SERVICE MANUAL

4-CHANNEL MUSIC CENTER

SANSUI MQ-2000

Sansui

SANSUI ELECTRIC COMPANY LIMITED

Dear Service Engineer:

Thank you for the trouble you are taking to service our MQ-2000.

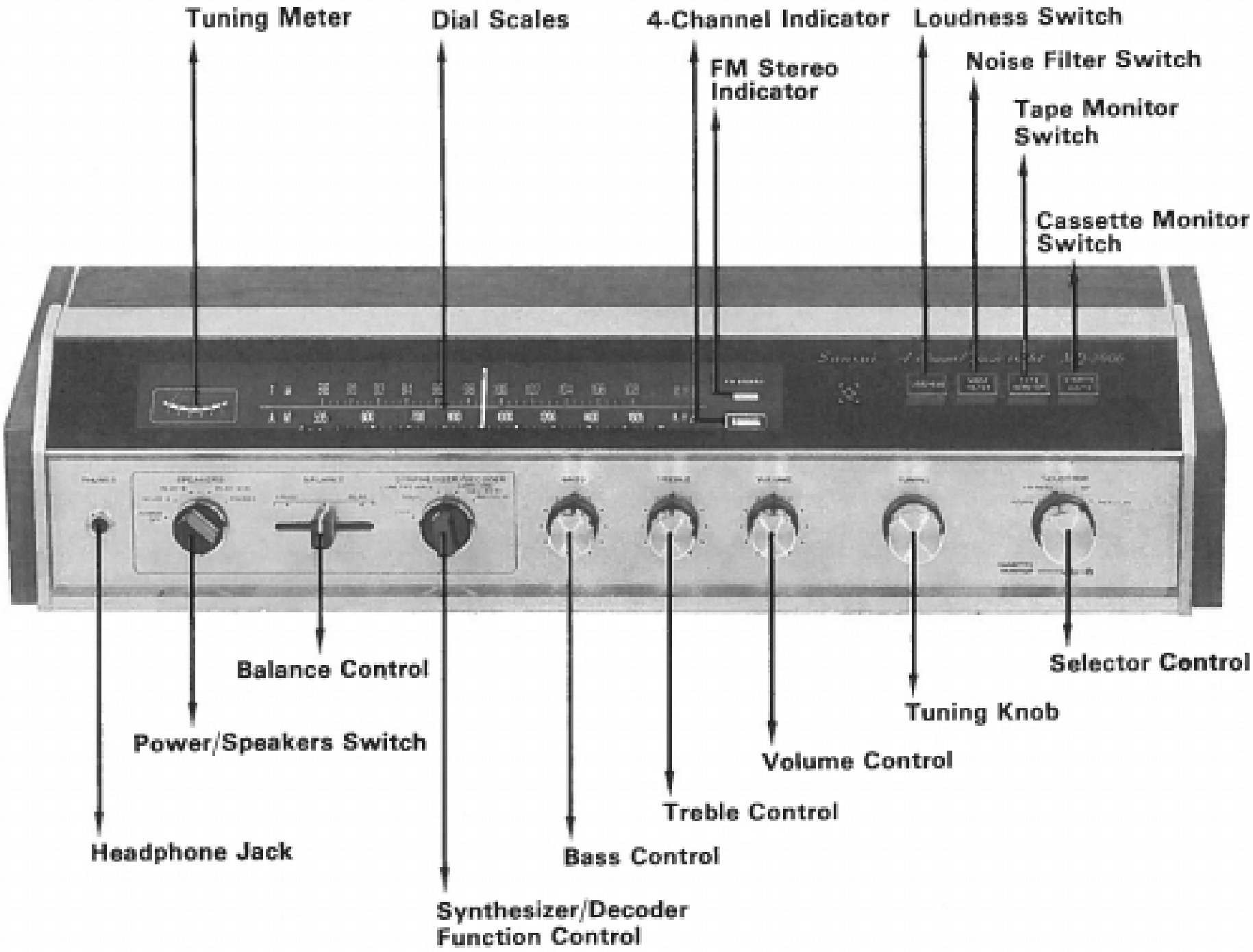
The MQ-2000 4-Channel Music Center is designed for people who want to enter the world of 4-channel stereo without much fuss and without making too big an investment. Like other quality 4-channel stereo equipment from Sansui, it incorporates our unique QS synthesizer/decoder circuit. It is this circuit that enables this compact music center to recover the original four channels of signal from 2-channel program sources encoded from four channels by a Sansui QS encoder. Equally important, it is this circuit that enables the music center to produce exciting 4-channel stereo sound from today's 2-channel stereo sources, by the simple changeover of its Synthesizer/Decoder Function Control.

The matrixing or coding system of 4-channel stereo offers these and several other advantages. Since the Sansui QS synthesizer/decoder circuit employs a quite universal decoding matrix, once you understand its design and function, you would most likely find it easy to service matrixing system 4-channel equipment of other makes as well.

It is our sincere hope that this manual, along with the Service Manual for the automatic changer, provides you with all the detailed information required to maintain and service the MQ-2000.

