

PHOTOFACT® Folder

with CIRCUITRACE™

CHANNEL MASTER
MODEL 6463CHANNEL MASTER
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MODEL 6463

TRADE NAME: Channel Master Model 6463

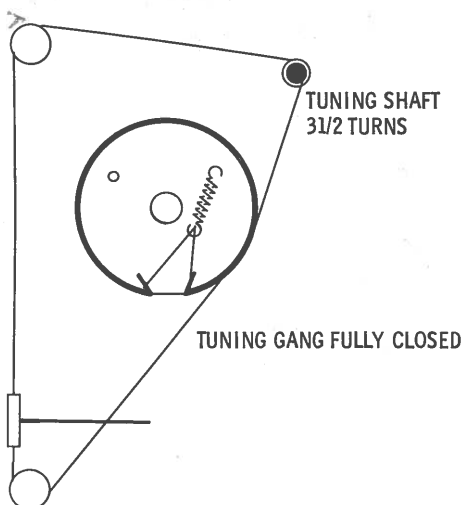
SUPPLIER: For Current Address, See Annual Index.

TYPE SET: 9 Transistor AM-FM Receiver

POWER SUPPLY: 110-120 Volts AC, 60 Cycles
(6 Volts DC 4 "C" Cells)

RATING: 1.5 Watts, .015 Amp. @ 117 Volts AC

DIAL CORD STRINGING



HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

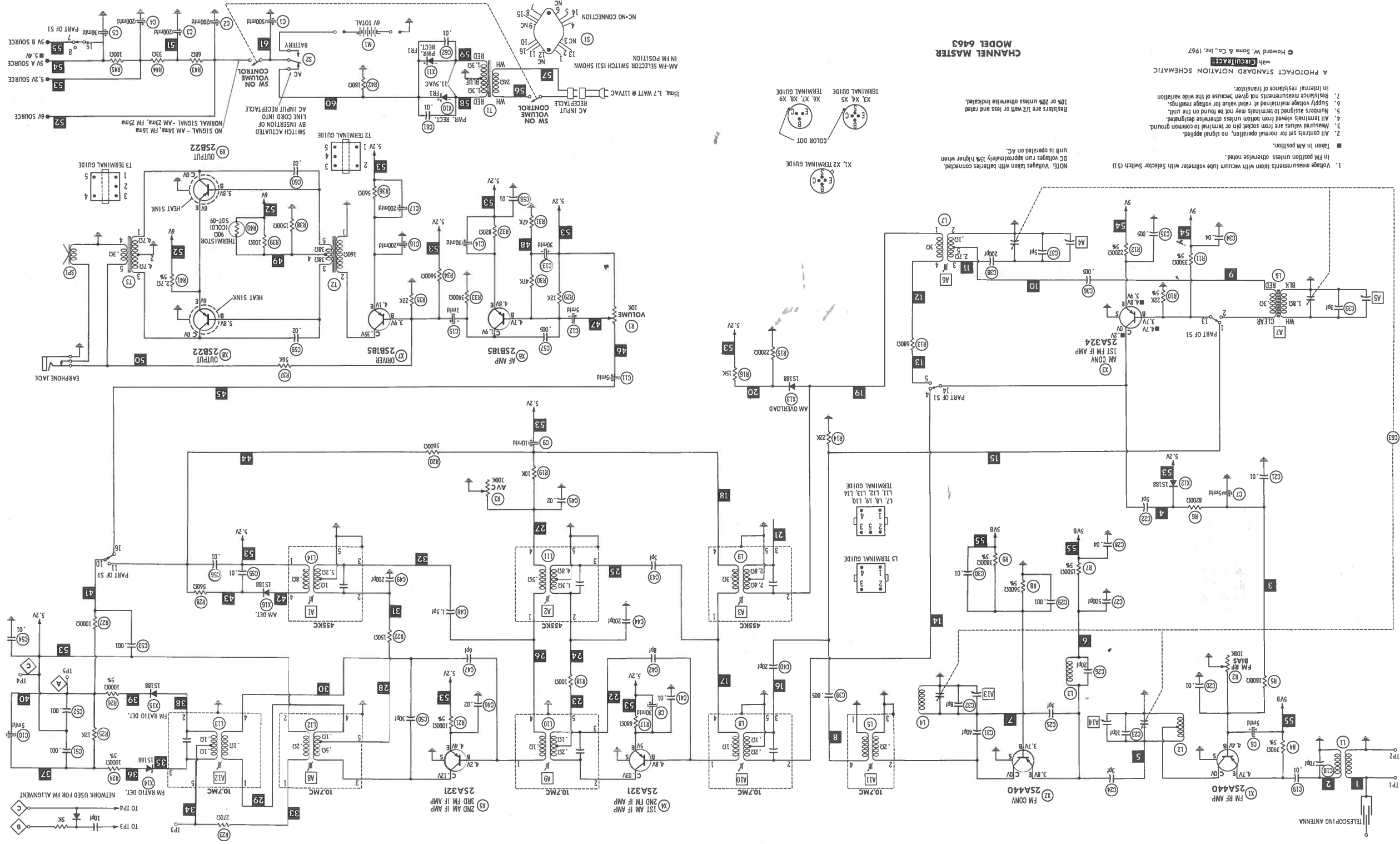
The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed. NK620

