NuTone SERVICE MANUAL



AM-FM TRANSISTOR RADIO and INTERCOM

Models 2561-2562

NuTone Housing Products

Scovill

Madison & Red Bank Roads, Cincinnati, Ohio 45227

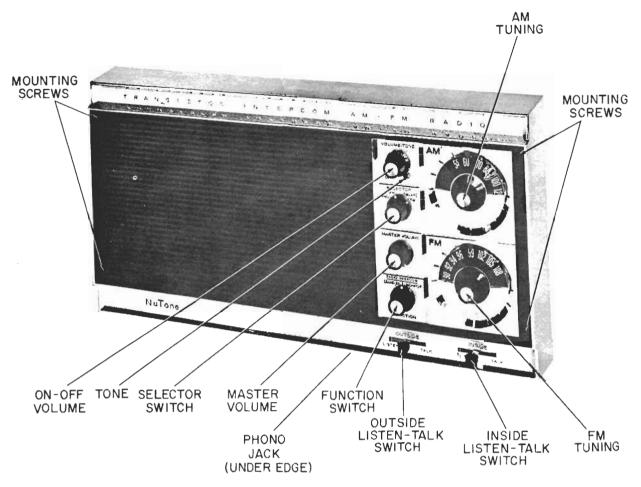


Fig. 1. Master station front panel.

CHECK-OUT PROCEDURE

- 1. Set Master Function switch in Radio-Intercom position.
- Rotate Master Speaker Volume control fully clockwise.
- Turn unit on with On-Off Volume knob and set control two-thirds clockwise. AM and FM tuning dial will be illuminated.
- 4. Set Selector switch to AM position.
- 5. Tune in AM radio station and check reception.
- Set Selector switch to FM or FM-AFC position. Tune in FM radio station and check reception.
- With radio playing, set Function switch on each Remote Speaker station to Radio-Intercom position and check for radio reception. Check operation of all Remote Speaker Volume controls.
- 8. Talk from Master to the Remote Speaker Stations (except door speaker) by operating Master Inside Talk-Listen switch to right (Talk position). Check for intercom reception at all Remote Speakers. Radio will be automatically silenced when Talk—Listen switch of Master or Remote Speaker is operated.
- 9. Push Inside Talk—Listen switch of Master to left (Listen position), to hear reply from Remote Stations. Operation of Talk-Listen switch on Remote Speaker is not required.
- Return Inside Talk-Listen switch of Master to center position. Push Inside Talk-Listen switch

- of Remote Speakers to right (Talk position). Check for Intercom reception at Master and other Remote Speakers.
- Set Function Switch of Master and all Remote Speakers to Stand-by position. Push Inside Talk-Listen switch of a Remote Speaker to right (Talk position). Check for intercom reception at Master and Remote Speakers set on Stand-by.
- 12. Push Inside Talk-Listen Switch of Remote to left (Special Listen position), to hear reply from speakers on Stand-by. Operation of Talk-Listen switch on Remote Speaker is not required.
- Set Function switch of all Remote Speakers to Monitor position. Leave Inside Talk-Listen switch in center position and talk from each Remote to Master.
- 14. Re-set Function switch of Master and Remotes to Radio Intercom position. Push Outside Talk-Listen switch of Master to right (Talk Position). Talk to Door Remote speaker.
- Push Outside Talk-Listen switch of Master to left (Listen Position) to hear reply from Door Remote speaker.
 - **NOTE:** When outside Talk-Listen Switch of Master or Remote Speaker is in center position, door speaker is in-operative.
- 16. Repeat steps 14 and 15 from all Remote Speakers.

MASTER STATION DISASSEMBLY INSTRUCTIONS

Partial Disassembly

- 1. Turn On-Off Power and Volume control to OFF position.
- Remove four (4) front panel mounting screws (Fig. 1).
- 3. Slide master unit forward. Support with hand, and disconnect power and antenna plugs from chassis. Power plug is equipped with special wire handle to assist in removal. To avoid broken leads of power and antenna plug, do not pull on leads of plug assemblies.

NOTE: To operate unit after removal from wall, extension leads will be required from the antenna plug (P1) and pins J, K, and L of Power Plug (P2).

Alternate Method: Connect auxiliary power transformer and plug assembly as described in bench test procedure.

Complete Disassembly

- 1. Perform Steps 1, 2, and 3 under "Partial Disassembly".
- 2. Pull and remove front panel control and switch knobs.
- 3. Remove four (4) screws (Fig. 3) from main chassis side support brackets and remove front panel.
- To gain access to components of the power supply, audio output, audio amplifier, and IF sub assemblies, remove four (4) screws securing master speaker to main chassis.
- 5. For access to components of the FM tuner assembly, remove AM tuning dial. Remove two (2) hex head screws under AM tuning dial, and one (1) hex head screw below FM tuning dial. Disconnect any associated wiring necessary for removal and temporarily re-connect for test.

OPERATION AND TESTING FOR BENCH SERVICE

- To apply power to unit for testing, an auxiliary power transformer assembly will be required. Fabricate the auxiliary power transformer assembly as shown in Fig. 2. This assembly can also be used in conjunction with an auxiliary speaker (45 ohm or less) to test output distribution and intercom functions of the unit.
- With Function switch of Master set to Radio-Intercom position, connect auxiliary speaker to pins C and G of J2 to check output distribution and intercom calls from Master.
- Connect auxiliary speaker to pins B and F of J2 to make intercom call to Master. To check muting function (Radio cut-off) short pins E and G of J2. Remove short and observe intercom reception at Master with radio playing.
- Connect auxiliary speaker to pins A and E of J2.
 Set Function switch of Master to Stand-by position. Push Master Inside Talk-Listen switch to

- Talk position and observe intercom reception at auxiliary speaker. Push Master Inside Talk-Listen switch to left (Listen position) and talk into auxiliary speaker. Check for intercom reception at master. Return Function switch of Master to Radio-Intercom position.
- 5. Connect auxiliary speaker to pins D and H of J2. Push Master Outside Talk-Listen switch to right (Talk position) and observe intercom reception at auxiliary speaker. Push Master Outside Talk-Listen switch to left (Listen position) and talk into auxiliary speaker. Check for intercom reception at Master.

NOTE: As auxiliary test speaker will usually be in close proximity to Master unit, proper function of intercom tests will be noted by feedback oscillations of speakers.