CONTENTS

SWITCHES AND CONTROLS



This Service Manual is concerned only with the receiver part of the MQ-2000. A separate service manual is available for the automatic changer section, and can be obtained simply by writing to SANSUI ELECTRONICS CORPORATION.

GENERAL TROUBLESHOOTING CHART

If the receiver is otherwise operating satisfactorily, the more common causes of trouble may generally be attributed to the following:

1. Incorrect connections or loose terminal contacts. Check the speakers, turntable, tape deck, antenna and power cord.

2. Improper operation. Before operating any audio component, be sure to read its manufacturer's instructions.

3. Improper location of audio components. The proper positioning of components, such as speakers and turntable, is essential to maximum stereo enjoyment.

4. Defective audio components.

The following are some other common causes of malfunction and what to do about them.

PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
AM, FM or MPX reception	A. Constant or intermittent noise heard at times or in certain areas	* Discharge or oscillation caused by electrical appliances, such as fluorescent lamp, TV set, D.C. motor rectifier or oscillator. * Natural phenomena, such as atmospheric, static or thunderbolts * Insufficient antenna input due to ferroconcrete wall or long distance from station	* Attach noise limiter to electrical appliance producing noise, or attach it to the receiver's power source * Install outdoor antenna and ground receiver to raise SN ratio * Reverse power cord plug/receptacle connections * If noise occurs at certain frequency, attach wave trap to input * Keep receiver at proper distance from other electrical appliances
AM reception	A Noise heard at a particular time of a day, in a certain area or over part of dial	* Peculiar to AM broadcasts	* Install antenna for maximum antenna efficiency. See "RADIO RECEPTION" in operating instructions booklet * In some cases, noise can be eliminated by grounding receiver or reversing power cord plug/receptacle connections
	B. High-frequency noise	* Adjacent-channel interference or beat interference * TV set too close to audio system	* Such noise cannot be completely eliminated by the receiver, but it is advisable to turn Treble control counterclockwise and turn on Noise Filter * Keep TV set at proper distance from stereo system
FM reception	A. Noisy	* Poor noise limiter effect or too low SN ratio due to insufficient antenna input Note: FM reception is affected considerably by transmission conditions of station, such as power and antenna efficiency. As a result, you may receive one station quite well while receiving another station poorly.	* Change the set position or install antenna for maximum signal strength * If this does not prove effective, use exclusive FM outdoor antenna. If using TV antenna for both TV and FM with a divider, make sure TV reception is not affected * Exclusively long lead-in wire of an tenna may cause noise
	B. A series of pops	* Ignition noise caused by starting of nearby automobile engine	* Install antenna and its lead-in wire at proper distance from street or increase antenna input as described before
	C. Tuning noise between stations	* Results from nature of FM reception	* Turn Volume control counterclockwise

PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
FM-MPX reception	A. Noise heard during FM-MPX reception but inaudible during FM mono reception	* Weaker signal because service area of FM-MPX broadcast is only half that of FM mono broadcast	* Orient antenna for maximum antenna input * Switch on Noise Filter and/or turn Treble control counterclockwise
	B. Channel separation deteriorates during reception	* Excess heat	* Circulation of room air is important to receiver. Be sure that receiver is well ventilated
	C. Stereo indicator blinks on and off	* Interference	* Indicator is not faulty
Record playing or tape playback	A. Hum or howling	* Set placed directly on speaker * Wire other than shielded cable used * Loose terminal contact * Shielded cable too close to power cord, fluorescent lamp or other appliances * Nearby amateur radio station or TV transmission antenna	* Place cushion between turntable and speaker cabinet or place them away from each other * Connecting shielded cables should be as short as possible * Turn Bass control counterclockwise * Consult nearest Radio Regulatory Bureau
	B. Surface noise	* Worn or old record * Worn phono stylus * Phono stylus is dusty * Improper stylus pressure	* Recondition playback head of tape deck or the stylus of turntable * Turn Treble control counterclockwise * Turn Noise Filter on
4-channel stereo playback	A. Position of musical instruments and voice not clear	* Incorrect phasing of speakers or input connections	* Check phasing of speakers and input connections * Change rear speaker position and/or direction

TIDBITS

On the QS Synthesizer/Decoder Circuit

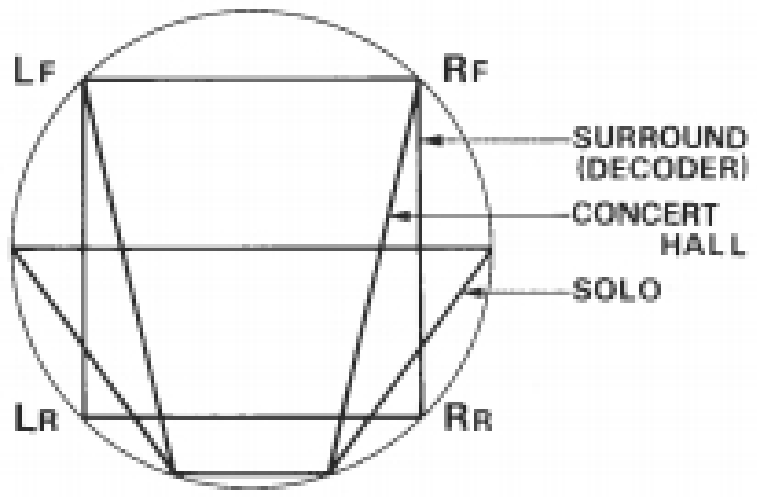
This circuit comprises a matrix to recover four channels—left front, right front, left rear and right rear—of information from two channels, and unique phase shifters (patents pending) to closely approximate the delicate ambience of the live performance. The matrixing system of 4-channel stereo is particularly fit to reproduce all those delicate shades and nuances of concert hall performances. In a concert hall, not only the direct sounds from the musical instruments and singers but the indirect sounds reflected off the walls, ceiling and floor play a vital role in the enjoyment of music by the audience. The matrix in the MQ-2000 performs complex additions and subtractions on the input two channels of signal to separate them into four channels, i.e., into direct sounds and indirect sounds with varying phase differences from the former.