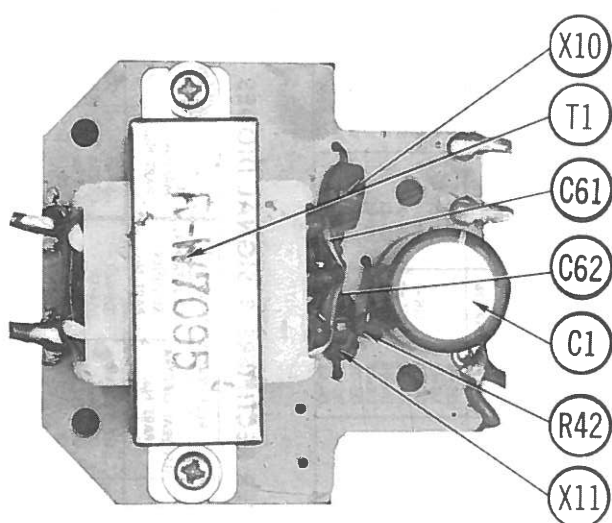
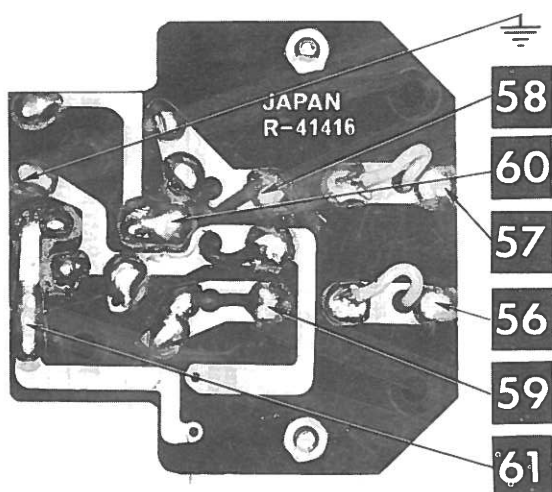
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DATE 3 -67

SET 874 FOLDER 5







ALIGNMENT INSTRUCTIONS

Use only enough generator output to obtain a suitable indication.

AM Alignment – Selector in "AM" Position

Fashion loop of several turns of wire and connect generator across loop. Set volume control at maximum.				
GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
1. 455KC (400v Mod.)	Tuning gang fully open.	Output Meter across Voice coil.	A1, A2, A3.	Adjust for maximum. Repeat until no further improvement can be made.
2. 1650KC	"	"	A4.	Adjust for maximum.
3. 1400KC	Tune to signal.	"	A5.	"
4. 600KC	"	"	A6, A7.	Rock tuning gang and adjust for maximum. Repeat steps 2 thru 4 until no further improvement can be made.