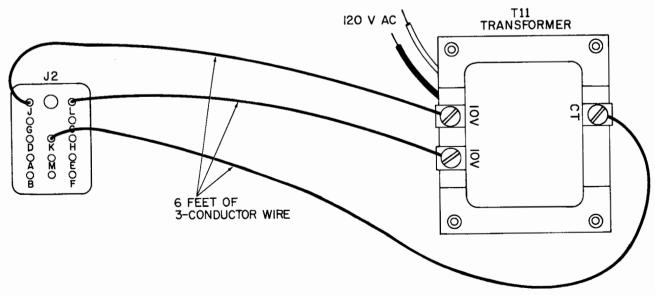


Fig. 2. Auxiliary power transformer assembly.

TROUBLESHOOTING

The following trouble chart is useful in isolating the more common troubles. Remembering that common circuitry is connected to perform several different operations of the Radio-Intercom System, one source of trouble may appear in several functions of operation.

As the Master unit is completely transistorized, extreme caution must be taken during servicing procedures to avoid accidental damage to the transistors. Turn power to Master OFF whenever performing any soldering. Use low wattage soldering equipment

and solder or un-solder components as fast as possible.

A VTVM, with a DC scale of 0 to 1.5 volts, will be required to measure most transistor base and emitter voltages. Components should be removed from the circuit when making resistance measurements to avoid incorrect polarity battery voltage of the ohmmeter being applied to a transistor. It is also important that circuit components are not inadvertently shorted during service functions.

TROUBLE CHART

TROUBLE	SUGGESTED CHECK POINTS
System "dead"	Check that AC power is being applied to power transformer. Check for secondary low voltage on pins J, K, and L of J2. Check fuses M8 and M9. Check switch (M2) on volume control (R55). Check diodes D7, D8, D9, D10 and associated circuitry. Check amplifier stages TR-7, TR-8, TR-9, TR-10, TR-11 and associated circuitry. Check M1 switch or for open T-10 transformer.
AM & FM radio and phono "dead"—Intercom operation normal.	Momentarily disconnect J2 signal plug from master to eliminate remote station or wiring errors causing muting diodes D5 and D6 to conduct. Check wiring of M4 and M5 of master for shorts. Check associated wiring of D5 and D6 for possible short to negative DC voltage.
No AM radio. Other operations normal.	Check voltage reading of TR-4, TR-5, and TR-6 and associated circuitry of L5, L6, T5, T6, and T7. Check M1 switch.
No FM radio. Other operations normal.	Check voltage readings of TR-1, TR-2, TR-3, TR-4, TR-5, TR-6, and associated circuitry of FM tuner assembly, T1, T2, T3, and T4. Check M1 switch.
No intercom operation. Other functions normal.	Check for open input transformer T8 and associated circuitry. Check connections of pins B and F of J2.
One or more remote stations inoperative in transmissions, receptions, or both.	Check inoperative remote stations for defective wiring connections at remote, master, or preceeding remote station. Check remote station selector switch M201 and Talk-Listen switches M202 and M203 for proper contact. Check for open volume control R201 or open speakers.

ALIGNMENT INSTRUCTIONS— READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT

Prealignment Instructions

Output of signal generator should be no higher than necessary to obtain an output reading. Volume control should be at minimum position.

Alignment Tools—Standard hex and slotted type.

AM RF and IF Alignment

Set Selector switch on AM position.

Dummy Antenna		Sig. Gen. Coupling	Sig. Gen. Frequency	Radio Dial Setting	Connect VTVM	Adjust	Remarks		
1.	.01 mfd	High side to point A. Low side to chassis.	455KC (400 cycle mod.)	Mid scale	DC probe to point B.	A1, A2, A3.	Adjust for maximum deflection. Keep generator output at minimum to obtain output reading.		
2.	.01 mfd	High side to point A. Low side to chassis.	1620KC (400 cycle mod.)	Tuning gang fully open.	DC probe to point B.	A4	Adjust for maximum deflection.		
3.	.01 mfd	High side to point A. Low side to chassis.	537KC (400 cycle mod.)	Tuning gang fully closed.	DC probe to point B.	A5	Adjust for maximum deflection. Repeat Steps 2 and 3.		
4.	50 mmf	High side to point C.	1400KC (400 cycle mod.)	1400KC	DC probe to point B.	A6	Adjust for maximum deflection.		
5.	50 mmf	High side to point C.	600KC (400 cycle mod.)	600KC	DC probe to point B.	A7	Adjust for maximum deflection. Repeat Steps 4 and 5.		

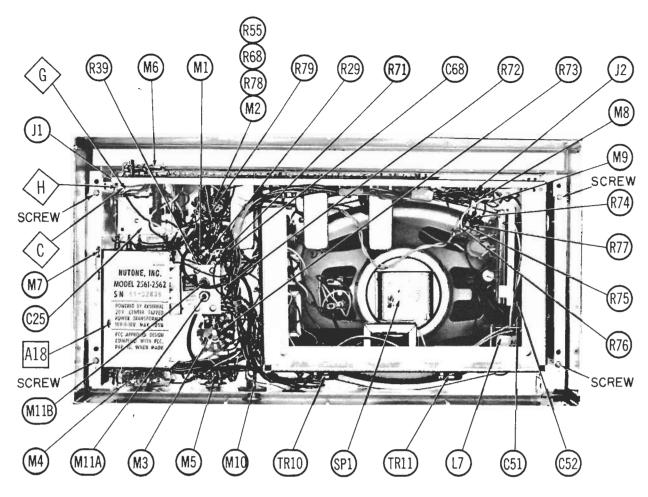


Fig. 3. Rear view of master station.

ALIGNMENT INSTRUCTIONS—(cont'd)

FM RF and IF Alignment

Set Selector switch on FM position.
Use frequency modulated signal with 450 KC sweep.
Use 60 cycle sawtooth voltage in scope for horizontal deflection.