The Synthesizer/Decoder Function Control of the MQ-2000 enables the operator to alter the 'blending coefficient' (additions and subtractions) of the matrix to suit the type of music to be played.

SOLO: The input two channels of signal are released from the front without any blending for very broad separation, but the rear channels are rendered the narrowest of all three positions for 4-channel reproduction. Good for hearing solo and small-band performances where the left-right stereo separation is very limited and there is little expansion of the indirect sounds.

CONCERT HALL: The front left-right separation is a little narrower than SOLO, but the rear channels are separated wider. Appropriate for hearing orchestras and big bands where the stage is wide and the indirect sounds disperse to the left and right.

SURROUND/DECODER: In this position, the matrix provides a square sound field, producing interesting effects with mood music, rock-'n'-roll and other types of music by scattering the musical instruments all around the listener. When made to reproduce 4-channel sources encoded by the Sansui QS 4-channel encoder into a 2-channel form, it delivers particularly enthralling 4-channel stereo music combining the charm of sound source reproduction of the discrete 4-channel system and the advantage of the sound field reproduction of the matrixing system.



The phase shifters are a circuit to remedy the inherent shortcoming of the matrix circuit. When the original four channels of signal are converted to two channels and then back to four by an encoder and decoder, they are processed through two—encoding and decoding—matrix circuits.

As a result of this process, the sound reproduced in any given channel is a product of several channels of original signal blended together. For example, the sound reproduced out of the left rear speaker system is a mixture of the original left rear channel signal and the two adjacent channel signals—the right rear and left front channels.

These adjacent channel components are required to produce the delicate ambience of the original sound field.

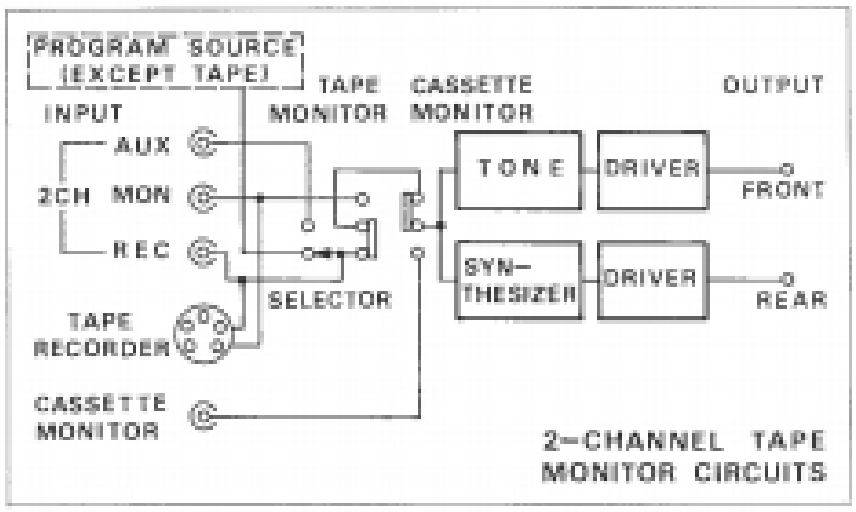
Unfortunately, in this case, the right rear channel component is 180 degrees out of phase with the original left rear channel signal, obscuring the sense of sound image position and directionality.

Sansui engineers have resolved this problem by phase-shifting the left rear channel by −90 degrees from the front, and the right rear channel by +90 degrees. The result is a most natural 4-channel stereo sound field.

The ±90-degree phase shifters are exclusive to Sansui's QS Coding System of 4-channel stereo.

On 2-Channel Tape Monitor Circuits

The MQ-2000 is equipped with recording and playback terminals for an open-reel 2-channel stereo tape deck, and with playback terminals for a cassette stereo tape deck. The former, located on the rear panel, and the latter, located on the front, are connected in series and therefore possess identical electric input specifications, but no dubbing (copying of recorded tapes) can be done between the two tape circuits. To dub a tape, connect the playback tape deck to the 2CH AUX terminals and the recording tape deck to the 2CH REC (and MON) terminals.



