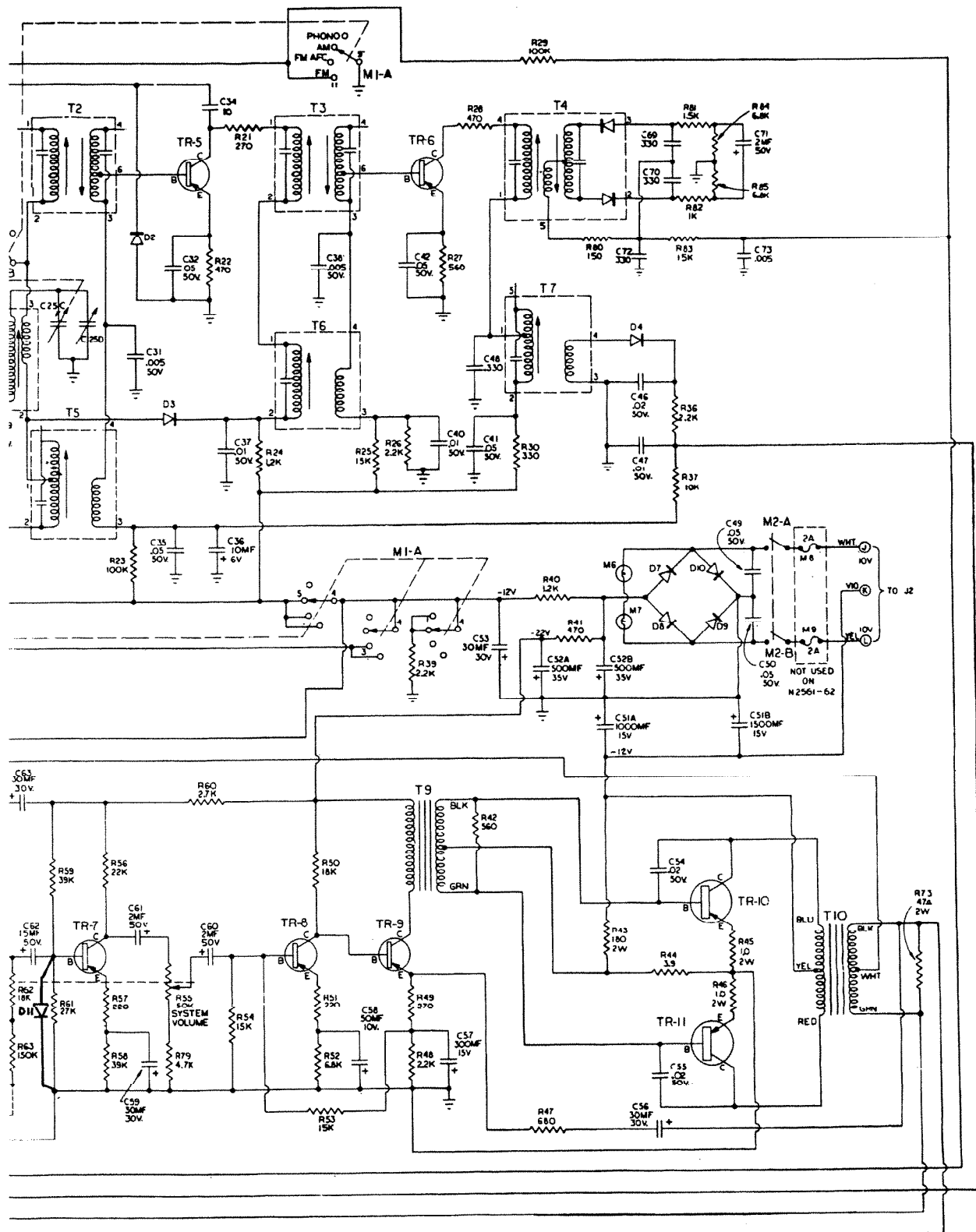


- NOTES**
1. ALL RESISTORS 1/2 WATT 10% TOLERANCE UNLESS OTHERWISE SPECIFIED.
 2. ALL CAPACITIES SHOWN AS DECIMAL FRACTIONS ARE MICROFARADS, WHOLE NUMBERS ARE MICROMICROFARADS UNLESS OTHERWISE SPECIFIED.
 3. ALL CAPACITORS 100V VOLT UNLESS OTHERWISE NOTED.
 4. SELECTOR SWITCH SHOWN IN AM POSITION.
 5. SOCKET CONNECTIONS ARE SHOWN AS TOP (OR PLUS END) VIEWS.
 6. TRANSFORMER IS MOUNTED REMOTE FROM SET. (T1)
 7. HEAVY LINES ON M4 AND M5 INDICATE INTERNAL SWITCH CONNECTIONS.



RESISTOR VALUES IN OHMS.

RESISTOR VALUES SHOWN AS
RESISTOR VALUES NOTED.

N.
P (OR PLUG END) VIEWS.

1 SET. (T1)
TERMINAL SWITCH CONNECTION.

Master station schematic.

MODELS - N2561 - N2562

FOR ALIGNMENT AND VOLT-
AGE CHARTS, REFER TO
PERMANENT SERVICE MANUAL.

REVISED CIRCUIT PARTS LIST

The following parts have been changed, added or deleted in late production units - effective with unit chassis number designated.

NOTE: Revised circuit component parts are not interchangeable with earlier production units unless so designated.

LATE PRODUCTION PRIOR TO CHASSIS NUMBER DESIGNATION

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
Change:			*R37		10K 10% 1/2 watt Carbon
*D1	35019	AFC	*T1	30550	1st FM IF
*D7,D8	36549	T1-55 Silicon Rectifier	*T2,T3	30551	2nd & 3rd FM IF
*C27		2.2 mmf NPO Ceramic Disc	*L3	30062	RF Choke
*C33		2.2 mmf NPO Ceramic Disc	*M1	34552	Selector Switch, 4-Pos. Rot
*C34		15 mmf NPO Ceramic Disc	*M4	34527	Inside Talk-Listen Switch
*C51A	35018	1000 mfd 15V Electrolytic	*M5	34528	Outside Talk-Listen Switch
B		1500 mfd 15V Electrolytic	Add: (Omitted from basic service manual)		
*C52A	35017	500 mfd 35V Electrolytic	D11	36549	T155 Silicon Rectifier
B		500 mfd 35V Electrolytic	* -	40220	FM Tuner Assembly
C56		30 mfd 30V Electrolytic			

Delete: CHASSIS NUMBER 561C

L7 30055 Choke

Change: CHASSIS NUMBER 561D

TR2	36571	(TIMX 203) FM Oscillator	Add:		
TR3	36572	(TIMX 202) FM Mixer	C69		330 mmf @ 1000V Ceramic Di
TR4	36573	(TI 403) 1st FM IF, AM Converter	C70		330 mmf @ 1000V Ceramic Di
TR5	36573	(TI 403) 2nd FM IF, 1st AM IF	C71		2 mfd @ 50V Electrolytic
TR6	36573	(TI 403) 3rd FM IF, 2nd AM IF	C72		330 mmf @ 1000V Ceramic Di
*TR7,TR8	36569	(2N 408) AF Amp	C73		.005 mfd @ 100V Ceramic Di
*TR9	36569	(2N 581) Driver	R80		150, 1/2 Watt, Carbon
C8		12 mmf 10% Ceramic Disc	R81		1500, 1/2 Watt, Carbon
C10		15 mmf N 330 Ceramic Disc	R82		1000, 1/2 Watt, Carbon
C16		3.3 mmf NPO Ceramic Disc	R83		15K, 1/2 Watt, Carbon
C31		.005 mfd @ 100V Ceramic Disc	R84		6800, 1/2 Watt, Carbon
C34		10 mmf NPO Ceramic Disc	R85		6800, 1/2 Watt, Carbon
C38		.005 mfd @ 100V Ceramic Disc	Delete:		
*C59		30 mfd @ 30V Electrolytic	C7		4.7 mmf NPO Ceramic Disc
*C60,C61		2 mfd @ 50V Electrolytic	C27		4.7 mmf NPO Ceramic Disc
*C63		30 mfd @ 30V Electrolytic	C33		4.7 mmf NPO Ceramic Disc
R2		18K, 10%, 1/2 Watt, Carbon	C43		.005 mfd @ 50V Ceramic Dis
R10		2200, 10%, 1/2 Watt, Carbon	C44		.005 mfd @ 50V Ceramic Dis
R18		22K, 10%, 1/2 Watt, Carbon	C45		.005 mfd @ 50V Ceramic Dis
R27		560, 10%, 1/2 Watt, Carbon			
T1	30570	1st FM IF	R31		1500, 1/2 Watt, Carbon
T2	30567	2nd FM IF	R32		1500, 1/2 Watt, Carbon
T3	30568	3rd FM IF	R33		15K, 1/2 Watt, Carbon
T4	30566	Ratio Detector	R34		6800, 1/2 Watt, Carbon
L2	30061	FM Mixer	R35		6800, 1/2 Watt, Carbon
-	40318	FM Tuner Assembly	L2B	30052	FM Neutralizer

* Interchangeable with earlier production units.