	Dummy Antenna	Sig. Gen. Coupling	Sig. Gen. Frequency	Radio Dial Setting	Oscillo- scope	Adjust	Remarks
6.	.01 mfd	High side to point D. Low side to chassis.	10.7MC	Point of non-interference.	Vert. amp. to point E. Low side to chassis.	A8, A9	Adjust for symmetrical "S" curve (Fig. B).
7.	.01 mfd	High side to point A. Low side to chassis.	10.7MC	10.7MC	Vert. amp. to point F. Low side to chassis.	A10, A11, A12, A13	Adjust for curve of maximum amplitude and symmetry (Fig. A).
8.	270 ohm resistor	High side to point G. Low side to point H.	106MC	106MC	Vert. amp. to point E. Low side to chassis.	A14, A15, A16, A17	Adjust for symmetrical "S" curve (Fig. B). Reduce sweep width if necessary.
		Only make fo	ollowing adju	istment if unit v	vill not track pro	perly.	
9.	270 ohm resistor	High side to point G. Low side to point H.	108.5MC	108.5MC	Vert. amp. to point E. Low side to chassis.	A18	Adjust for symmetrical "S" curve (Fig. B).
10	. 270 ohm resistor	High side to point G. Low side to point H.	87.5MC	87.5MC	Vert. amp. to point E. Low side to chassis.	L4	Expand or compress coil for symmetrical "S" curve (Fig. B). Reduce sweep width if necessary. Repeat Steps 9 and 10 until no further improvement is noted. Repeat Steps 7 and 8.

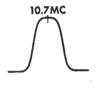


Fig. A.

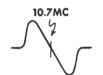


Fig. B.

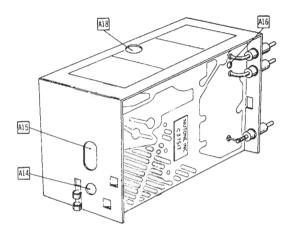


Fig. 4. Alignment points on FM tuner assembly.

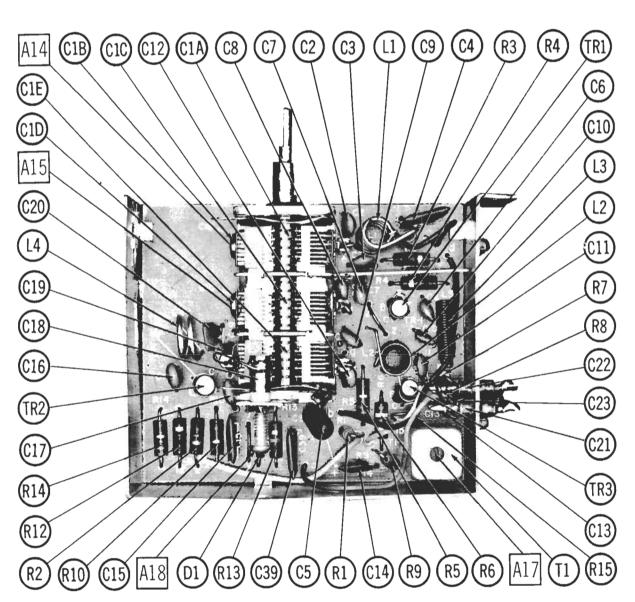


Fig. 5. Top view of FM tuner printed board.

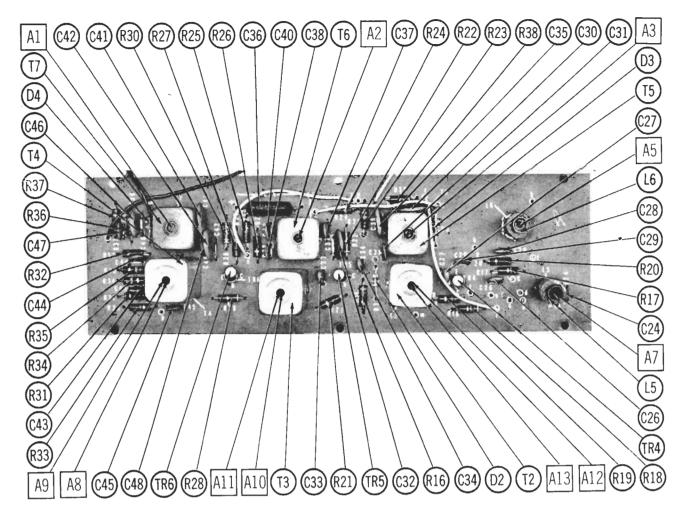


Fig. 6. Top view of IF printed board.

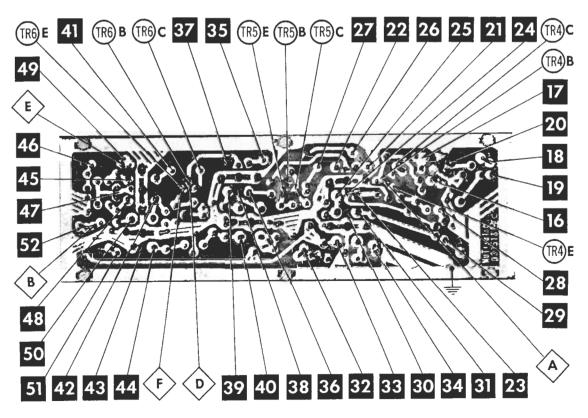


Fig. 7. Bottom view of IF printed board.

INSTALLATION INSTRUCTIONS REMOTE SPEAKER STATIONS

General

The following four models of remote speakers can be used in conjuction with the Model 2561-62 AM-FM Radio and Intercom system, provided the necessary and proper rough-in frames have been previously installed.

- 1. Model 2570-5 inch speaker (Fig. 8).
- 2. Model 2571-31/2 inch speaker (Fig. 10).
- 3. Model 2572-8 inch speaker (Fig. 12).
- 4. Model 2573-8 inch speaker (Fig. 14).

The Model 2570 is an inside remote assembly complete with controls.

The Model 2571 is an outside door speaker assembly supplied with protecting grille and bezel but no controls.

The Model 2572 is a Hi-Fi inside speaker assembly fitted with "break-away" controls that can be removed from the speaker assembly and installed in a separate wall box to operate as a remote control.

The Model 2573 is a patio speaker supplied with a remote control to be installed in a separate wall box at a convenient location.

Installing Model 2570 Remote Speaker Station (Figs. 8 and 9).

- Connect 8-conductor cable in wall frame to terminal board as color indicates (Red to Red and Red/White to Red/White, etc).
 - When speakers are jumpered together, connect the 8-conductor in parallel on the terminal board.
- 2. Mount the speaker assembly to the wall frame with the two screws provided.



1. Connect two wires in wall frame to the two screws on the speaker terminal strip.

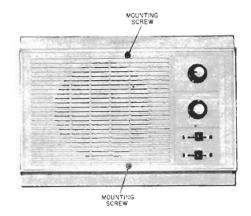


Fig. 8. Model 2570 inside remote speaker station.