FM Alignment Using AM Signal Generator – Selector in "FM" Position

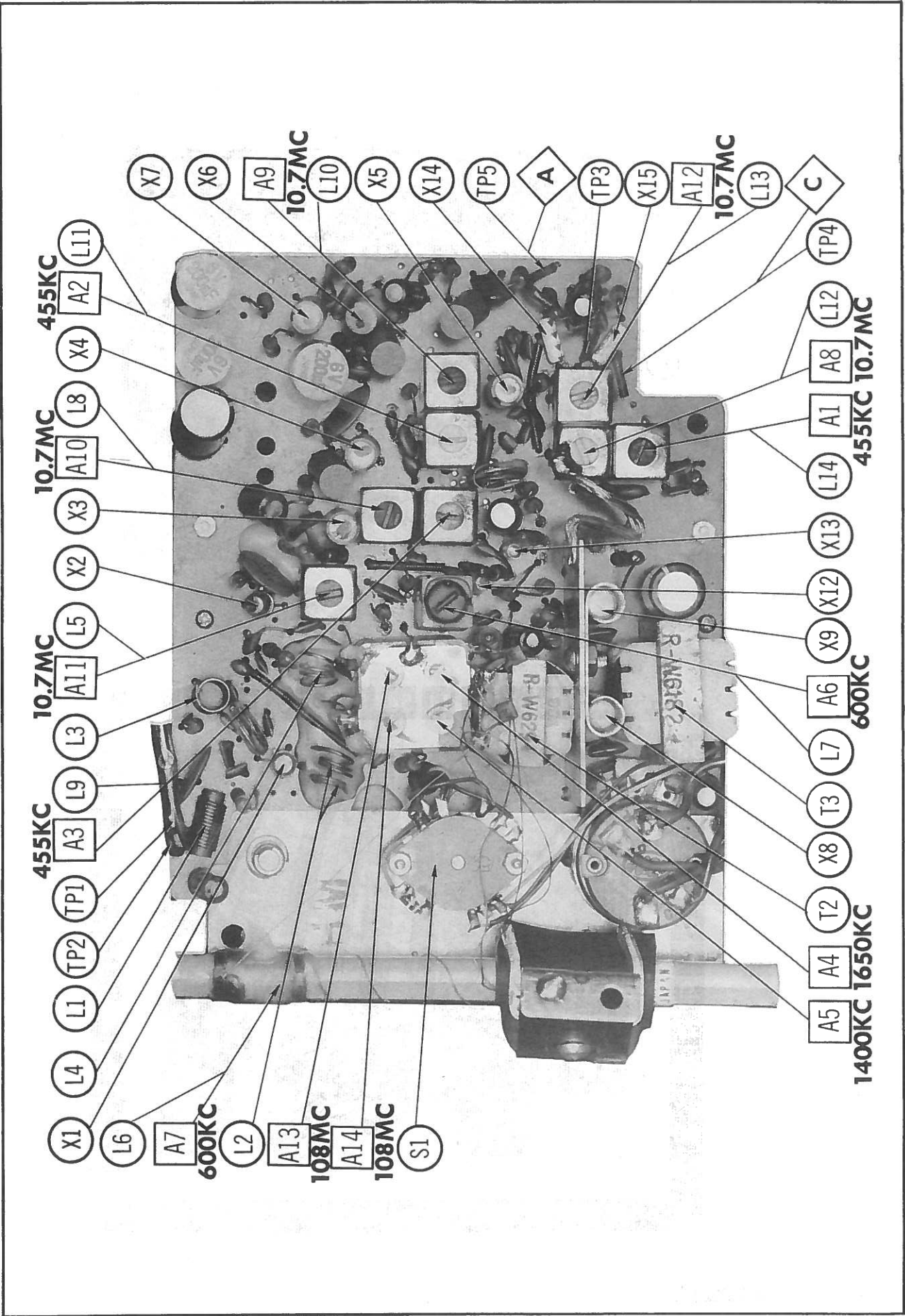
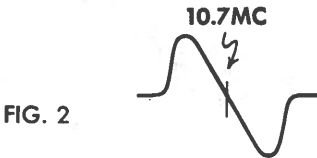
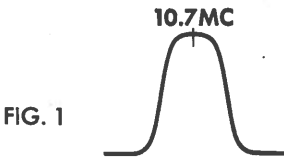
High side to FM Antenna (TP1), low side to ground.				
GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
5. 10.7MC (Unmod.)	Point of non-interference.	DC probe of VTVM to point A; common to point C.	A8, A9, A10, A11.	Adjust for maximum.
6. "	"	DC probe to point B; common to point C.	A12.	Adjust for zero reading. A positive or negative reading will be obtained on either side of the correct setting.