NUTONE

Supplemental Information

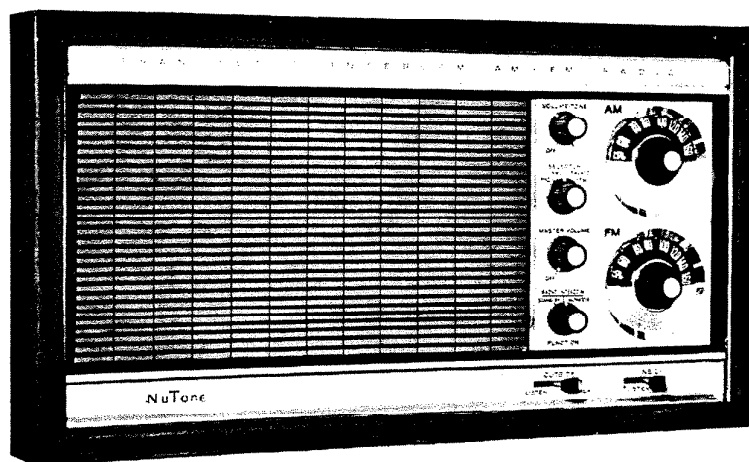
No. 2

REVISED CIRCUIT & PARTS LIST

AM-FM TRANSISTOR RADIO & INTERCOM

Models N2561-N2562

CHASSIS NO. 561-E

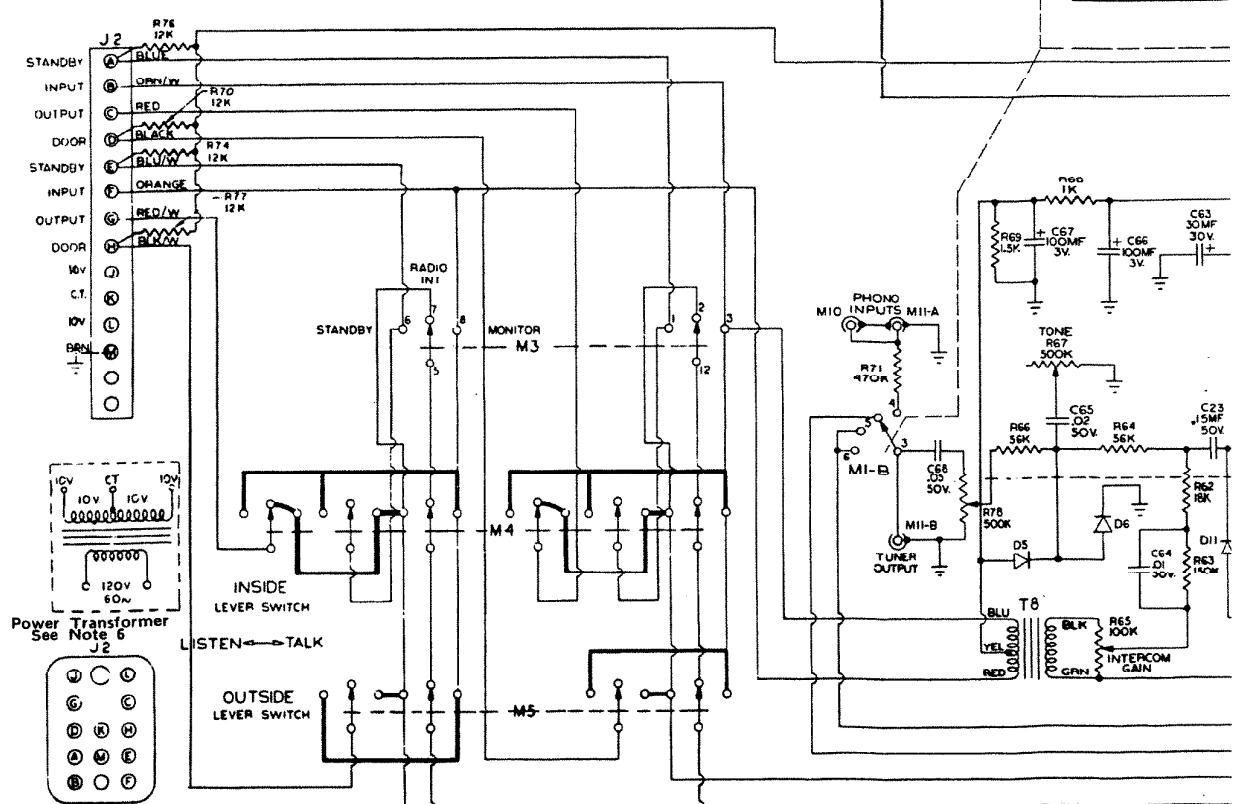
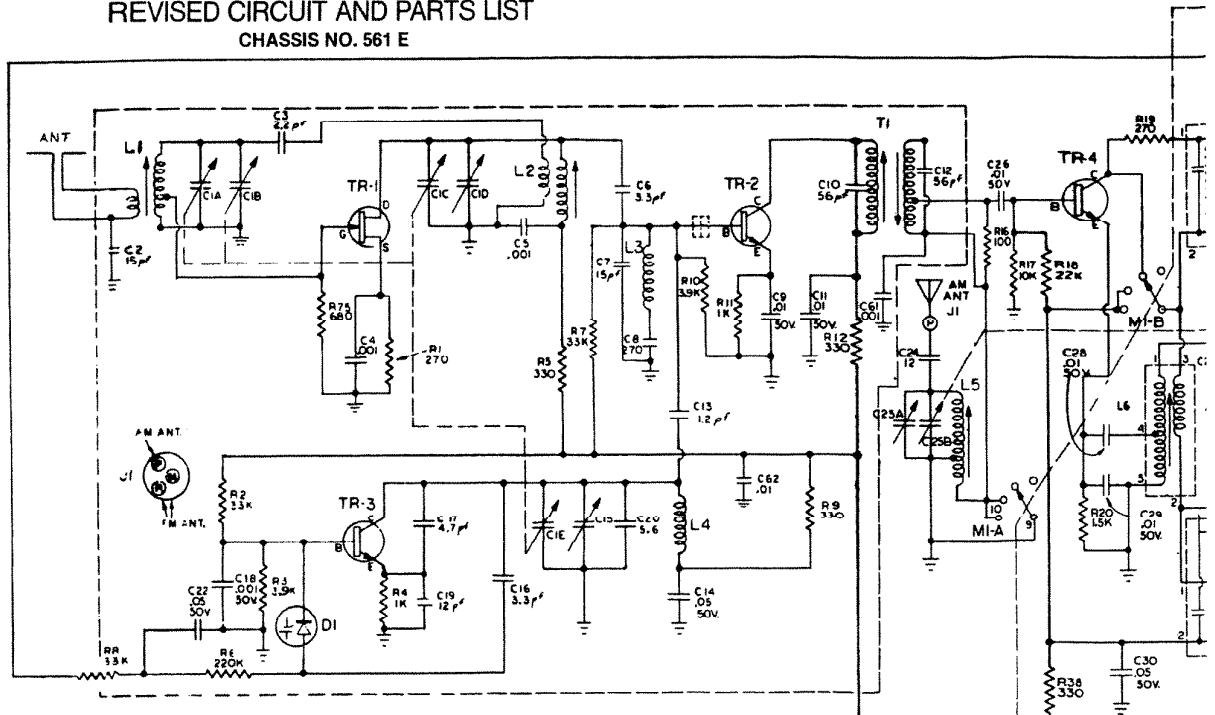