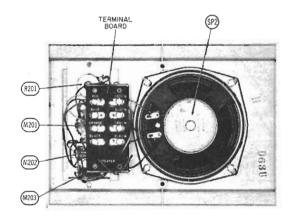


Fig. 9. Rear view of Model 2570 inside remote speaker station.

Mount speaker assembly to the wall frame with the two screws provided. Mount bezel over speaker and secure with the screws at top and bottom edges.

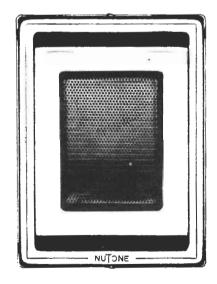


Fig. 10. Model 2571 outside door remote speaker station.

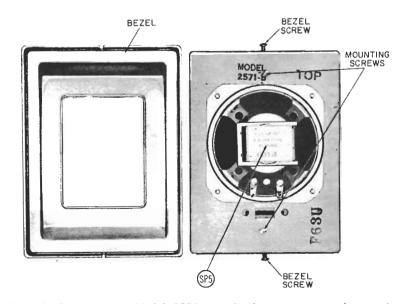


Fig. 11. Rear view of Model 2571 outside door remote speaker station.

Installing Model 2572 Hi-Fi Speaker (Figs. 12 and 13).

Controls Installed On Speaker Panel.

- Connect the 8-conductor cable in the wall frame to the terminal board on the control as color indicates (Red to Red and Red/White to Red/ White, etc).
 - When speakers are jumpered together, connect 8-conductor cables in parallel on terminal board.
- 2. Mount the speaker assembly to the wall frame with the four screws provided.

Installed with Control in Remote Location.

- 1. Remove and discard the two wires connecting the speaker terminals to the terminal board.
- Remove screw from top of control panel and remove remote control.

- 3. Remove blank panel from remote control bezel and install blank panel in open space in speaker panel. Secure with screw.
- 4. Connect 2 wire cable, from remote location of control, to the two terminals on the speaker.
- 5. Mount the speaker assembly to the wall frame with the four screws provided.
- 6. Install the remote control in the control bezel and secure with screw.
- Connect the 2 wire cable from the speaker to the terminals marked speaker on the terminal board.
- Connect 8-conductor cable to terminal board as color indicates. When speakers are jumpered, connect 8-conductor cables in parallel on the terminal board.
- 9. Mount the control assembly on the wall box with the four screws provided.

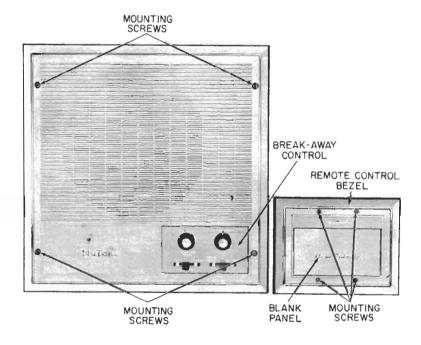
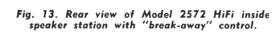
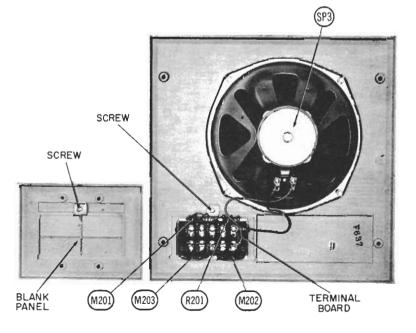


Fig. 12. Model 2572 H1Fi inside speaker station with "break-away control.





Installing Model 2573 Patio Speaker (Figs. 14, 15 and 16).

- 1. Connect the 2 wire cable (previously installed from the remote control wall box to the speaker wall frame) to the speaker terminals.
- 2. Mount the speaker assembly to the wall frame with the four screws provided.
- 3. Connect the 2 wire cable from the speaker to the terminals marked "speaker" on the control terminal board.
- 4. Connect the 8-conductor cable in the wall box to the control terminal board as color indicates.
- 5. Mount control on wall box with the four screws provided.

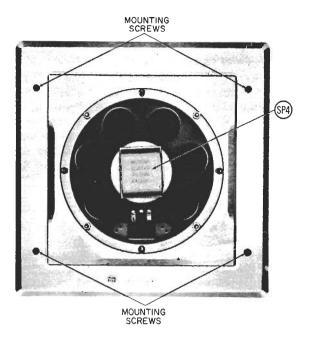


Fig. 14. Rear view of Model 2573 patio remote speaker station.

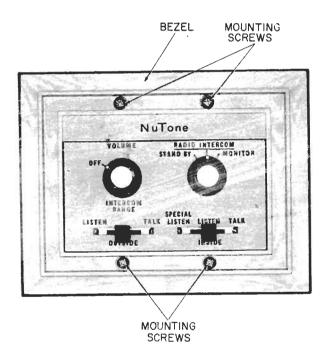


Fig. 15. Remote control used with Model 2573 patio remote speaker station.

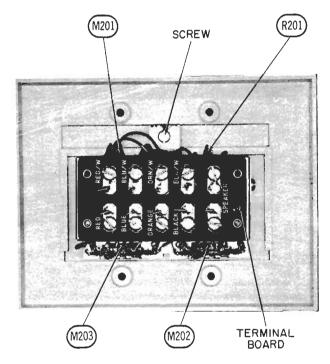


Fig. 16. Rear view of remote control used with Model 2573 patio remote speaker station.

MASTER STATION

Wiring

Plug-in Terminal Block

The three mounting screws are started in three holes provided in the top of the master wall frame (Fig. 17). The terminal block is slipped in place over the three screws, with the wiring labels up. The screws are tightened to secure the block. All wiring (power transformer, remote stations, chimes and antennas) is connected to the plug-in terminal block.

Power

Connect ground wire to terminal screw labeled GND. Connect 3-conductor wire from 10V, CT and 10V terminals of power transformer to the corresponding terminals on the terminal block.

CAUTION: The CT terminal of the power transformer must be connected to the CT terminal of the terminal block or serious delayed damage will result.

Remote Stations

Connect 8-conductor cable to terminal block as color indicates (Red to Red and Red/White to Red/White, etc).

Door Speaker

Connect the 2-conductor cable from the remote door speaker to the black and black/white terminals (in parallel with the black and black/white wires of the 8-conductor cable) of the Master or any remote station terminal strip.

Electronic Chime

The 2-conductor cable from a NuTone Electronic Chime is connected to the two terminals labeled Chime on the Master terminal block.

Antennas

The AM antenna (blue wire) is connected to the AM ANT terminal on the terminal block.