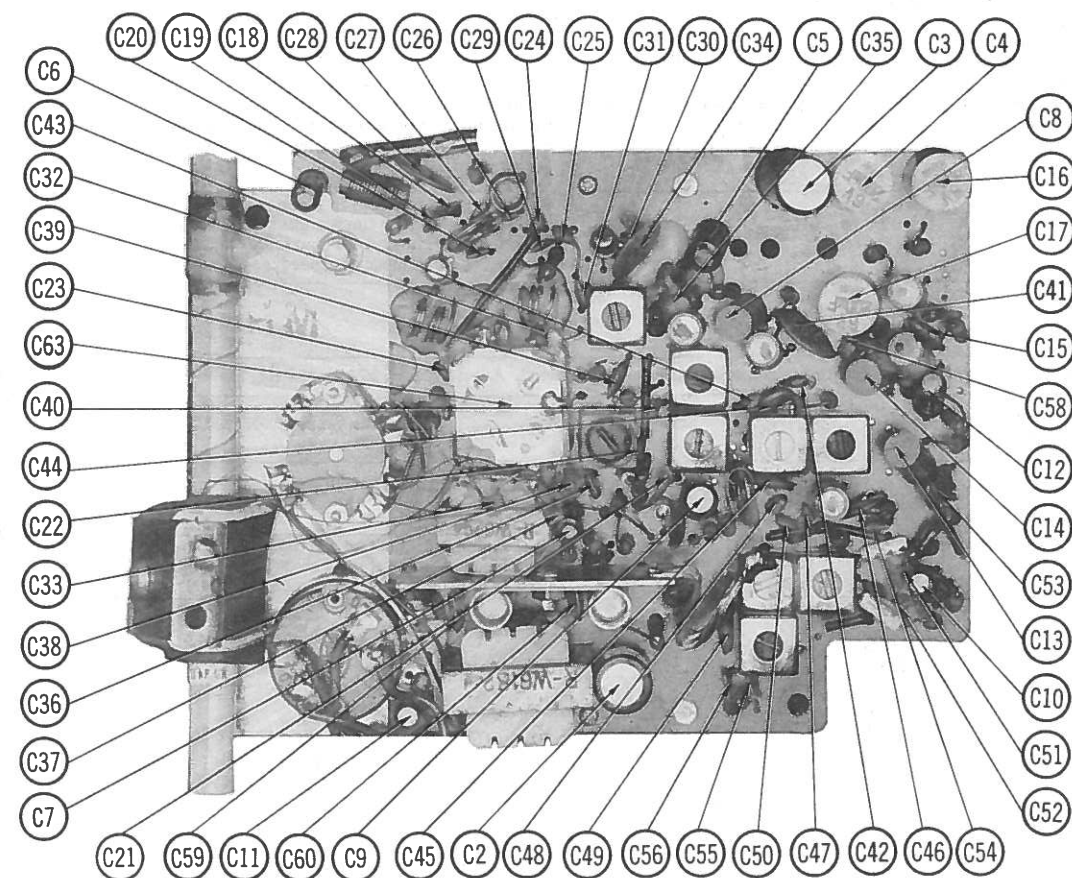
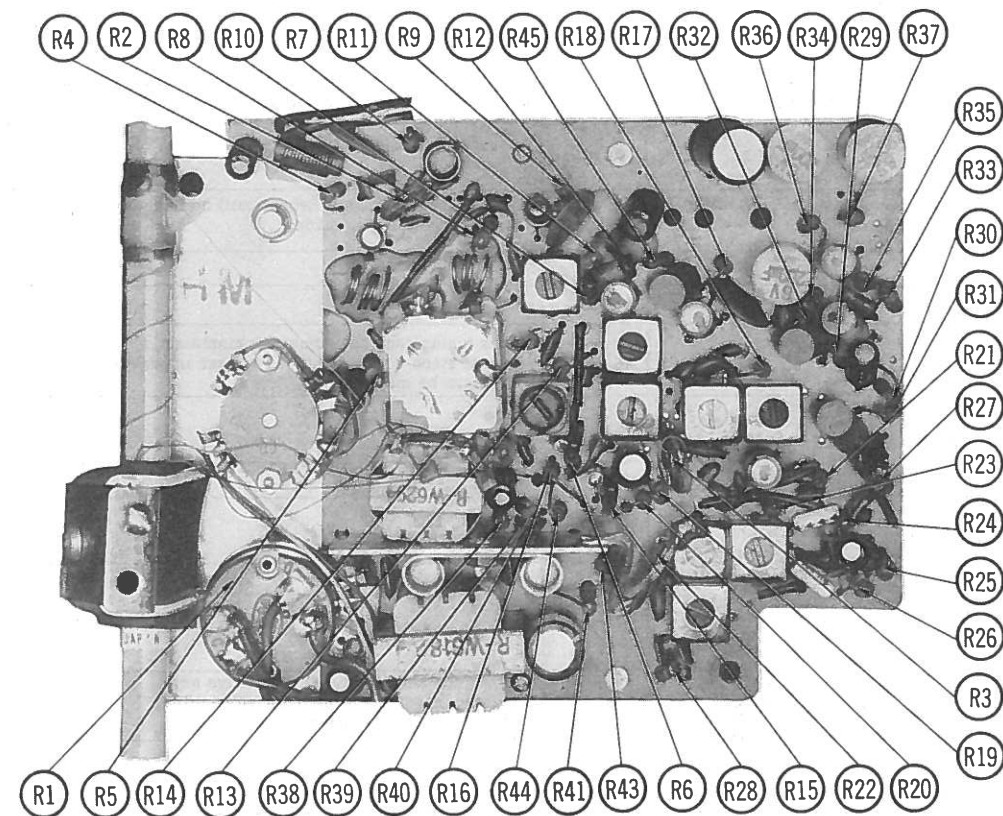
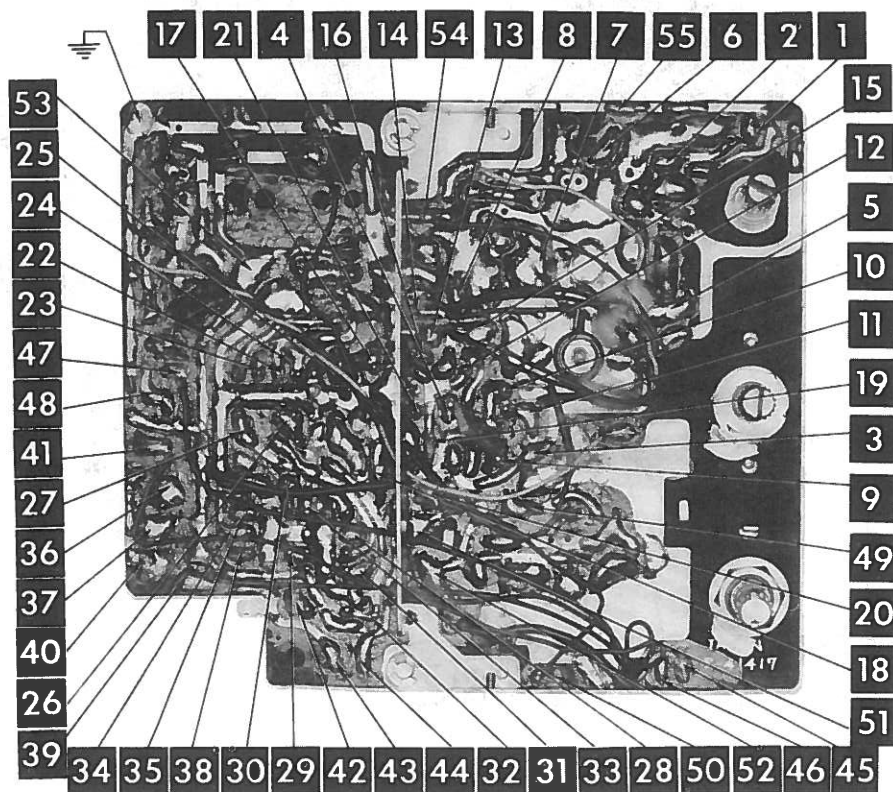