2-CHANNEL TAPE MONITOR CIRCUITS

Replacement of Pickup Cartridge

To replace the pickup cartridge of the automatic changer, consult the separate Service Manual for the changer and use the screws supplied for this purpose. The phono input sensitivity of the MQ-2000's receiver section is 4mV. If you're replacing the cartridge with a new cartridge of a different make (i.e., other than SHURE M75-6), make certain its output voltage matches or exceeds this level. Or else, not only the rated power output will fail to be delivered, but the reproduced sound may be distorted in some cases.

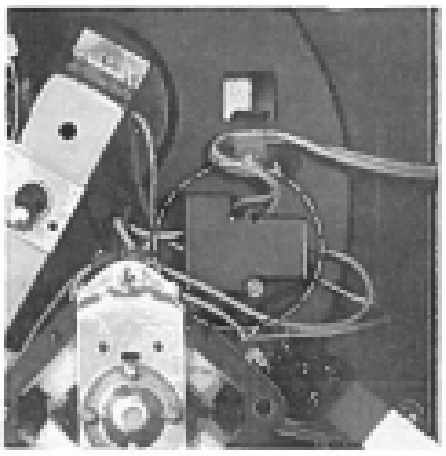
On the Power Supply Voltage and Frequency

If the purchaser is using the MQ-2000 in an area where the power supply voltage and/or frequency are different from those indicated on the unit's carton box, they need be adjusted.

The frequency affects the revolution of the automatic changer. The pulley attached to the motor shaft need be exchanged for the one matching the frequency of the area. Remove the changer platter first.

The voltage influences the performance of both the amplifier section and automatic changer. First adjust the amplifier by re-setting the Voltage Selector Plug inside the amplifier section so that its arrow faces the correct voltage indication of the area.

Then alter the wiring inside the changer after removing the cover, as shown in the photograph, referring to the changer's Service Manual.



BEFORE YOU BEGIN SERVICING

Before you actually set out to service the MQ-2000, it is advisable to check if all connections are properly made and if the operation is correct. Examine these simple check points once more:

Connections

1. Is the power cord connected to the wall AC outlet?
2. Is the required power voltage being supplied to the unit?
3. Is the antenna(s) properly connected?
4. Is the tape deck(s) connected to the correct terminals?
5. Are the output plug and power plug of the automatic changer properly connected to the receiver section? Check inside the unit.
6. If two or more speaker systems are connected to the MQ-2000's speaker terminals in parallel with each other, is their composite impedance 4Ω or greater? This is necessary for the speaker systems to produce natural sounds.
7. Has the power fuse or any of the quick-acting fuses blown?

Operation

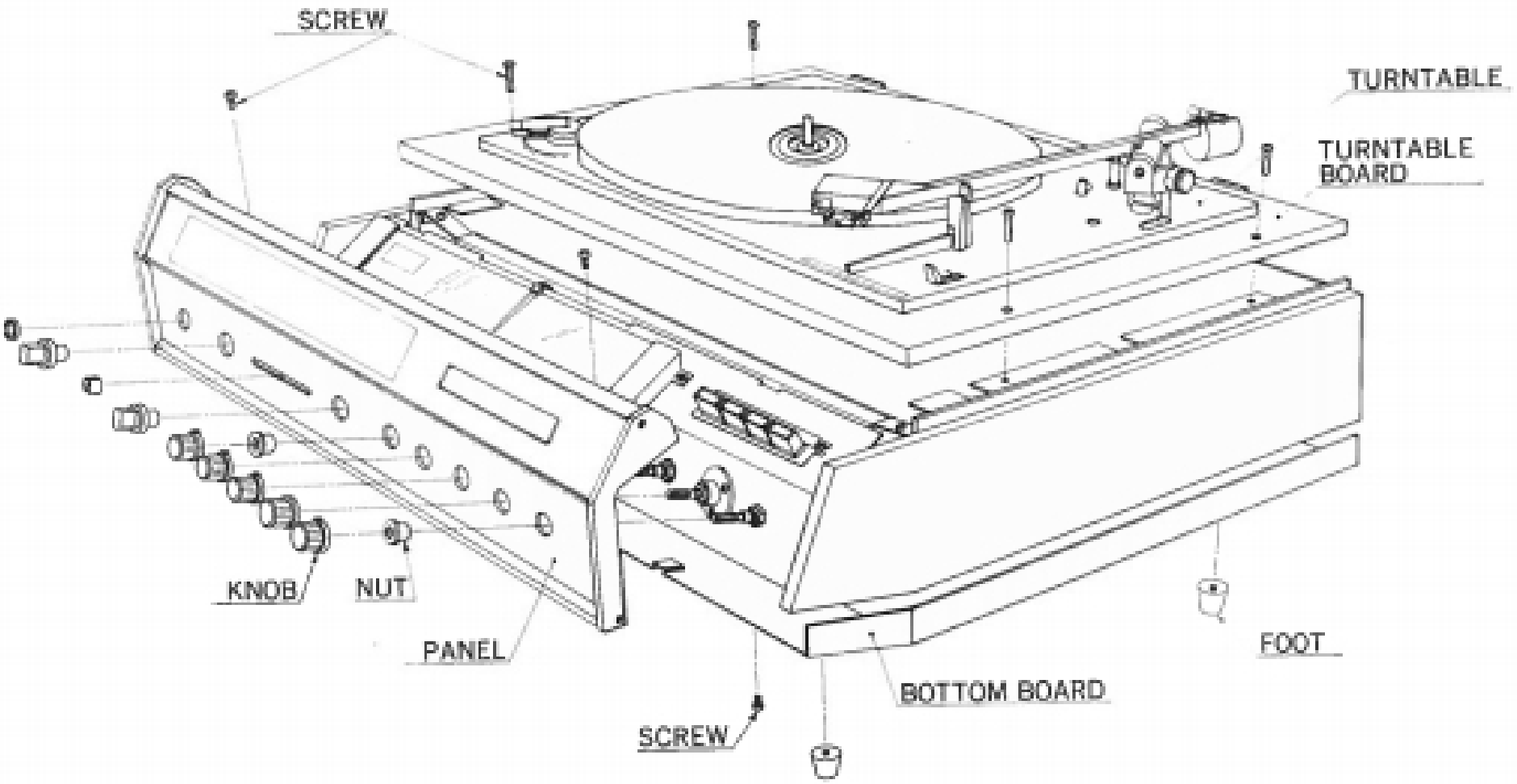
1. Is the Power Switch turned on?
2. Are the Selector Control, Synthesizer/Decoder Function Control, and the Power/Speakers Switch set to the respective correct positions?
3. Isn't the Tape Monitor Switch pushed down, though you don't want to reproduce a tape?
4. Aren't both the Tape Monitor Switch and Cassette Monitor Switch pushed down? If they are, the cassette monitor circuit takes precedence.
5. Isn't the Synthesizer/Decoder Function Control set to AUX (4CH)? This position should be selected only when you wish to play back a discrete 4-channel music tape on a 4-channel tape deck.
6. Is the Volume Control turned to a proper position?