Supplemental information NO. 2

FOR ALIGNMENT, IF, RF, SEE FRONT SECTION THIS SERVICE MANUAL

REVISED CIRCUIT AND PARTS LIST

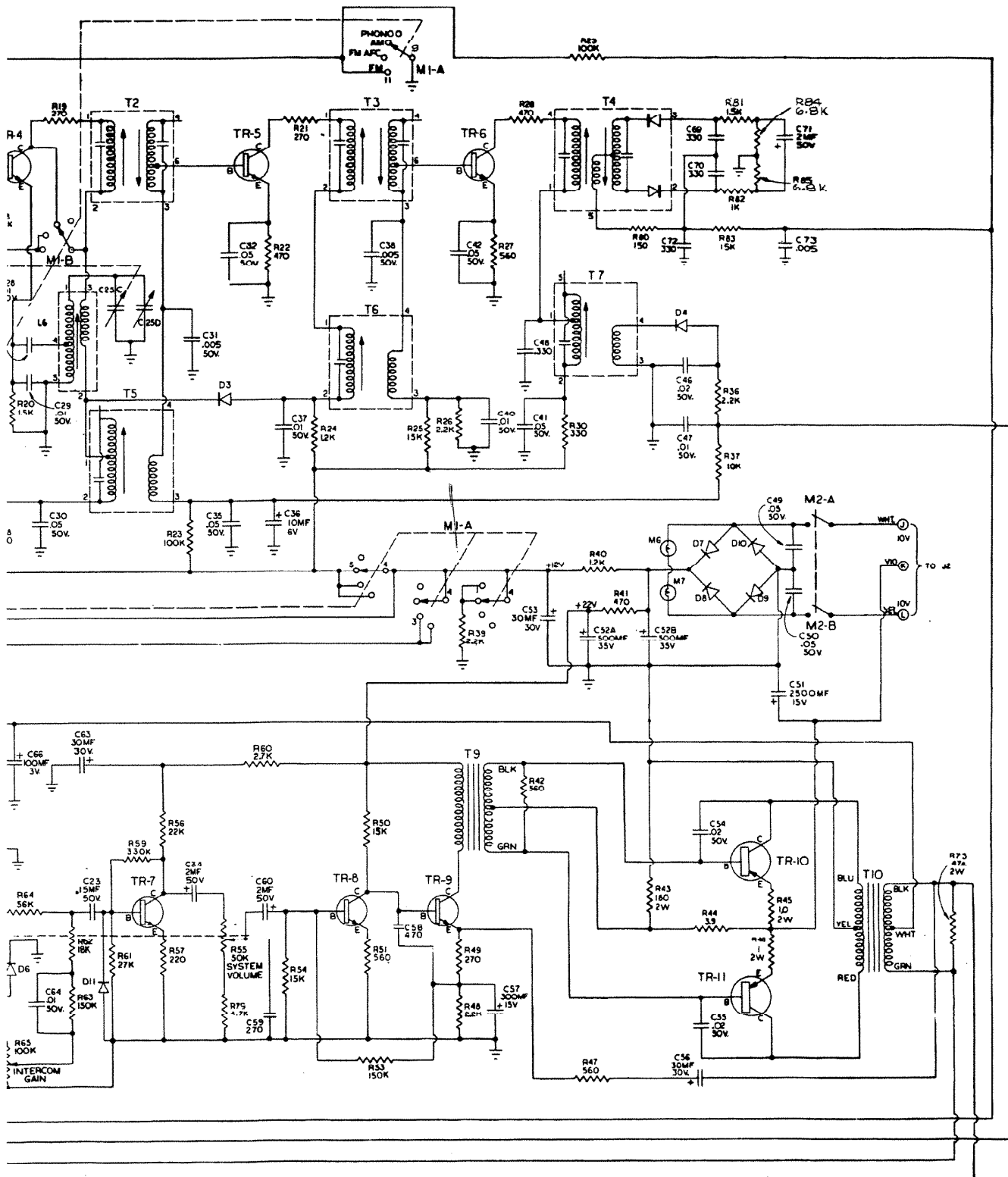
CHASSIS NO. 561 E



- NOTES
1. ALL RESISTORS 1/2 WATT 10% TO K=1,000.
 2. ALL CAPACITIES SHOWN AS DEC WHOLE NUMBERS ARE MICROMIK
 3. ALL CAPACITORS 1000 VOLT UN
 5. SOCKET CONNECTIONS ARE SHO
 6. TRANSFORMER IS MOUNTED RE
 7. HEAVY LINES ON M4 AND M5 I

TRANSISTOR VOLTAGE CHART ON BACK PAGE

ALL TRANSISTOR VOLTAGES ARE POSITIVE

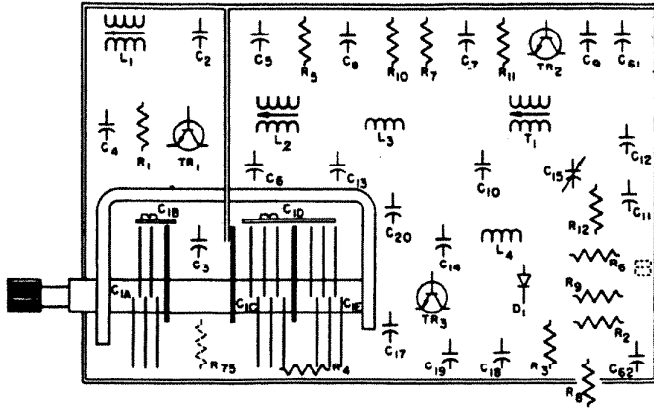


WATT 10% TOLERANCE UNLESS OTHERWISE NOTED, VALUES IN OHMS,

HOWN AS DECIMAL FRACTIONS ARE MICROFARADS AND SHOWN AS ARE MICROMICROFARADS UNLESS OTHERWISE NOTED. 1000 VOLT UNLESS OTHERWISE NOTED.

ONS ARE SHOWN AS TOP (OR PLUG END) VIEWS. MOUNTED REMOTE FROM SET. (T11) M4 AND M5 INDICATE INTERNAL SWITCH CONNECTION.

NUTONE
Model N2561B - N2562B
Chassis No. 561E
FET FM RF AMPLIFIER
All Silicon Transistors



F. M. TUNER

NUTONE MODEL N2561-N2562 RADIO INTERCOM PARTS CHANGES IN LATEST PRODUCTION UNIT - CHASSIS 561-E - USING ALL SILICON TRANSISTORS AND POSITIVE POWER SUPPLY.

PARTS LISTED BELOW ARE NOT INTERCHANGEABLE WITH EARLIER PRODUCTION UNITS.

REF. NO.	DESCRIPTION	REF. NO.	DESCRIPTION	REF. NO.	DESCRIPTION
CAPACITORS					
C3	2.2 pf	C23	.15mf	R7	220 K
C4	.001 mf	C34	2 mf	R8	33 K
C5	.001 mf	C39	Not Used	R10	3.9 K
C6	3.3 pf	C51	2500 mf	R11	1 K
C7	15 pf	C58	470 pf	R12	330
C8	270 pf	C59	270 pf	R13-15	Not Used
C9	.01 mf	C61	.001 mfq	R16	100 K
C10	56 pf	C62	.01 mf	R31-35	Not Used
C11	.01 mf	C69	330 pf	R47	560
C12	56 pf	C70	330 pf	R48	3.3 K
C13	1.2 pf	C71	2 mf	R50	15 K
C14	.05 mf	C72	330 pf	R51	560
C18	.001 mf	C73	.005 mf	R52	Not Used
C19	12 pf	RESISTORS		R53	150 K
C20	5.6 pf	R1	270 K	R58	Not Used
C21	Not Used	R2	33 K	R59	330 K
C22	.05 mf	R3	3.9 K	R70	12 K
		R6	220 K	R75	680

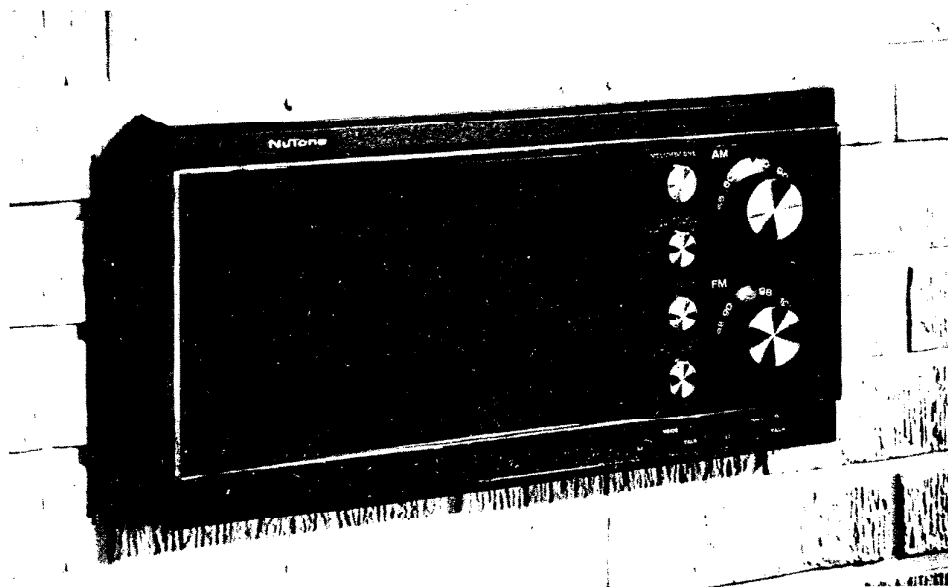
REF. NO.	NUTONE PART NO.	DESCRIPTION	REF. NO.	NUTONE PART NO.	DESCRIPTION
VARIABLE CAPACITORS					
C1	35084	FM Tuning Capacitor	L1C	30070	Ant. Trap
C15	35078	Tubular-FM Oscillator Trimmer	L2A	30071	Mixer
TRANSFORMERS					
T1	30524	FM IF Transformer	L4	30063	FM Oscillator
T3	30567	FM IF Transformer	DIODES		
T4	30574	FM Radio Detector	D2		Not Used
Coils					
L1A	30068	Ant. Primary	D7-10	36549	Silicon Diodes Used In B+ Power Supply
L1B	30069	FM Ant.	MISCELLANEOUS		
			M1	34550	4 Pos. Rotary Switch
				40807	FM Tuner Assembly