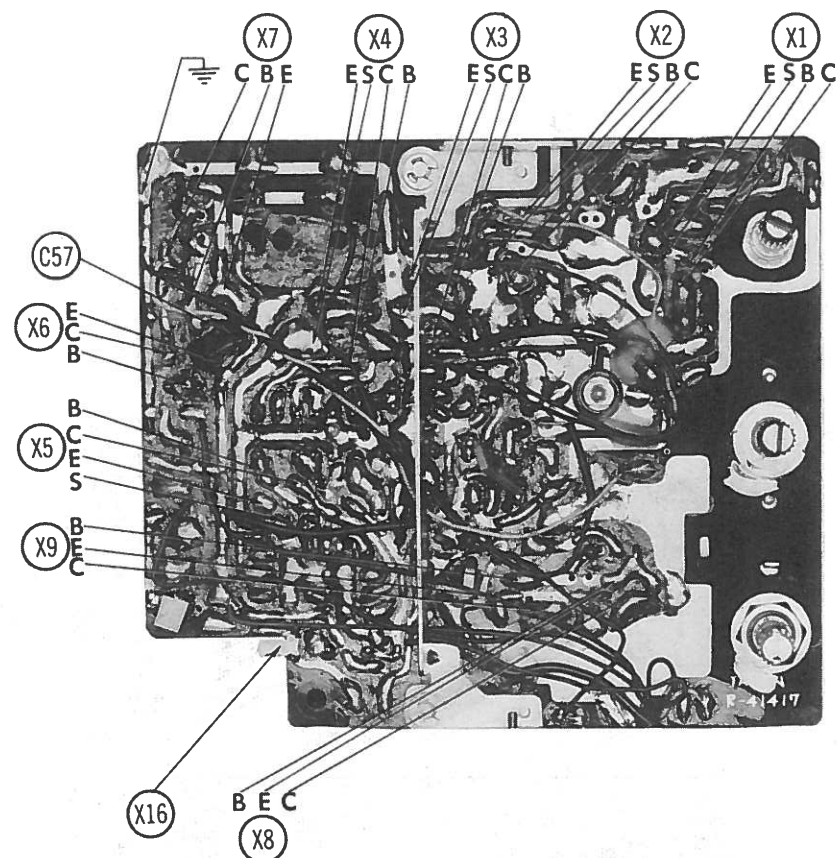
FM Alignment Using FM Signal Generator – Selector in "FM" Position