Basic Service Hints

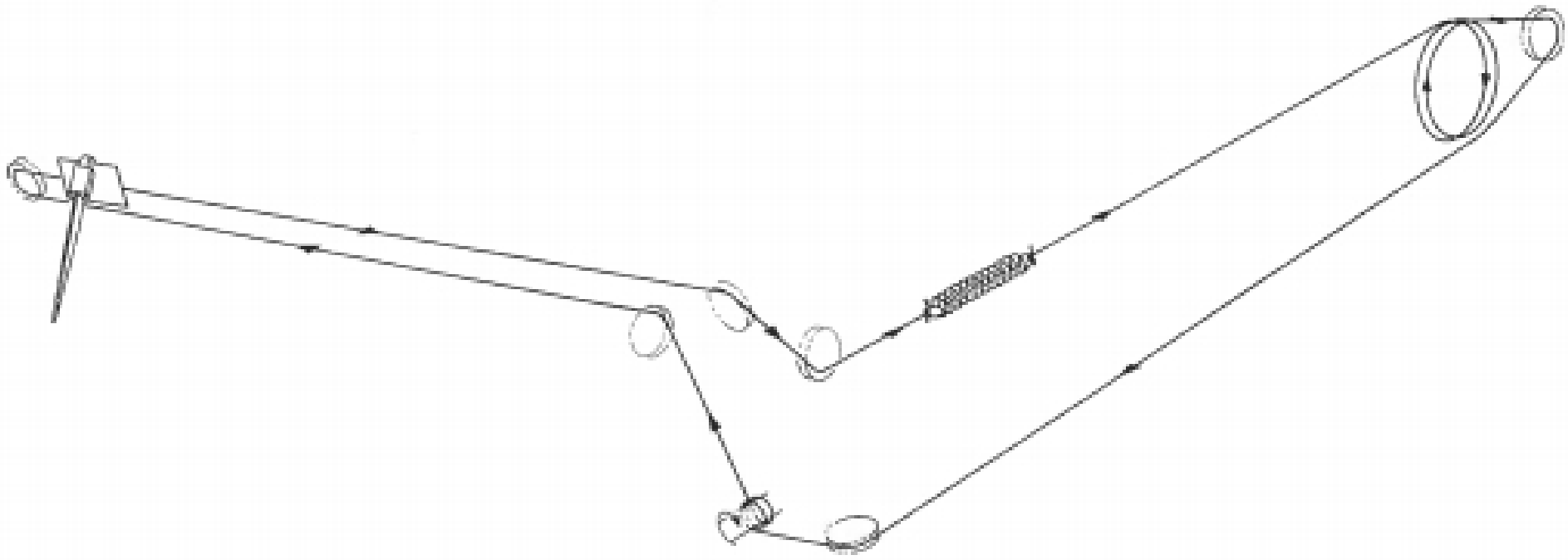
■ The receiver section can always be serviced more easily by removing the base board on which the automatic changer is mounted. The board can be removed by taking off the four screws securing it.
■ For detailed servicing instructions, see pp. 8-26.
To examine or service the tuner section without the help of a measuring instrument, take care to maximize the antenna input signal level. This is especially important with the FM tuner, because the FM wave is more directional.
If you're only using the built-in FM loop antenna, the receiving sensitivity could change considerably depending on the position and direction in which the MQ-2000 is placed. In a fringe FM signal area, it would help greatly just to stretch 300Ω balanced feeder cable (supplied) to a T shape.
To examine or service the audio amplifier section, connect a four to 16Ω load to the speaker output terminals. If you wish to check such electric output characteristics as the power bandwidth, feed the input signals to the 2CH AUX input terminals.
When replacing the R843–846 resistors (0.5Ω, 2W) on F–1162–2, fix the new resistor(s) away from the printed circuit board itself, so that the heat radiated by the resistor(s) may be dispersed by convection. On the other hand, if you ever replace the power transistor(s) (TR821—828), mount them firmly to the chassis, so that the radiated heat may escape by conduction.
■ Order the necessary parts from your nearest authorized Sansui Service Station. When you order, specify the name of the printed circuit board on which the part is located, the parts number, parts name and stock number. Please be advised beforehand, however, that if the particular part you ordered is out of stock, we may send you a substitute.