REF. NO.	NUTONE PART NO.	DESCRIPTION	AVERAGE DC VOLTAGES SELECTOR SWITCH IN FM POSITION		
TR1	36582	FET-FM RF Amplifier	Ed	Eg	Es
			10.9	0	.97
TR2	36578	FM Mixer	Ec	Eb	Ee
			12	1.22	.69
TR3	36581	FM Oscillator			.89
TR4	36578	Am Mixer-1st FM IF Anp			2.76
TR5	36578	1st AM-2nd FM IF Amp			.58
TR6	36578	2nd AM-3rd FM IF Amp			.8
TR7	36580	1st Audio (Low Noise NPN)			.12
TR8	36580	2nd Audio			.394
TR9	36580	Driver			11.98
TR10-11	36556	Push Pull Audio Output			12.1

**Supplemental Information
NO. 3**

REVISED CIRCUIT AND PARTS LIST

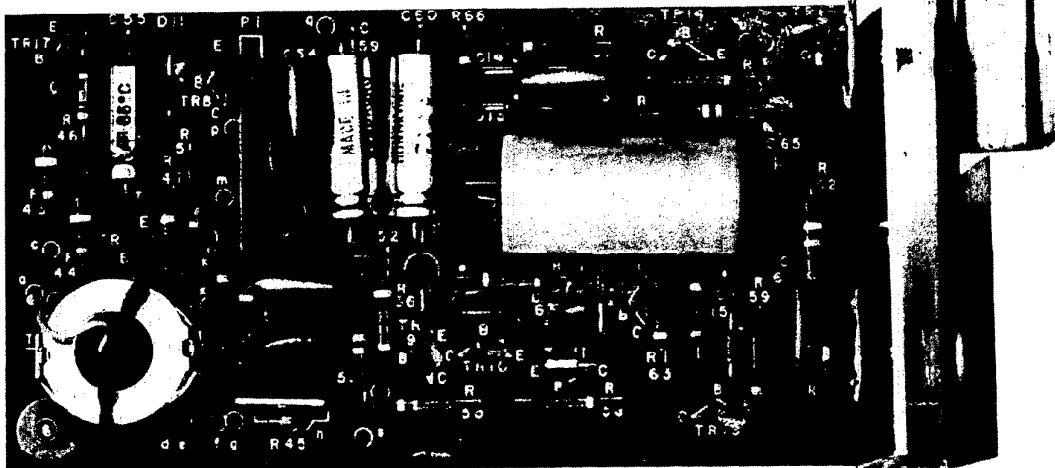
CHASSIS NO. 561 H



AM-FM TRANSISTOR RADIO and INTERCOM

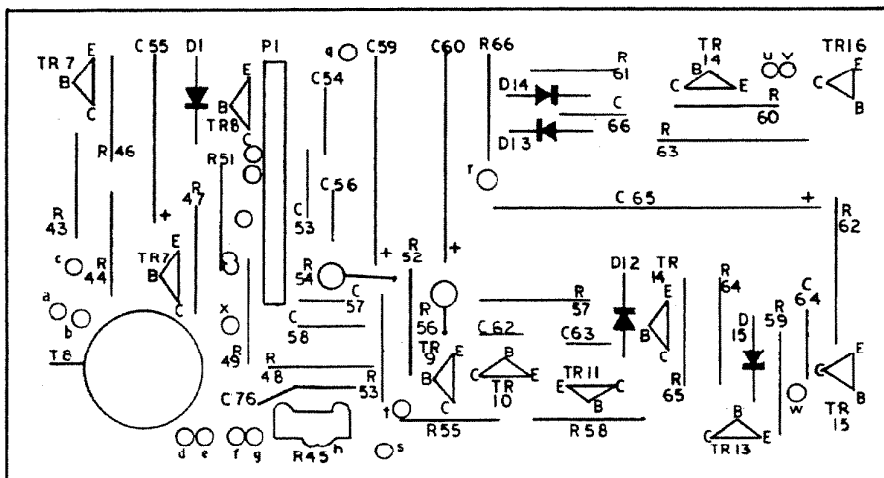
Models N2561-N2562

AMPLIFIER P/C BOARD

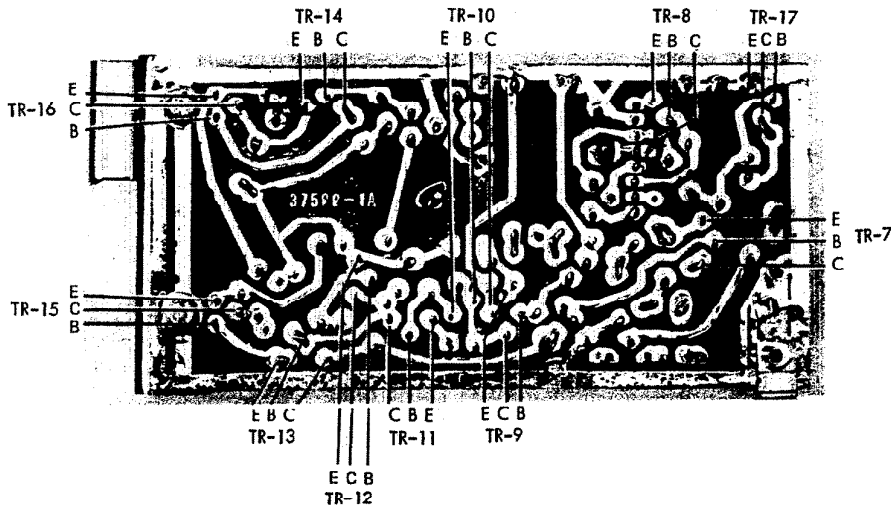


P/C BOARD COMPONENT LOCATION

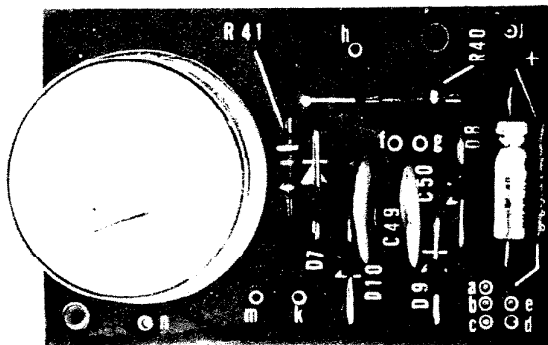
C53 is mislabeled. Should be C51.