High side to FM Antenna (TP1), low side to ground. Use only enough marker signal to obtain indication. Use 60v frequency modulated signal with 450KC sweep.				
GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
7. 10.7MC (450KC Swp.)	Point of non-interference	Vert. amp. of Scope to point A; low side to point C.	A8, A9,	Disconnect stabilizing capacitor C10. Adjust for maximum gain and symmetry of response similar to Fig. A with marker as shown. Reconnect C10.
8. "	"	Vert. amp. to point B; low side to point C.	A12.	Adjust A 12 (Secondary) to place marker at center of crossover lines similar to Fig. B. Adjust A 8 (Primary) for maximum amplitude and straightness of crossover lines.

FM RF Alignment – Selector in "FM" Position

Connect high side of generator thru .01 capacitor to rod antenna, low side to ground. Adjust R2 for .25V across R4.				
GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
9. 108MC	Set at high end.	DC probe of VTVM to point A; common to point C.	A13, A14.	Adjust for maximum.
10. 90MC	Tune to signal.	"	L2, L4.	Rock tuning and adjust for maximum by expanding or compressing coils. Repeat steps 9 and 10 until no further improvement can be made.





PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8530 (Solid) Available in 12 Colors
Power Cord	Use BELDEN No. 8524 (Stranded) Available in 12 Colors
Power Cord (Interlock Type)	Use BELDEN No. 17106 (Plastic) or 17126 (Rubber) - 6 Ft.
Low-Loss Shielded Lead (Interconnecting)	Use BELDEN No. 17109 (Plastic) or 17129 (Rubber) - 9 Ft.
Phono Pick-up Arm Cable	Use BELDEN No. 8874 (Rubber) or 8895 (Plastic)
	8401 or 8421
	8430 (Two Conductor-Unshielded)
	8429 (Two Conductor-Shielded)
	8419 (Three Conductor-Shielded)

TRANSISTORS

ITEM No.	ORIG. TYPE	USE	REPLACEMENT DATA				NOTES
			DELCO PART No.	GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	RCA PART No.	
X1	2SA440	FM RF Amp.	DS-41		TR-17	SK-3006	PNP
X2	2SA440	FM Converter	DS-41		TR-17	SK-3006	PNP
X3	2SA324	AM Conv. - 1st FM IF	DS-56	GE-9	TR-17	SK-3006	PNP
X4	2SA321	1st AM - 2nd FM IF	DS-56	GE-9	TR-17	SK-3006	PNP
X5	2SA321	2nd AM - 3rd FM IF	DS-56	GE-9	TR-17	SK-3006	PNP
X6	2SB185	AF Amp.	DS-26	GE-2	TR-05	SK-3004	PNP
X7	2SB185	Driver	DS-26	GE-2	TR-05	SK-3004	PNP
X8	2SB22	Output	DS-26	GE-2	TR-05	SK-3004	PNP
X9	2SB22	Output	DS-26	GE-2	TR-05	SK-3004	PNP

POWER RECTIFIERS & SIGNAL DIODES

ITEM No.	MEASURED CURRENT	ORIGINAL Part or Type No.	RECTIFIERS & DIODES		RECTIFIERS		
			GENERAL ELECTRIC PART No.	INTERNATIONAL RECTIFIER PART No.	MALLORY PART No.	RCA PART No.	SARKES TARZIAN PART No.
X10	.017A	FR1	GE-504A or GE-505	8D4 or 5A4-D	A50 or CTP50 ①	SK-3016 or SK-3017	40C or S-5981 ①
X11	.017A	FR1	GE-504A or GE-505	8D4 or 5A4-D	A50 or CTP50 ①	SK-3016 or SK-3017	40C or S-5981 ①
X12		1S188	1N60	1N60			
X13		1S188	1N60	1N60			
X14		1S188	1N60	1N60			
X15		1S188	1N60	1N60			
X16		1S188	1N60	1N60			