The two conductor ribbon lead of the FM antenna is connected to the FM ANT 1 and 2 terminals of the terminal block.

After all connections are made to the terminal block, the three mounting screws are loosened and the terminal block is slid out. Rotate the terminal block so the terminals are to the rear and then slide the terminal block under the screws and secure in place.

Master Mounting Brackets

Two mounting brackets are installed on the wall frame, with the four screws supplied (Fig. 17). The brackets are interchangeable. Be sure the wall frame and brackets are flush with the finished wall surface.

Remove the plastic bag from the terminal block plugs.

Mounting Master Unit

Position the Master unit in front of the wall frame and plug in the signal/power and antenna plugs. Slide the Master unit over the mounting brackets and into the wall frame. Secure unit with the four mounting screws provided (Fig. 1).

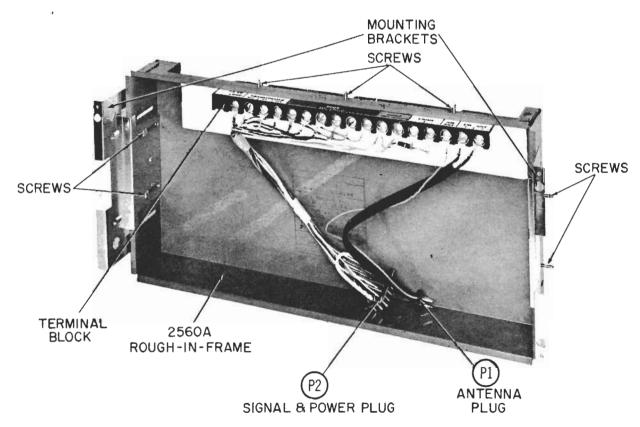


Fig. 17. Master station "rough-in" wall frame.

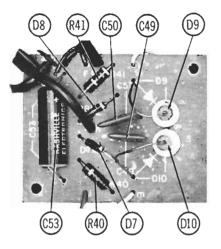


Fig. 18. Top view of power supply printed board.

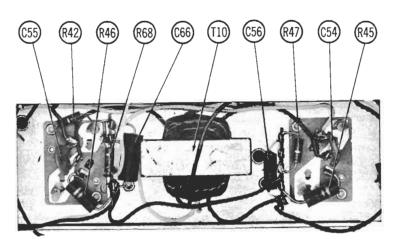


Fig. 19. Top view of output chassis.

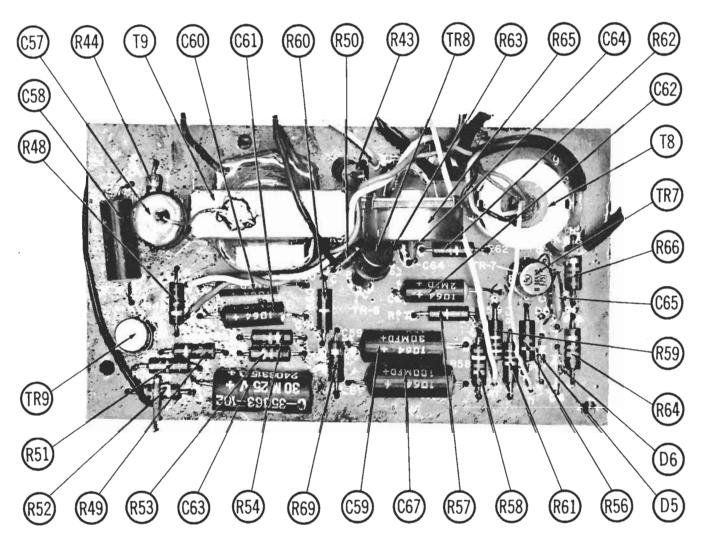


Fig. 20. Top view of intercom printed board.

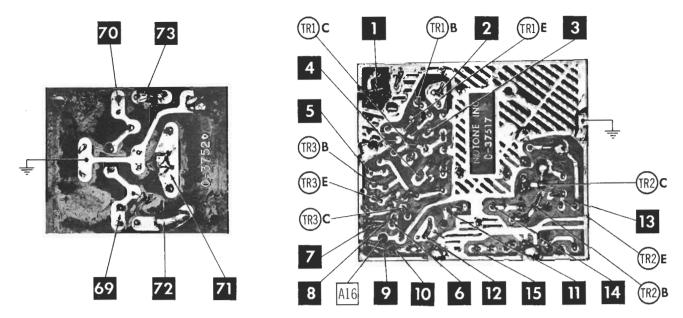


Fig. 21. Bottom view of power supply printed board.

Fig. 22. Bottom view of FM tuner printed board.

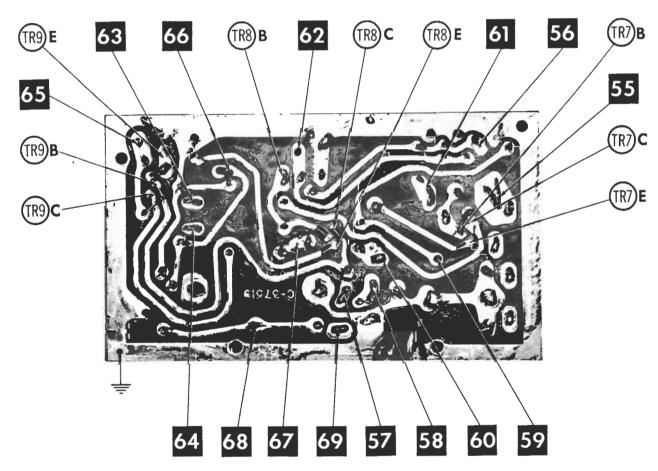


Fig. 23. Bottom view of intercom printed board.

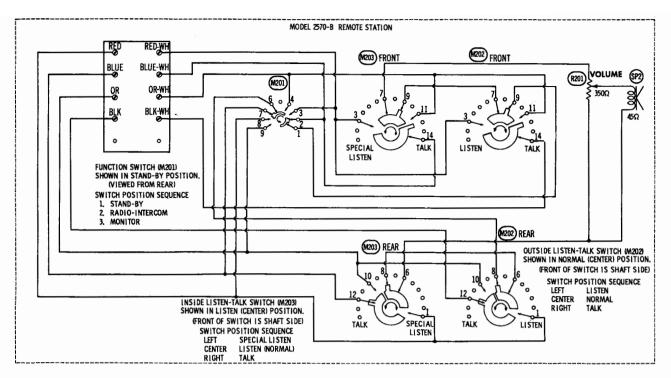


Fig. 24. Model 2570 remote speaker station schematic.