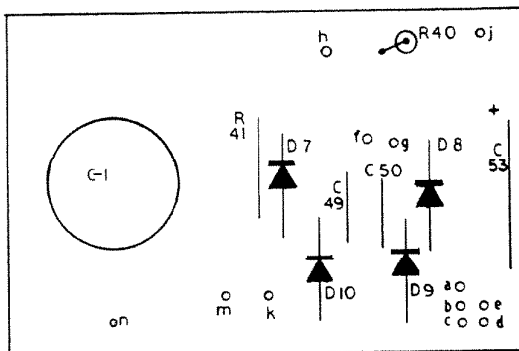
FOIL SIDE CALL OUTS



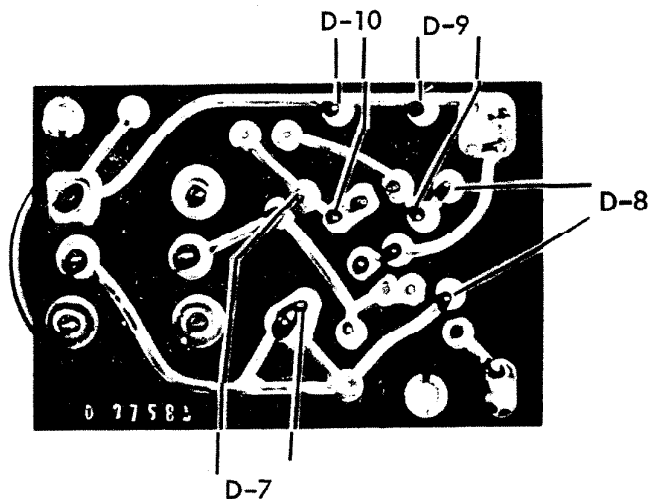
POWER SUPPLY P/C BOARD



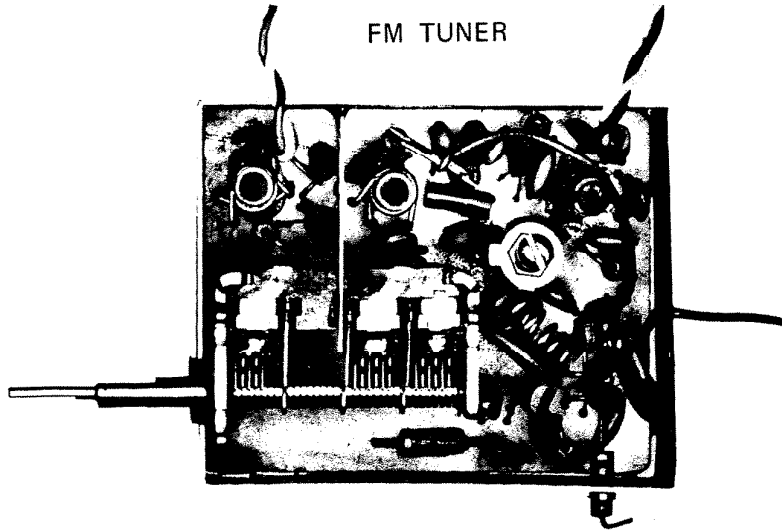
P/C BOARD COMPONENT LOCATION



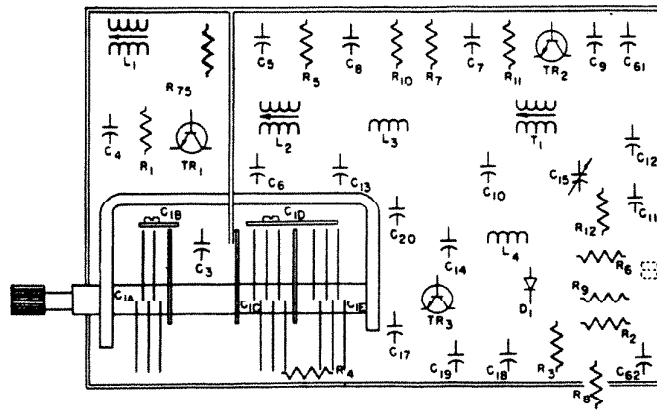
FOIL SIDE CALLOUTS



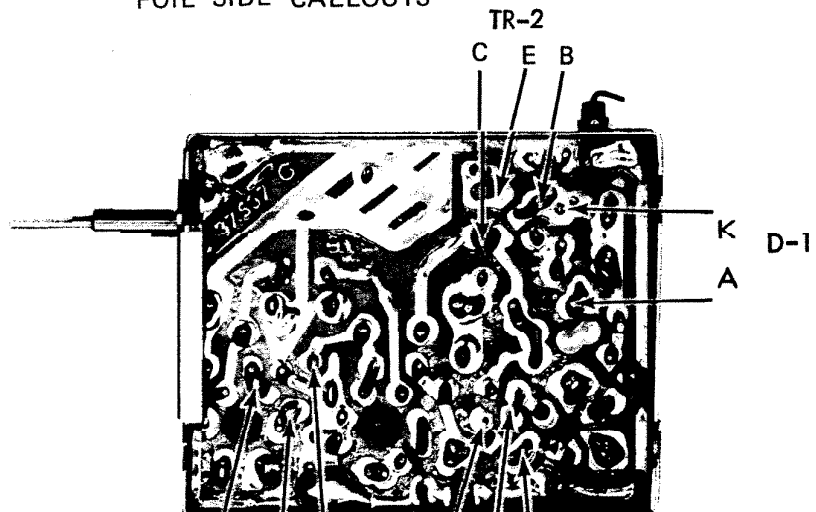
FM TUNER



P/C BOARD COMPONENT LOCATION



FOIL SIDE CALLOUTS



S G D
TR-1

B C E
TR-3

AMPLIFIER PARTS LIST

CHASSIS 561H - SUPPLEMENT NO.3

Ref. No.	NuTone Part No.	Description	Ref. No.	NuTone Part No.	Description
TRANSISTORS			RESISTORS (contd)		
TR-7	36606 (Motorola M052)	Driver	R-65	33101-272	2.7 K ohms
TR-8	36580 (Motorola M-7)		R-66	33101-101	100 ohms
TR-9	36580 (Motorola M-7)		CAPACITORS		
TR-10	36606 (Motorola M052)	Driver	*C-51	35100-140	.02 mfd @ 50V
TR-11	36606 (Motorola M052)	Driver	C-54	35100-141	.05 mfd @ 50V
TR-12	36613 (Motorola MPS A20)	Driver	C-55	35068-107	100 mfd @ 3V
TR-13	36613 (Motorola MPS A20)	Driver	C-56	35100-134	470 pf
TR-14	36606 (Motorola M052)	Driver	C-57	35100-142	330 pf
TR-15	36614	Power Output	C-58	35100-127	.1 mfd @ 100V
TR-16	36614	Power Output	C-59	35068-115	100 mfd @ 25V
TR-17	36613 (Motorola MPS A20)	Driver	C-60	25068-115	100 mfd @ 25V
DIODES			C-62	35100-144	56 pf
D-11	36549 (Motorola 1N4002)	Silicon Rectifier	C-63	35100-144	56 pf
D-12	36549 (Motorola 1N4002)	Silicon Rectifier	C-64	35100-127	.1 mfd @ 100V
D-13	36549 (Motorola 1N4002)	Silicon Rectifier	C-65	35085-101	500 mfd @ 25V
D-14	36549 (Motorola 1N4002)	Silicon Rectifier	C-66	35100-141	.05 mfd @ 25V
D-15	36549 (Motorola 1N4002)	Silicon Rectifier	C-76	35100-140	.02 mfd @ 50V
RESISTORS			*Shown as C-53 on P/C board.		
R-43	33101-393	39 K ohms	TRANSFORMERS		
R-44	33101-393	39 K ohms	T-1	30587	Input
R-45	34023	Potentiometer	COMPONENT COMBINATIONS		
R-46	33101-153	15 K ohms	P-1	33032	Resistor Pack
R-47	33101-103	10 K ohms	POWER SUPPLY		
R-48	33101-272	2.7 K ohms	DIODES		
R-49	33101-102	1 K ohms	D-7	36549 (Motorola 1N4002)	Silicon Rectifier
R-51	33101-104	100 K ohms	D-8	36549 (Motorola 1N4002)	Silicon Rectifier
R-52	33101-473	47 K ohms	D-9	36549 (Motorola 1N4002)	Silicon Rectifier
R-53	33101-104	100 K ohms	D-10	36549 (Motorola 1N4002)	Silicon Rectifier
R-54	33101-124	120 K ohms	RESISTORS		
R-55	33101-683	68 K ohms	R-40	33101-102	1 K ohm
R-56	33101-820	82 ohms	R-41	33101-470	47 ohms
R-57	33101-473	47 K ohms	CAPACITORS		
R-59	33101-221	220 K ohms	C-1	35083	500/500 mfd. @ 40V
R-60	33101-221	220 K ohms	C-49	35100-141	.05 mfd. @ 50V
R-61	33101-152	1.5 K ohms	C-50	35100-141	.05 mfd. @ 50V
R-62	33101-010	1 ohm 2 watt W/W	C-53	35068-104	30 mfd. @ 30V
R-63	33101-010	1 ohm 2 watt W/W			
R-64	33101-471	470 ohms			