① A single unit replacement for X1 and X2.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING		Channel Master PART No.	REPLACEMENT DATA			
	CAP.	VOLT.		AEROVOX PART No.	CORNELL-DUBILIER PART No.	GENERAL ELECTRIC PART No.	MALLORY PART No.
C1	500	15		PRS1220	BR500-15	QT1-30	TC1505
C2	200	10		BCDI0190	NLW200-12	MT1-23	TT10X200
C3	200	10		BCDI0190	NLW200-12	MT1-23	TT10X200
C4	200	6		BCD6200	NLW200-12	MT1-23	TT6X200
C5	30	6		BCD6025	NLW30-6	MT1-13	TT6X30
C6	5	6		BCD6005	NLW5-15	MT1-3	TT6X5
C7	5	6		BCD6005	NLW5-15	MT1-3	TT6X5
C8	5	6		BCD6005	NLW5-15	MT1-3	TT6X5
C9	10	6		BCD6025	NLW30-6	MT1-13	TT6X30
C10	5	6		BCDI0010	NLW10-15	MT1-5	PET1340
C11	5	6		BCD6005	NLW5-15	MT1-3	TT6X5
C12	5	6		BCD6005	NLW5-15	MT1-3	TT6X5
C13	30	6		BCD6005	NLW5-15	MT1-3	TT6X5
C14	30	6		BCD6025	NLW30-6	MT1-13	TT6X30
C15	1	10		BCD6025	NLW30-6	MT1-13	TT6X30
C16	200	6		BCD6200	TYR13B-C010K		TASI05K010P0A
C17	200	6		BCD6200	NLW200-12	MT1-23	TT6X200
				BCD6200	NLW200-12	MT1-23	TT6X200

CAPACITORS

ITEM No.	RATING	REMARKS	REPLACEMENT DATA					
			AEROVOX PART No.	CENTRALAB PART No.	CORNELL-DUBILIER PART No.	BLMENCO PART No.	MALLORY PART No.	SPRAGUE PART No.
C18	70pf 50V ±10%		DI-68	DD-680	RR05CW680K	CCD-680	GP468	10TS-Q39
C19	.01 50V		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C20	.01 50V		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C21	.01 50V		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C22	5pf 50V		NPO-DI5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CN0547	10TCC-V50
C23	10pf 50V		NPO-DI10	DTZ-10	CZ601CG100J	CCTO-100	CN0410	10TCC-Q10
C24	3pf 50V		NPO-DI3.0	DTZ-3R3		CCTO-3R3	CN0533	10TCC-V30
C25	3pf 50V		NPO-DI3.0	DTZ-3R3		CCTO-3R3	CN0533	10TCC-V30
C26	20pf 50V		NPO-DI20	DTZ-20		CCTO-200	CN0422	10TCC-Q20
C27	500pf 50V			DM-501	JBZ601YP501K		GP350	
C28	.04 50V		TTD-05	CK-503	HOV101ZV503Z		TA150	TG-S50
C29	.001 50V			DM-102	BYZ601ZU102M		SM210	
C30	.01 50V		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C31	40pf 50V ±10%		DI-39	DD-390	RR05CW390K	CCD-390	GP439	10TS-Q68
C32	8pf		NPO-DI8.2					10TCC-V82
C33	3pf 50V		NPO-DI3.0	DTZ-3R3		CCTO-3R3	CN0533	10TCC-V30
C34	.04 50V		TTD-05	CK-503	HOV101ZV503Z		TA150	TG-S50
C35	.005 50V		TTD-005	CK-502	HOY101ZV502P		TA250	TG-D50
C36	.005 50V			CK-502	HOY101ZV502P		TA250	TG-D50
C37	5pf 50V		NPO-DI5.0	DTZ-4R7	CZ601CH5R0D	CCTO-050	CN0547	10TCC-V50
C38	200pf 125V			DM-201			GP320	
C39	.005 50V		TTD-005	CK-502	HOY101ZV502P		TA250	TG-D50
C40	20pf 50V		NPO-DI20	DTZ-20		CCTO-200	CN0422	10TCC-Q20
C41	.01 50V		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C42	8pf 50V		NPO-DI8.2					10TCC-V82
C43	3pf 50V		NPO-DI3.0	DTZ-3R3		CCTO-3R3	CN0533	10TCC-V30
C44	200pf 50V ±20%		TTD-02	CK-203	HOR101ZV103P		TA120	TG-S20
C45	.02 50V		TTD-02	CK-203	HOR101ZV103P		TA120	TG-S20
C46	.02 50V							10TCC-V56
C47	6pf 50V							10TCC-V15
C48	1.5pf 50V		NPO-DI15	DTZ-1R5			CN0515	
C49	200pf 50V ±20%			DM-201			GP320	
C50	30pf 50V		DI-30	DD-300		CCD-300	GP430	10TS-Q30
C51	.001 50V			DM-102	BYZ601ZU102M		SM210	
C52	.001 50V			DM-102	BYZ601ZU102M		SM210	
C53	.001 50V			DM-102	BYZ601ZU102M		SM210	
C54	.01 50V		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C55	.01 50V		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C56	.01 50V		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C57	.005 50V			CK-502	HOY101ZV502P		TA250	TG-D50
C58	.01 50V		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C59	.02 50V			CK-203	HOR101ZV103P		TA120	TG-S20
C60	.02 50V			CK-203	HOR101ZV103P		TA120	TG-S20
C61	.01 50V		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C62	.01 50V		TTD-01	CK-103	HOY101ZV103P		TA110	TG-S10
C63	4 Section	*A304						

*Channel Master Part Number.