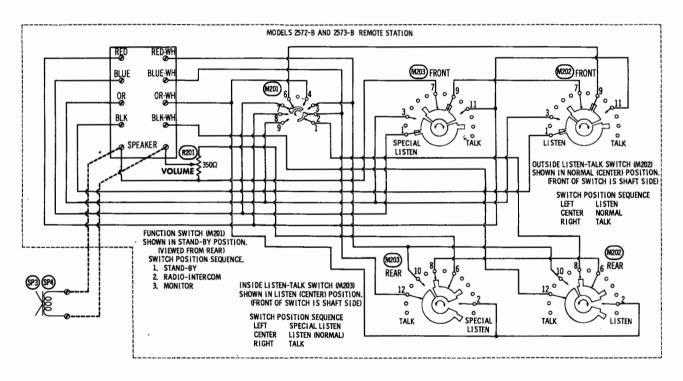


Fig. 25. Models 2572 and 2573 remote speaker stations schematic.

PARTS LIST

Ref.	Part		Ref.	Part	
No.	No.	Description	No.	No.	Description
		TRANSISTORS		TR.	ANSISTORS—(cont'd)
TR1	36550	TI390, FM RF Amp	TR4	36559	TI388, 1st FM IF Amp, AM Con-
		TI400, FM RF Amp (Late produc-			verter
		tion)	TR5	36559	TI388, 2nd FM IF Amp, 1st AM IF
TR2	36552	TI387, FM Oscillator			Amp
TR3	36551	TI391, FM Mixer	TR6	36560	TI389, 3rd FM IF Amp, 2nd AM
		TI401, FM Mixer (Late production)			IF Amp
				Co	ontinued on page 17.

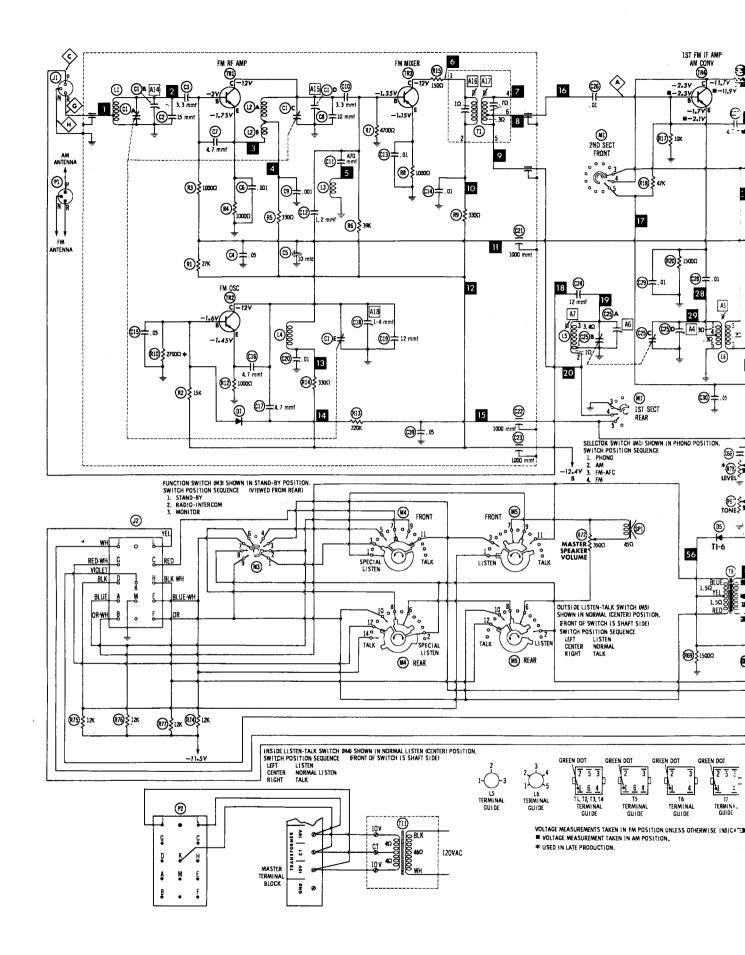
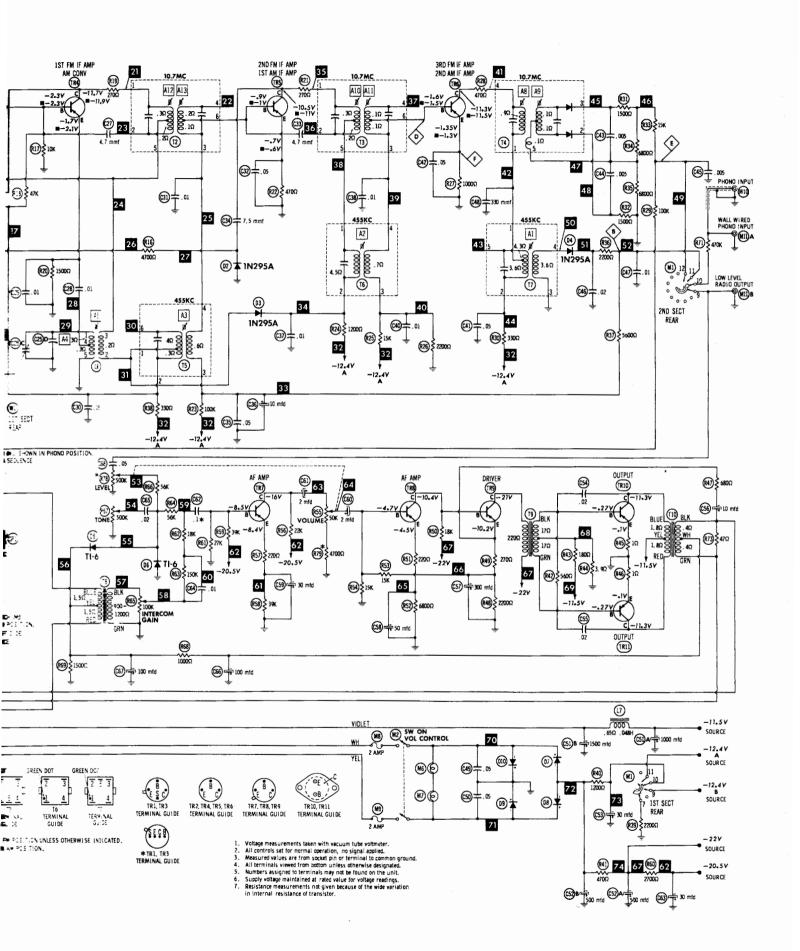