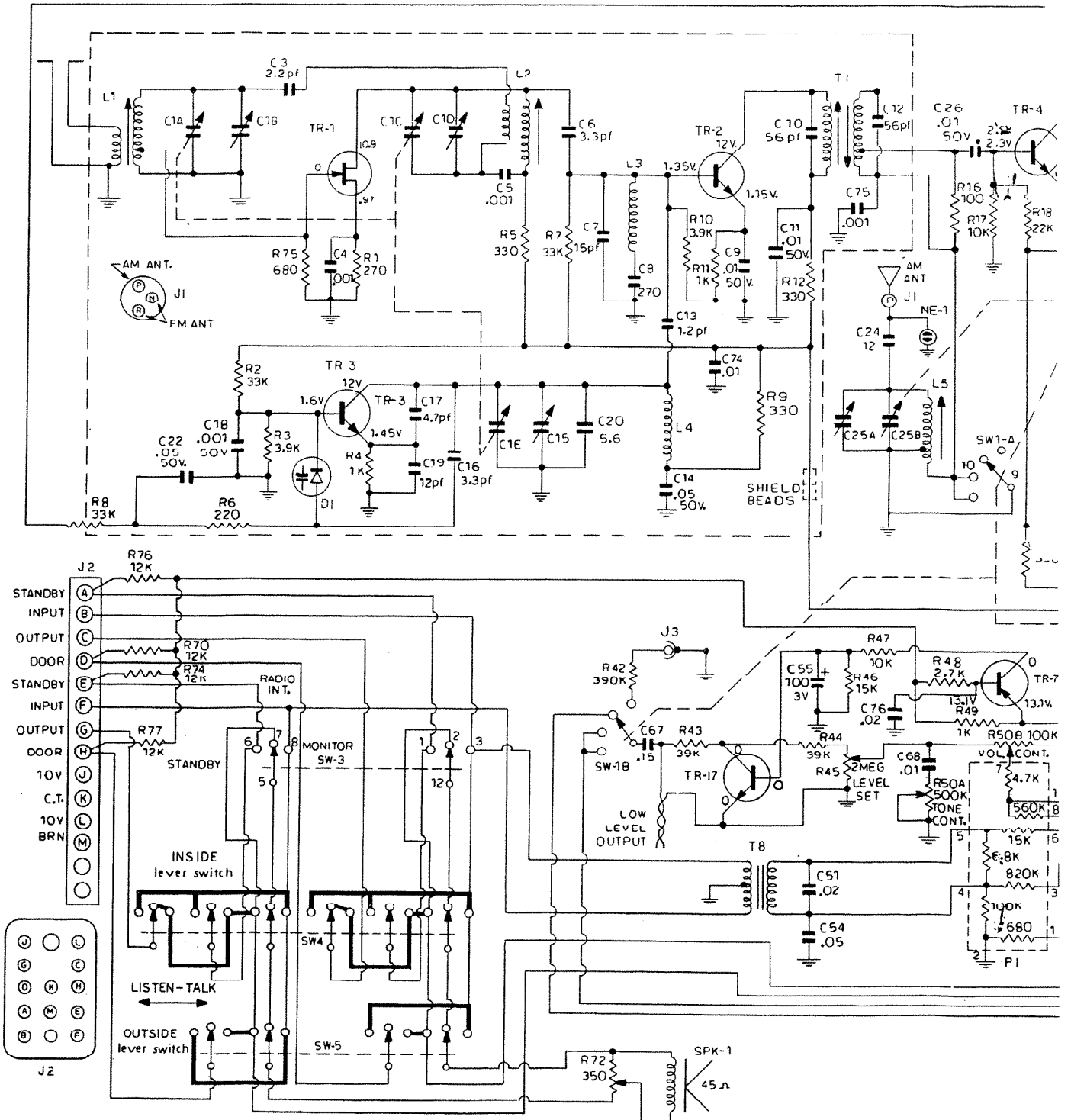
Supplemental Information No. 3

FOR ALIGNMENT, IF, RF, SEE FRONT SECTION THIS SERVICE MANUAL

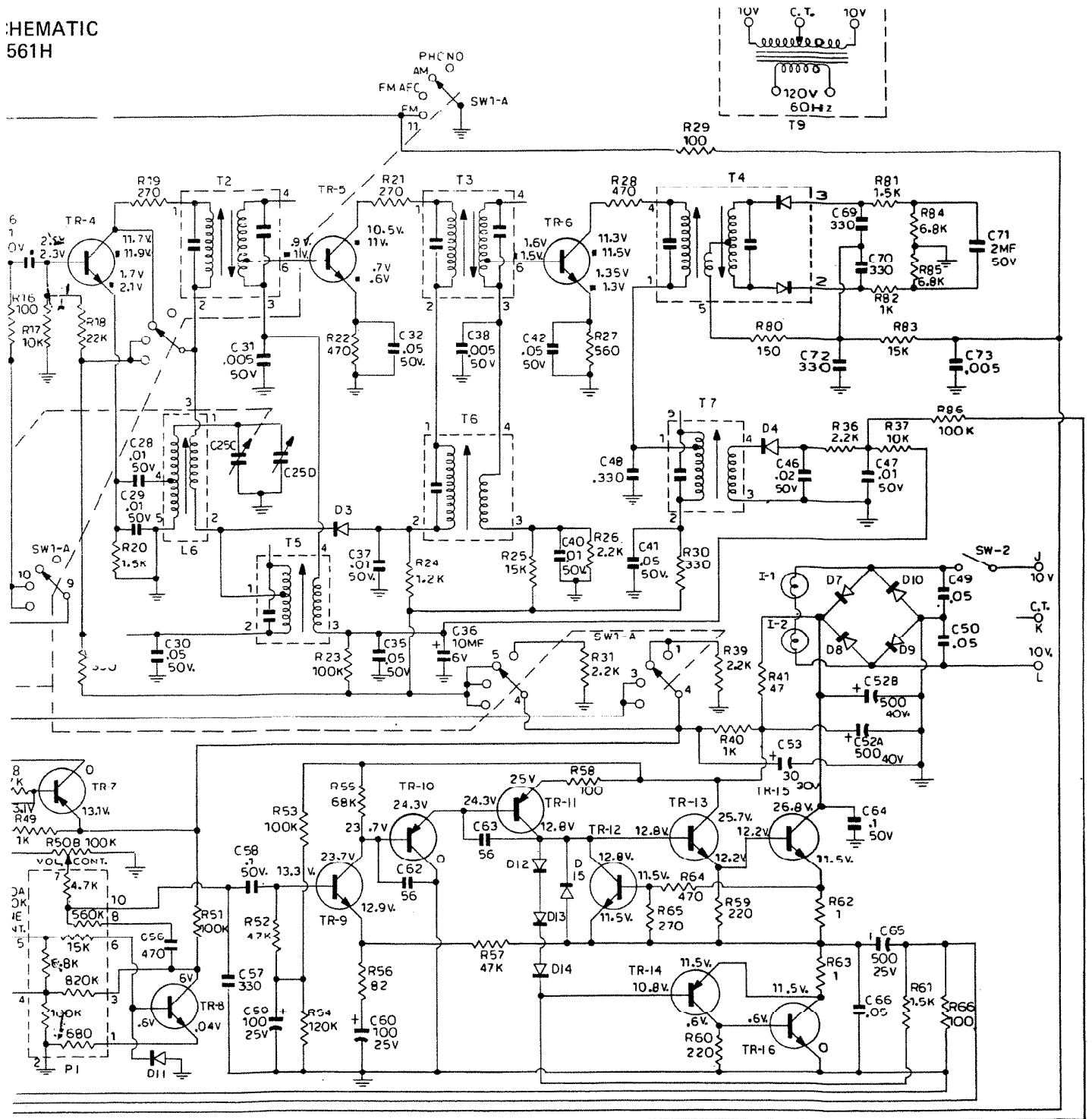
REVISED CIRCUIT AND PARTS LIST

CHASSIS NO. 561 H

N 2561-62 SCHEMATIC CHASSIS 561H



SCHEMATIC
561H



NOTE: IF STRIP, TRANSISTOR VOLTAGES
NOT MARKED: (SELECTOR SWITCH IN
AM MODE)
MARKED ■: (SELECTOR SWITCH IN
FM MODE)