CONTROLS

All wattages 1/2 watt, or less, unless otherwise listed.

ITEM No.	USE	RESISTANCE	REPLACEMENT DATA				
			Channel Master PART No.	CENTRALAB PART No.	CLAROSTAT PART No.	CTS-IRC PART No.	MALLORY PART No.
R1	Volume, Switch	10K	R124136	F2-10K①,SSK110 KR-2	A47-10K-Z①, KSS-3, SWE-20	Q13-116①, 76-2 or(BU1①,CF61, SS1, WF)*	RU14A, SL36, SL3250, US42 or (UA14A①,SK3500, US42) or(U18①, US27)
R2	Bias, FM RF	100K				X201R104B②	MTC15L1②
R3	AVC	100K				X201R104B②	MTC15L1②

* "SNAPTROL"

① Enlarge mounting hole. ② Cut off one of the outside terminals.

COILS (RF-IF)

ITEM No.	USE	REPLACEMENT DATA					
		Channel Master PART No.	MEISSNER PART No.	MERIT PART No.	MILLER PART No.	STANCOR PART No.	WORKMAN PART No.
L1	FM Antenna	E311					
L2	FM RF	I479					
L3	FM Choke	I339					
L4	FM Oscillator	I477					
L5	1st. FM IF		16-9030		2070		RTC-9269
L6	Loopstick		14-9028①		7789①		
L7	AM Oscillator						
L8	2nd. FM IF		16-9031		2071		RTC-9270
L9	1st. AM IF		16-9026	BC-574	8517		RTC-9266
L10	3rd. FM IF		16-9032		2072		RTC-9271
L11	2nd. AM IF		16-9027	BC-575	8517		RTC-9267
L12	FM Ratio Detector (Pri.)	C216					
L13	FM Ratio Detector (Sec.)	C217					
L14	3rd. AM IF		16-9028	BC-576	8518		RTC-9268

TRANSFORMER (POWER)

ITEM No.	RATING			REPLACEMENT DATA					NOTES
	PRI.	SEC. 1	SEC. 2	Channel Master PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T1	117VAC @ .015A AC	11.5VAC @ .06A DC		C227 (R-W7095)					

TRANSFORMER (DRIVER)

ITEM No.	TURNS RATIO		REPLACEMENT DATA					NOTES
	PRI.	SEC.	Channel Master PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T2	1.2	1CT	C228 (R-W6294)					

TRANSFORMER (AUDIO OUTPUT)

ITEM No.	IMPEDANCE		REPLACEMENT DATA					NOTES
	PRI.	SEC.	Channel Master PART No.	MERIT PART No.	STANCOR PART No.	THORDARSON PART No.	TRIAD PART No.	
T3	100Ω CT	3-4Ω	C093 (R-W6182)					

SPEAKER

ITEM No.	TYPE	REPLACEMENT DATA			NOTES
		Channel Master PART No.	JENSEN PART No.	QUAM PART No.	
SP1	4" x 6" PM 3-4Ω	G213	P4X6X3	46A1	

BATTERIES

ITEM No.	VOLTAGE	Channel Master PART No.	REPLACEMENT DATA			NOTES
			BURGESS	EVEREADY	MALLORY	
M1	6V (Total)		130 or AL1	1035 or E-95	M14R or MNI400	4 Required

CABINETS & CABINET PARTS

(When Ordering Specify Model, Chassis & Color)

ITEM		PART No.	ITEM		PART No.
Knob-Volume, Selector, Tuning		I465	Handle, Complete		I464
Cabinet, Front		G210	Dial Pointer		I471
Back Cover		G211	Dial Plate		I470
Battery Cover		G212	Tuning Drum		I475

MISCELLANEOUS

ITEM No.	PART NAME	Channel Master PART No.	NOTES
S1	Switch	E382	AM-FM Selector (Rotary Type)
S2	Switch	I482	AC-DC (Spring Leaf Type)
	Jack	E001	Earphone
	FM Antenna	E326	Telescoping
	AC Cord	E383	
	Plug Batt. Term.	I481	
	Minus Batt. Term.	I665	