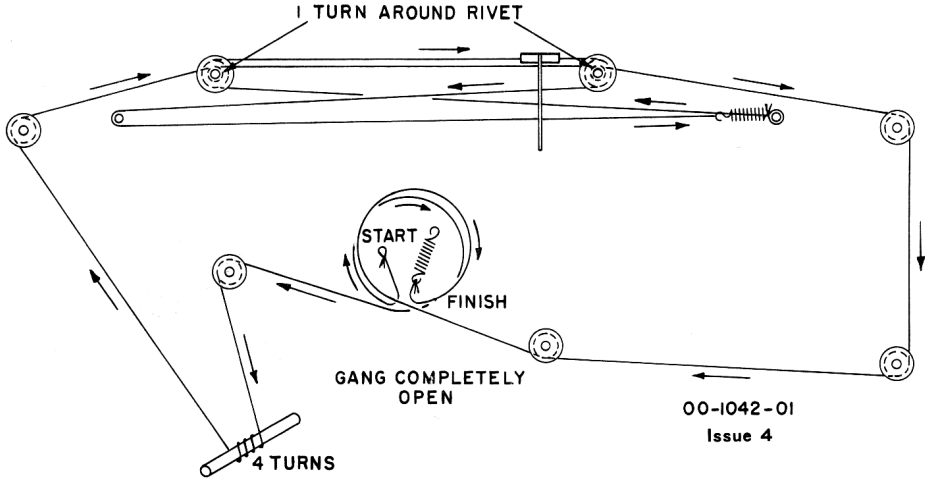
CONDENSERS

T=TUBULAR, FOLLOWED BY CAP. IN MFD AND D.C.W.V.
E=ELECTROLYTIC, " " " " " " "
C=CERAMIC, FOLLOWED BY CAP. IN MMFD AND TOL. IF CRITICAL.
M=MICA, " " " " " " " " " " "





RCS-505AR



RCS-534