MODEL N2561-N2562
SCHEMATIC DIAGRAM
FOR PRODUCTION MODELS
CHASSIS NO. 561-H

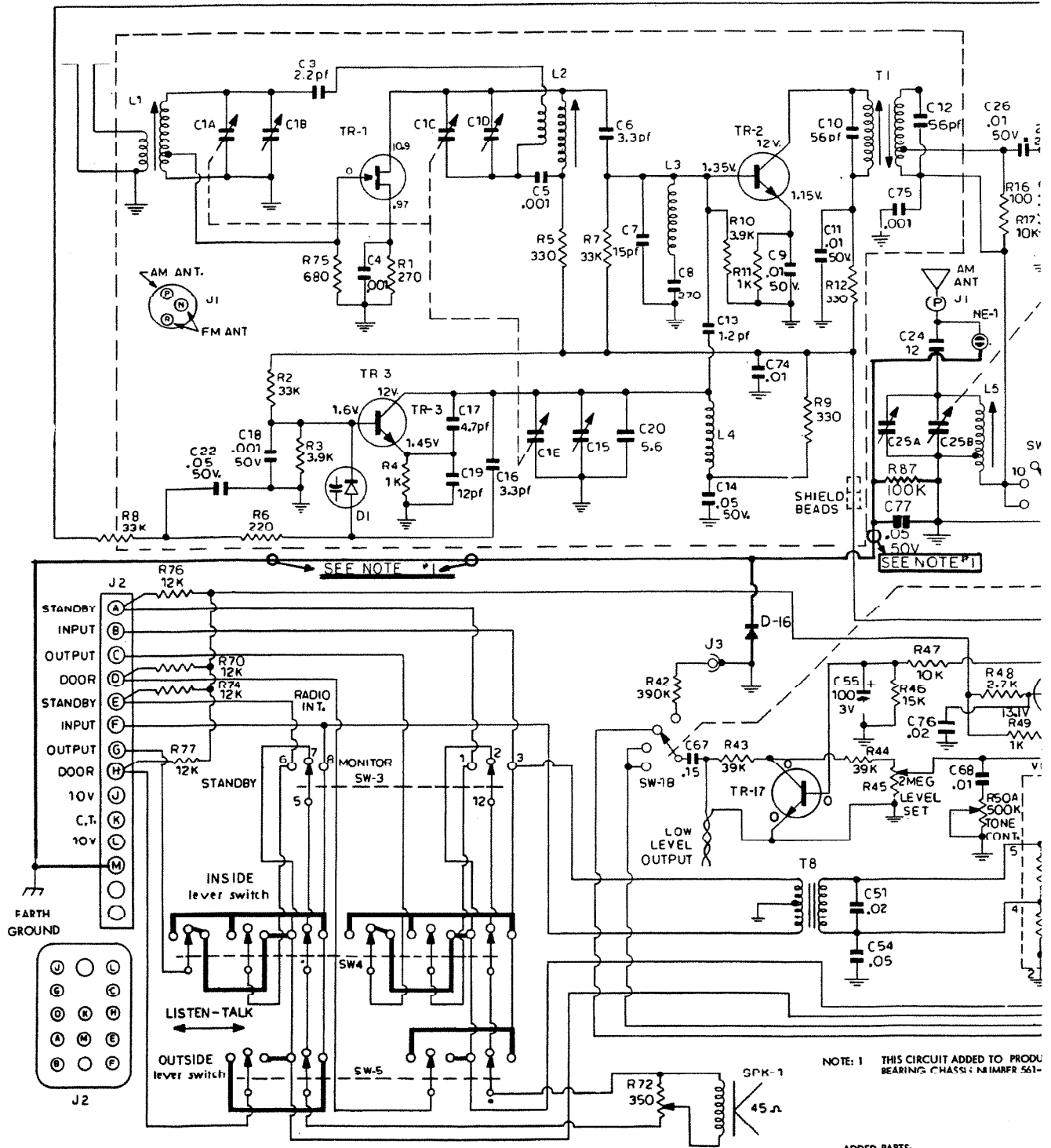
Supplemental Information No. 4

FOR ALIGNMENT, IF, RF, SEE FRONT SECTION THIS SERVICE MANUAL

REVISED CIRCUIT AND PARTS LIST

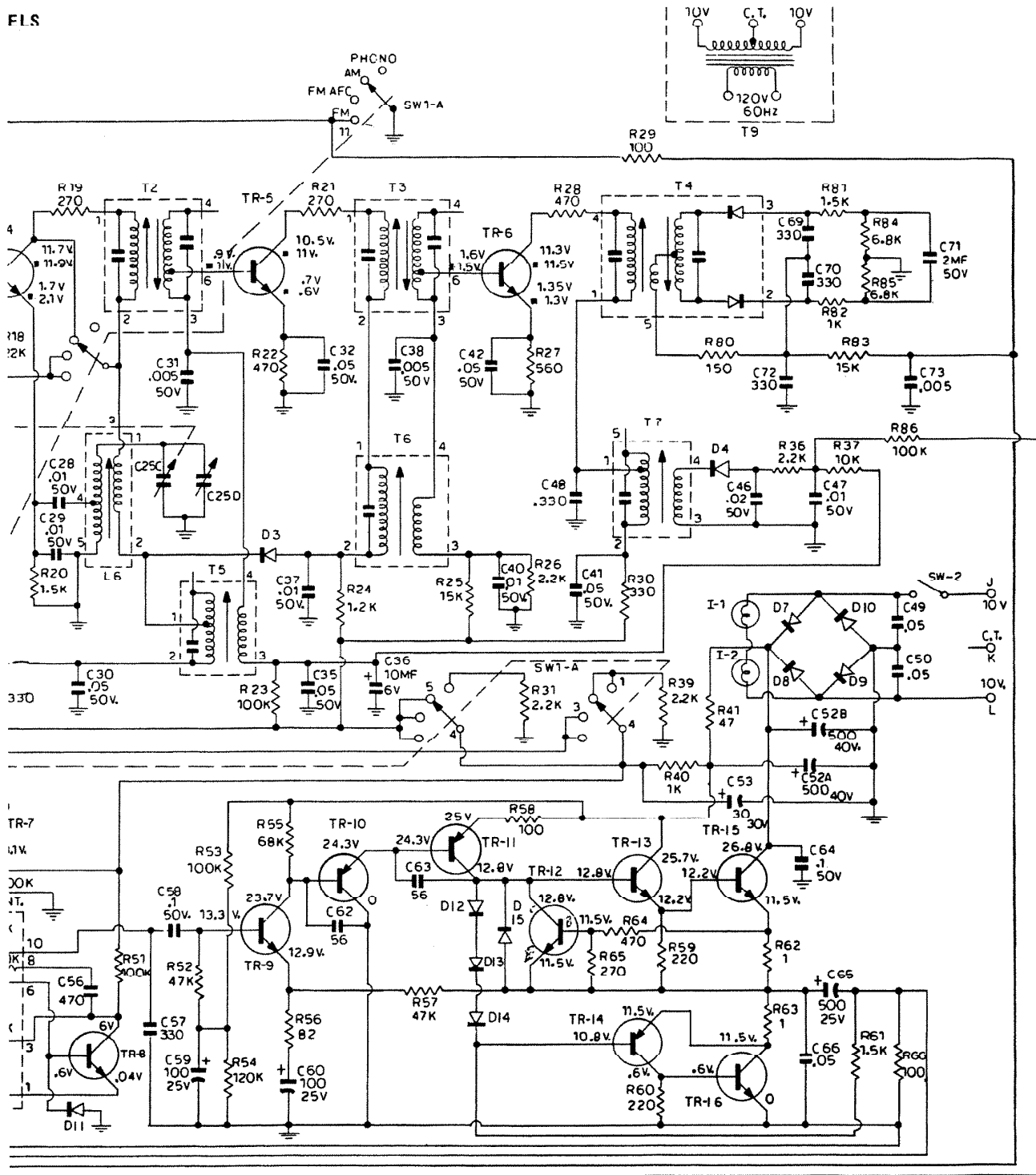
CHASSIS NO. 561 J

MODEL N2561-N25
SCHEMATIC DIAGR
FOR PRODUCTION
CHASSIS NO. 561-J



NOTE: 1 THIS CIRCUIT ADDED TO PRODUCE BEARING CHASSIS: N114RFR 561-

ADDED PARTS REF. NO.	NUTONE PART NO.
D-16	#36612
R-97	31101-104
C-77	35100-141



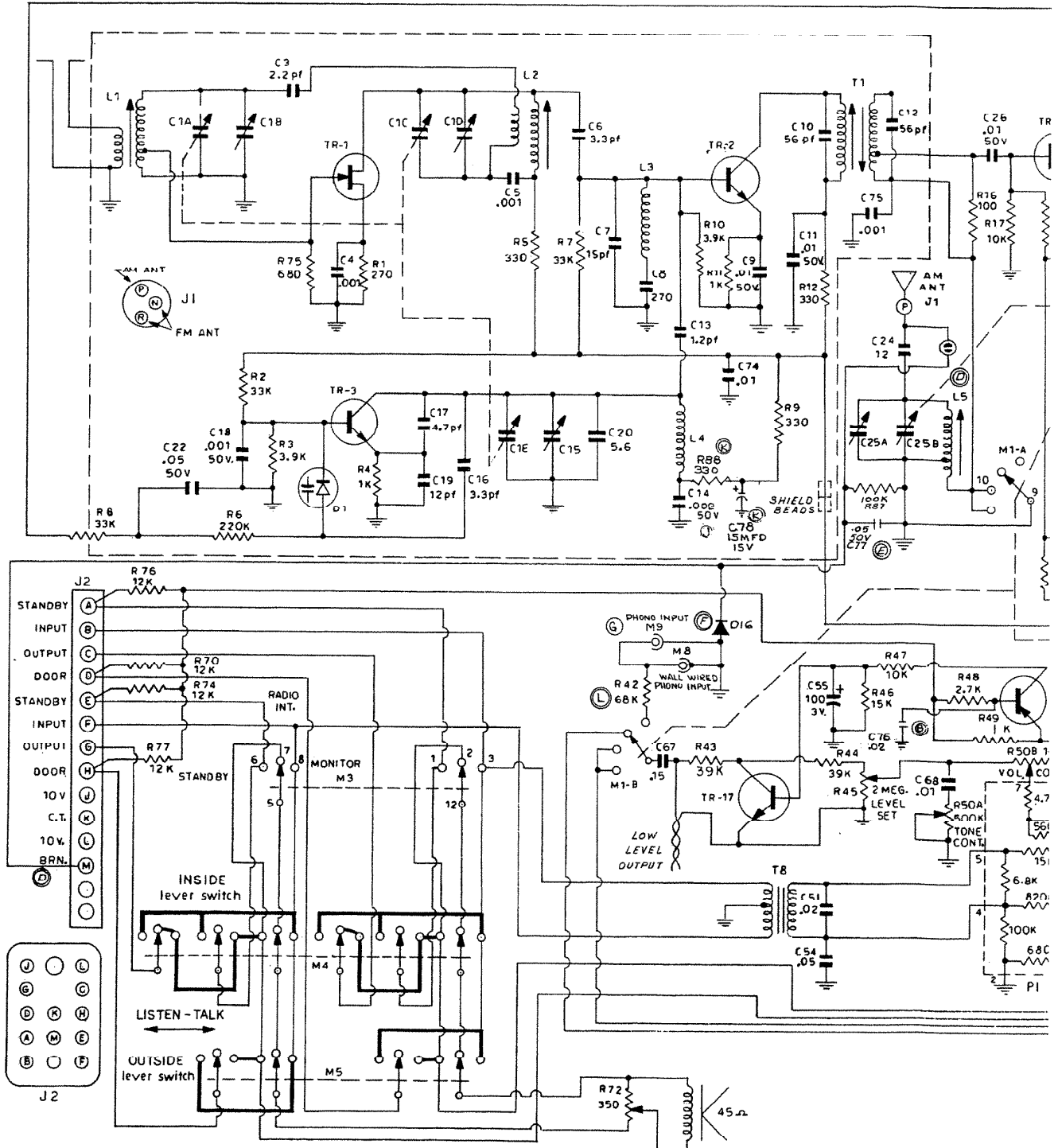
VOLTAGE MEASUREMENTS TAKEN IN AM POSITION UNLESS OTHERWISE INDICATED.
■ VOLTAGE MEASUREMENTS TAKEN IN FM POSITION.