Fig. 26. Master station schem



Dat	Dant		Def	Dant	
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
		•			-
	TRA	NSISTORS—(cont'd)		CA	PACITORS—(cont'd)
TR7	36558	2N408, 2N382, AF Amp	C47		.01 mfd @ 50V, Ceramic
TR8	36558	2N408, 2N382, AF Amp	C48		330 mmf 10%, Ceramic Disc
TR9	36557	2N591, 2N382, Driver	C49		.05 mfd @ 50V, Ceramic
TR10	36556	2N301, 2N242, Output	C50	05110	.05 mfd @ 50V, Ceramic
TR11	36556	2N301, 2N242, Output	C51A	35119	1000 mfd @ 15V, Electrolytic
		DIODES	B C52A	35120	1500 mfd @ 15V, Electrolytic 500 mfd @ 35V, Electrolytic
D1	35060	AFC	B	33120	500 mfd @ 35V, Electrolytic
·D2	36508	1N295A, FM AGC	C53		30 mfd @ 30V, Electrolytic
D3	36508	1N295A, AM Overload	C54		.02 mfd @ 50V, Ceramic Disc
D4	36508	1N295A, AM Detector	C55		.02 mfd @ 50V, Ceramic Disc
D5	36553	TI-6, Muting	C56		10 mfd @ 15V, Electrolytic
D6	36553	TI-6, Muting	C57		300 mfd @ 15V, Electrolytic
D7	36554	TI-55, Silicon Rectifier	C58		50 mfd @ 10V, Electrolytic
D8	36554	TI-55, Silicon Rectifier	C59		30 mfd @ 15V, Electrolytic
D9	36555	1N536, Silicon Rectifier	C60		2 mfd @ 20V, Electrolytic
D10	36555	1N536, Silicon Rectifier	C61		2 mfd @ 20V, Electrolytic
		CADA CIMODO	C62		.1 mfd @ 50V, Ceramic Disc (Late
~ 4		CAPACITORS			production)
C1	35064	FM Tuning			.15 mfd @ 50V, Tubular (Late
C2		15 mmf N330 10%, Ceramic Disc			production)
C3 C4		3.3 mmf 10%, Ceramic Disc			2 mfd @ 20V, Electrolytic (Early
C5		.05 mfd @ 50V, Ceramic	COD		production) 30 mfd @ 25V, Electrolytic
C6		10 mfd @ 6V, Electrolytic .001 mfd, Ceramic Disc	C63		.01 mfd @ 50V, Ceramic Disc
. C7		4.7 mmf NPO 10%, Ceramic Disc	C64 C65		.02 mfd @ 50V, Ceramic Disc
C8		10 mmf 10%, Ceramic Disc	C66		100 mfd @ 3V, Electrolytic
C9		.001 mfd, Ceramic Disc	C67		100 mfd @ 3V, Electrolytic
C10		3.3 mmf 10%, Ceramic Disc	C68		.05 mfd @ 100V, Ceramic Disc
C11		470 mmf 10%, Ceramic Disc			,
C12		1.2 mmf ±.25 mmf, Ceramic Disc		CON'	TROLS & RESISTORS
C13		.01 mfd @ 50V, Ceramic	R1		27K, 10%, ½ Watt, Carbon
C14		.01 mfd @ 50V, Ceramic	R2		15K, 10%, ½ Watt, Carbon
C15		.05 mfd @ 50V, Ceramic	R3		1000Ω, 10%, ½ Watt, Carbon
C16		4.7 mmf NPO 10%, Ceramic Disc	R4		1000Ω, 10%, ½ Watt, Carbon
C17	2222	4.7 mmf NPO 10%, Ceramic Disc	R5		330Ω, 10%, ½ Watt, Carbon
C18	35062	1-4 mmf, Trimmer	R6		39K, 10%, ½ Watt, Carbon
C19		12 mmf 10%, Ceramic Disc	R7		4700Ω, 10% ½ Watt, Carbon
C20 C21	25061	.01 mfd @ 50V, Ceramic	R8		1000Ω, 10%, ½ Watt, Carbon
C21	35061 35061	1000mmf, Feed-thru 1000mmf, Feed-thru	R9 R10		330Ω, 10%, ½ Watt, Carbon 2700Ω, 10%, ½ Watt Carbon (Late
C23	35061	1000mmf, Feed-thru	1110		production)
C24	00001	12 mmf N330 10%, Ceramic Disc			2200Ω, 10%, ½ Watt, Carbon (Early
C25	35065	AM Tuning			production)
C26		.01 mfd @ 50V, Ceramic	R11		Not Used
C27		4.7 mmf NPO 10%, Ceramic Disc	R12		1000Ω, 10%, ½ Watt, Carbon
C28		.01 mfd @ 50V, Ceramic	R13		220K, 10%, ½ Watt, Carbon
C29		.01 mfd @ 50V, Ceramic	R14		330Ω, 10%, ½ Watt, Carbon
C30		.05 mfd @ 50V, Ceramic	R15		150Ω, 10%, ½ Watt, Carbon
C31		.01 mfd @ 50V, Ceramic	R16		4700Ω, 10%, ½ Watt, Carbon
C32		.05 mfd @ 50V, Ceramic	R17		10K, 10%, ½ Watt, Carbon
C33		4.7 mmf NPO 10%, Ceramic Disc	R18		47K, 10%, ½ Watt, Carbon
C34 C35		7.5 mmf NPO 10%, Ceramic Disc	R19		270Ω, 10%, ½ Watt, Carbon
C36		.05 mfd @ 50V, Ceramic	R20		1500Ω, 10%, ½ Watt, Carbon
C37		10 mfd @ 6V, Electrolytic .01 mfd @ 50V, Ceramic	R21 R22		270Ω, 10%, ½ Watt, Carbon 470Ω, 10%, ½ Watt, Carbon
C38		.01 mfd @ 50V, Ceramic	R23		100K, 10%, ½ Watt, Carbon
C39		.05 mfd @ 50V, Ceramic	R24		1200Ω, 10%, ½ Watt, Carbon
C40		.01 mfd @ 50V, Ceramic	R25		15K, 10%, ½ Watt, Carbon
C41		.05 mfd @ 50V, Ceramic	R26		2200Ω, 10%, ½ aWtt, Carbon
C42		.05 mfd @ 50V, Ceramic	R27		1000Ω, 10% ½ Watt, Carbon
C43		.005 mfd @ 50V, Ceramic Disc	R28		470Ω, 10%, ½ Watt, Carbon
C44		.005 mfd @ 50V, Ceramic Disc	R29		100K, 10%, ½ Watt, Carbon
C45		.005 mfd @ 50V, Ceramic Disc	R30		330Ω, 10%, ½ Watt, Carbon
C46		.02 mfd @ 50V, Ceramic Disc	R31		1500Ω 10%, ½ Watt, Carbon