DISASSEMBLY PROCEDURE/DIAL MECHANISM

REMOVING THE FRONT PANEL AND BOARDS

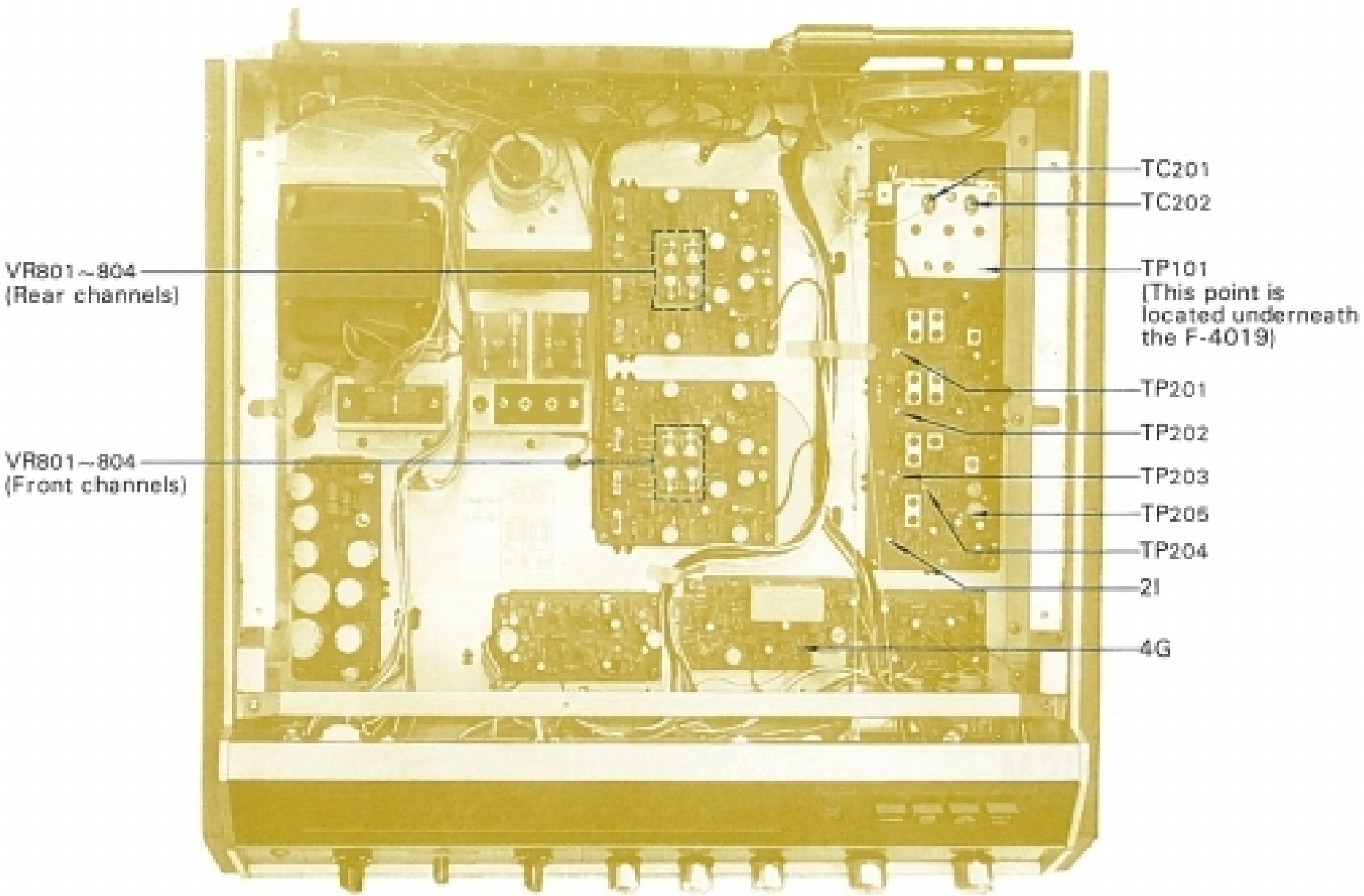


DIAL MECHANISM



ALIGNMENT

TEST POINTS



FM ALIGNMENT PROCEDURE

NOTE: To align, set the signal generator level to minimum.
Turn tuning gang fully.
Center carrier wave.
Set pointer at reference mark.