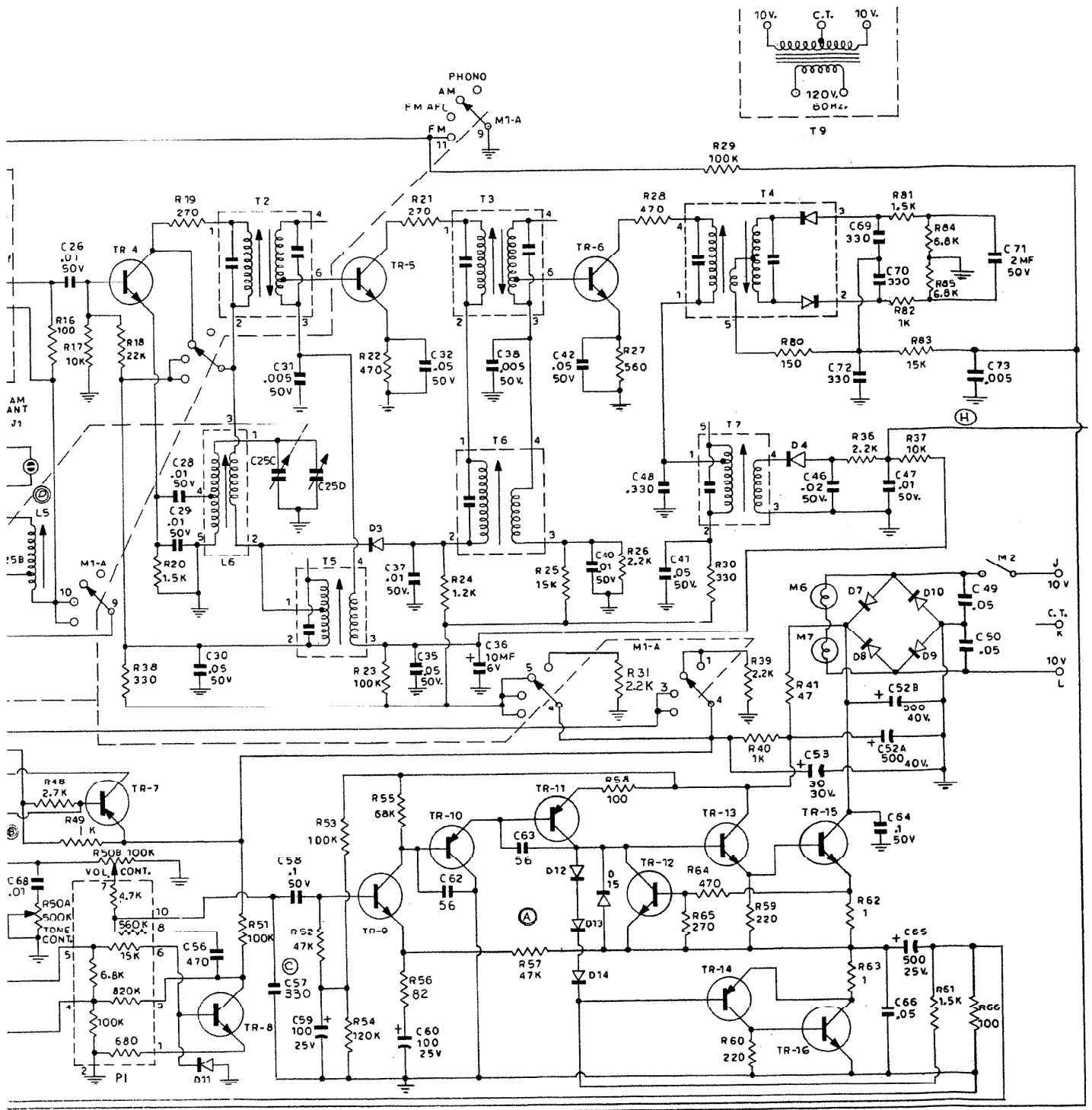
Supplemental Information No. 5

FOR ALIGNMENT, IF, RF, SEE FRONT SECTION THIS SERVICE MANUAL

REVISED CIRCUIT AND PARTS LIST

CHASSIS NO. 561 K





SCHEMATIC
Models N-2561 - N2562

TUNER PARTS LIST

CHASSIS 561K - SUPPLEMENT NO.5

Ref. No.	NuTone Part No.	Description	Ref. No.	NuTone Part No.	Description
TRANSISTORS			RESISTORS (contd)		
TR-1	36582	FET FM RF Amplifier	R-8	33101-333	33 K ohms
TR-2	36578	FM Mixer	R-10	33101-392	3.9 K "
TR-3	36581	FM Oscillator	R-11	33101-102	1 K ohm
C-3	35101-127	2.2 pf	R-12	33101-331	330 ohms
C-4	35100-120	.001 mfd	R-75	33101-681	680 ohms
C-5	35100-120	.001 mfd	VARIABLE CAPACITORS		
C-6	35101-134	3.3 pf	C-1	35084	FM Tuning Capacitor
C-7	35101-130	15 pf	C-15	35078	Tubular FM Oscillator Trimmer
C-8	35100-124	270 pf	TRANSFORMERS		
C-9	35100-139	.01 mfd	T-1	30524	FM IF Transformer
C-10	35100-144	56 pf	T-2	30567	FM IF Transformer
C-11	35100-139	.01 mfd	T-3	30574	FM Ratio Detector
C-12	35100-144	56 pf	COILS		
C-13	35101-126	1.2 pf	L-1A	30068	Antenna Primary
C-14	35100-141	.05 mfd	L-1B	30069	FM Antenna
C-18	35100-120	.001 mfd	L-1C	30070	Antenna Trap
C-19	35101-132	12 pf	L-2A	30071	Mixer
C-20	35101-137	5.6 pf	L-4	30063	FM Oscillator
C-22	35100-141	.05 mfd	COMPLETE FM TUNER ASSEMBLY 41301		
C-74	35100-120	.001 mfd	NOTE: This Tuner is not interchangeable with prior		
C-75	35100-139	.01 mfd	Production Units.		
RESISTORS					
R-1	33101-271	270 K ohms			
R-2	33101-333	33 K "			
R-3	33101-392	3.9 K "			
R-4	33101-102	1 K "			
R-5	33101-331	330 "			
R-6	33101-224	220 K "			
R-7	33101-333	33 K "			

REVISED CIRCUIT PARTS LIST AND VOLTAGE DATA

CHASSIS 561K - SUPPLEMENT NO. 5

The following parts have been changed or added to stabilize FM reception and prevent drift.

ADD:

REF. NO.	PART NO.	DESCRIPTION
C-78	35068-109	15 Mfd. 15 Volt Electrolytic Capacitor
R-88	33101-331	330 Ohm 1/2 Watt Carbon Resistor

CHANGE:

C-14	35100-141	.05Mfd. 50V TO .002Mfd. 50V—Part #35110-106
------	-----------	---

The following part has been changed in order to allow the Nutone Model 2603 Record Changer and 2605 8-Track Tape Player to be utilized without any circuit modifications.

CHANGE:

R-42 FROM 390K Ohms Part #33101-394 TO 68K Part #33101-683

The following resistor was removed in order to obtain increased sensitivity of radio operation.

REMOVE:

R-86 100K Ohms

TRANSISTOR VOLTAGE CHART (Average DC Voltages)

	S	G	D		E	B	C
TR-1	1.5	0	10	TR-7	*11.9	11.2	11.8
				TR-8	.04	.6	6
				TR-9	12.9	13.3	23.7
TR-2	.7	1.2	11.5	TR-10	24.3	23.7	0
TR-3	.7	1.1	12	TR-11	25	24.3	12.8
TR-4 (FM)	2.7	3.3	11.3	TR-12	11.5	11.5	12.8
TR-4 (AM)	3	3.6	12.8	TR-13	12.2	12.8	25.7
TR-5 (FM)	.5	1.2	11	TR-14	11.5	10.8	.6
TR-5 (AM)	.6	1.3	11.5	TR-15	11.5	12.2	26.8
TR-6 (FM)	.8	1.5	11.5	TR-16	0	.6	11.5
TR-6 (AM)	.9	1.6	12	TR-17	0	0	0
TR-7	13.1	13.1	0	TR-17	*0	.7	0

*Voltages during Intercom Operation (Inside Listen Talk or Outside Listen Talk)

NuTone

Madison and Red Bank Roads
Cincinnati, Ohio 45227

FORM NO. FS1365 8-84 HI
PRINTED IN U.S.A.