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
				110.	·
	CONTROL	S AND RESISTORS—(cont'd)			TRANSFORMERS
R32		1500Ω, 10%, ½ Watt, Carbon	T1	30535	1st FM IF
R33		15K, 10%, ½ Watt, Carbon	T2	30539	2nd FM IF
R34		6800Ω, 10%, ½ Watt, Carbon	T3	30539	3rd FM IF
R35		6800Ω, 10%, ½ Watt, Carbon	T4	30538	FM Discriminator
R36		2200Ω, 10%, ½ Watt, Carbon	T5	30542	1st AM IF
R37		5600Ω, 10%, ½ Watt, Carbon	T6	30540	2nd AM IF
R38		330Ω, 10%, ½ Watt, Carbon	T7	30541	3rd AM IF
R39 R40		2200Ω, 10%, ½ Watt, Carbon	T8	30536	Intercom Input
R41		1200Ω, 10%, ½ Watt, Carbon	T9 T10	30537 30543	Audio Driver
R42		470Ω, 10%, ½ Watt, Carbon	T11	**	Audio Output Power
R43		560Ω , 10% , ½ Watt, Carbon 180Ω , 10% , 2 Watt, Wirewound	111		rower
R44		3.9Ω , 10% , $\frac{1}{2}$ Watt, Whewould 3.9Ω , 10% , $\frac{1}{2}$ Watt, Carbon			COILS
R45		1Ω , 10%, 2 Watt, Wirewound	L1	30050	FM Antenna
R46		1Ω , 10%, 2 Watt, Wirewound 1Ω , 10%, 2 Watt, Wirewound	L2A	30053	FM Mixer
R47		680Ω, 10%, ½ Watt, Carbon	L2B	30052	FM Neutralizer
R48		2200Ω, 10%, ½ Watt, Carbon	L3	30058	RF Choke
R49		270 Ω , 10%, ½ Watt, Carbon	LA	30051	FM Oscillator
R50		18K, 10%, ½ Watt, Carbon	L5	30057	AM Antenna
R51		220Ω, 10%, ½ Watt, Carbon	L6	30056	AM Oscillator
R52		6800Ω, 10%, ½ Watt, Carbon	L7	30055	Choke
R53		15K, 10%, ½ Watt, Carbon		00000	
R54		15K, 10%, ½ Watt, Carbon			SPEAKERS
R55	34025	50K Volume Control with R67 500K	SP1	36041	$6'' \times 9''$, 45 Ω , Master Station
		Tone Control, R78 Level Control	SP2	**	5", 45Ω, Model 2570
		and M2 On-Off Power Switch	SP3	**	8", 45Ω, Model 2572
		(Late Production)	SP4	**	8", 45Ω, Model 2573
	34526	50K Volume Control with R67 500K	SP5	**	3½", 45Ω, Model 2571
		Tone Control and M2			
		On-Off Power Switch (Early pro-			MISCELLANEOUS
		duction)	M 1	34532	Selector Switch, 4 pos. Rotary
R56		22K, 10%, ½ Watt, Carbon	M2		Part of R55, R67, R78 & M2 (Late
R57		220 Ω , 10%, $\frac{1}{2}$ Watt, Carbon			production)
R58		39K, 10%, ½ Watt, Carbon			Part of R55, R67 & M2 (Early
R59		39K, 10%, ½ Watt, Carbon			production)
R60	•	2700Ω, 10%, ½ Watt, Carbon	М3	34531	Function Switch, 3 pos. Rotary
R61		27K, 10%, ½ Watt, Carbon	M4	34534	Inside Talk-Listen Switch
R62		18K, 10%, ½ Watt, Carbon	M5	34533	Outside Talk-Listen Switch
R63		150K, 10%, ½ Wat, Carbon	M6	31450	Dial Lamp, #161
R64	64505	56K, 10%, ½ Watt, Carbon	M7	31450	Dial Lamp, #161
R65	34525	100K, Intercom Gain Control	M8	31160	Fuse, 2 Amp
R66		56K, 10%, ½ Watt, Carbon	M9	31160	Fuse, 2 Amp
R67		500K, Tone Control	M10	31105	Phono Jack
		Part of R55, R67, R78 and M2 (Late	M11	31021	Phono Jack, Dual
		production)	J1 J2	31446	Antenna Socket, 3 pin
		Part of R55, R67, and M2 (Early	P1	31444 40291	Signal & Power Socket, 14 pin
Dee		production)	P2	40291	Antenna Plug & Wire Assembly
R68 R69		1000Ω, 10%, ½ Watt, Carbon 1500Ω 10%, ½ Watt, Carbon	12	40233	Signal & Power Plug & Wire Assembly
R70		Not Used		31449	Output Transistor Socket
R71		470K, 10%, ½ Watt, Carbon	M201	**	Remote Station Function Switch,
R72	34024	350Ω Master Speaker Volume Con-	11201		3 pos. Rotary (Models 2570, 2572 &
	0.02.	trol			2573)
R73		47Ω, 10%, 2 Watt, Wirewound	M202	**	Remote Station Outside Talk-Listen
R74		12K, 10%, ½ Watt, Carbon	_		Switch (Models 2572 & 2573)
R75		12K, 10%, ½ Watt, Carbon	M202	**	Remote Station Outside Listen-Talk
R76		12K, 10%, ½ Watt, Carbon			Switch (Model 2570)
R77		12K, 10%, ½ Watt, Carbon	M203	**	Remote Station Outside Listen-Talk
R78		Part of R55, R67, R78 & M2 (Late			Switch (Models 2572 & 2573)
		production)	M203	**	Remote Station Inside Listen-Talk
R79		4700Ω, 10%, ½ Watt, Carbon			Switch (Model 2570)
R201	**	350Ω Remote Station Volume Con-			
		trol			

^{**}See NUTONE Factory Parts Price List for Parts Numbers.