STEP	ALIGN.	GENERATOR	FEED SIGNAL	CONNECT	DIAL SETTING	ADJUST	ADJUST FOR
1.	IF Trans-former	10.7 MHz ±200 kHz	Sweep signal to TP_{101} via the 0.022μF ceramic capacitor	Oscilloscope to TP_{202}, $_{202}$ and $_{201}$ via the 0.022μF ceramic capacitor with probe Grounding TP_{204} via the 0.022μF ceramic capacitor		Primary and secondary coils of T_{201}, $_{202}$, $_{203}$	Best I.F. wave form
2.	Discrimi-nator	10.7 MHz ±200 kHz	Sweep signal to TP_{101} via the 0.022μF ceramic capacitor	Oscilloscope to 2I (Remore the 0.022μF and the grounding connected to TP_{203})		FM. Discriminator transformer T_{204} top primary and secondary	S curve
3.	O.S.C.	90 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. to output load	90 MHz	O.S.C. coil L_O	Maximum
4.	O.S.C.	106 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. to output load	106 MHz	O.S.C. trimmer TC_O	Maximum
5.	Reiterate 3 and 4.						
6.	High-frequency Amp. Circuit	90 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. to output load	90 MHz	Antenna coil L_A and L_B	Maximum
7.	High-frequency Amp. Circuit	106 MHz 400 Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. to output load	106 MHz	Trimmer TC_A and TC_B	Maximum
8.	Reiterate 6 and 7.						

FM MULTIPLEX ALIGNMENT PROCEDURE

1. Do not attempt to align the Multiplex Circuit unless the following equipments are available:
a. Multiplex Stereo Generator b. Oscilloscope c. AC. V.T.V.M. d. Audio Oscillator e. FM Signal Generator

STEP	ALIGN.	GENERATOR	FEED SIGNAL TO	TEST EQUIPMENT (S)	ADJUST	ADJUST FOR
1	19kHz Transformer	FM Signal Gen. Modulated 30% by STEREO Gen. sub-channel	Antenna terminals Tune to signal	V.T.V.M. and Oscilloscope at 4G	L_{401}	Maximum
2	38kHz Transformer and Separation VR	FM Signal Gen. Modulated 30% by STEREO Signal Gen, channel-L	Antenna terminals Tune to signal	V.T.V.M. and Oscilloscope at output load, (channel-R)	T_{402} or T_{403} within ¼ turn and Separation VR_{401}	Minimum (Channel-R)

ALIGNMENT

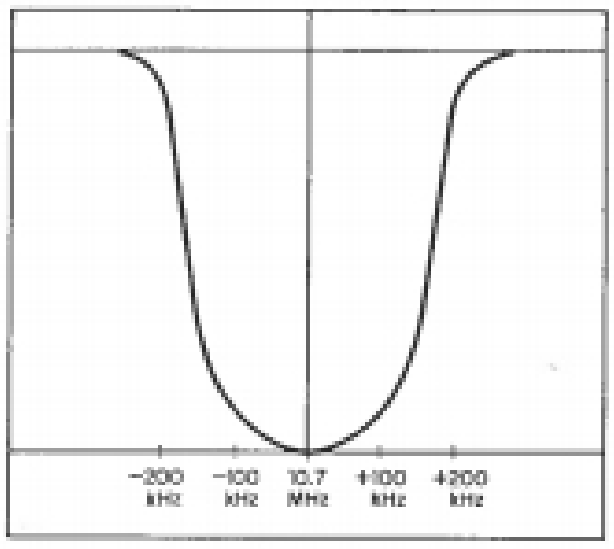
AM ALIGNMENT PROCEDURE

NOTE: To align, set the signal generator level to minimum.

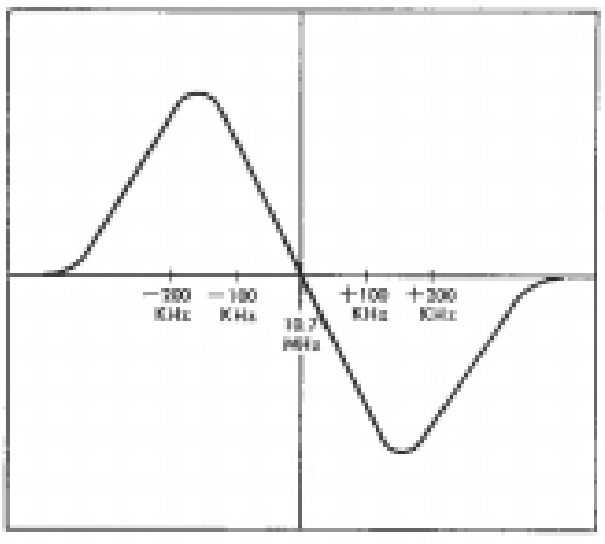
STEP	ALIGN.	GENERATOR	FEED SIGNAL TO	TEST EQUIPMENTS	DIAL SETTING	ADJUST	ADJUST FOR
1.	I.F. Transformer	455 kHz ±30 kHz Sweep-generator	Antenna terminals	Oscilloscope and V.T.V.M. at TP_{250}		Primary and Secondary from the 1st I.F.T (T_{307}) to the 3rd I.F.T. ($_{305}$)	Best I.F. wave form
2.	O.S.C.	AM-generator 535 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	535 kHz	O.S.C. Coil T_{308}	Maximum
3.	O.S.C.	AM-generator 1(1600kHz)600 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	1600 kHz	O.S.C. Trimmer TC_{312}	Maximum
4.	Reiterate 2 and 3						
5.	Antenna circuit	AM-generator 1600 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	600 kHz	Ferrite bar Antenna L_{201}	Maximum
6.	Antenna circuit	AM-generator 1400 kHz 400 Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	1400 kHz	Antenna circuit Trimmer TC_{201}	Maximum
7.	Reiterate 5. 6. 7.						

STANDARD WAVE FORMS

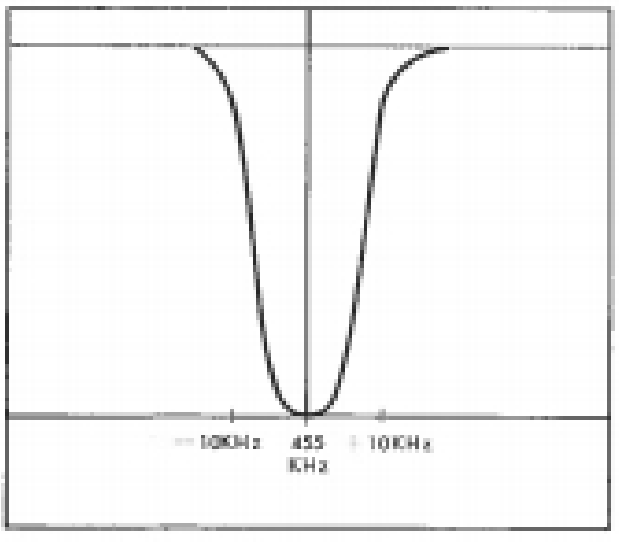
FM IF WAVE FORM



FM DISCRIMINATOR WAVE FORM

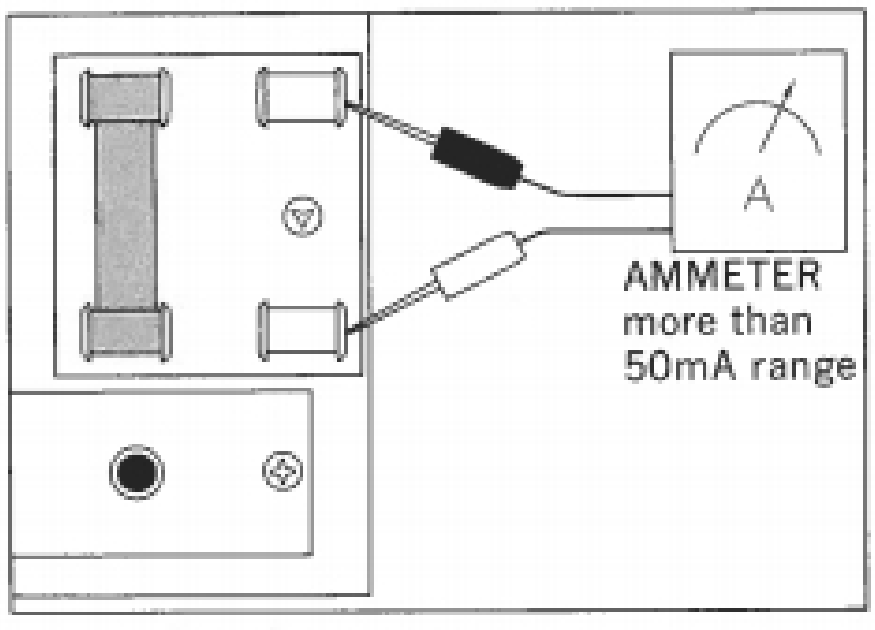


AM IF WAVE FORM



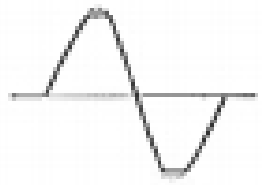
CURRENT ADJUSTMENT

STEP	SETTING OF AMMETER (TESTER)	WHAT TO DO	NOTE
1.		Remove F_{801} and F_{802}	Use an ammeter with 50mA range
2.		Set $VR_{803,\ 804}$ (front channels) to minimum	
3.		Set Volume Control to minimum	
4.		Turn on the receiver	Be sure to switch on lst and then connect the ammeter
5.	50mA range.	Connect ammeter to F_{801} as illustrated in Fig. 1	
6.		Turn VR_{803} (left channel) clockwise and adjust current to 20 to 15 mA	
7.	50mA range.	Turn off the receiver and replace F_{801}	
8.		Turn on the receiver and connect ammeter to F_{802} as illustrated in Fig. 1	
9.		Turn VR_{804}(right channel)clockwise and adjust current to 30 to 25mA	
10.		Replace F_{802}	
11.		Adjust the rear channels as above	

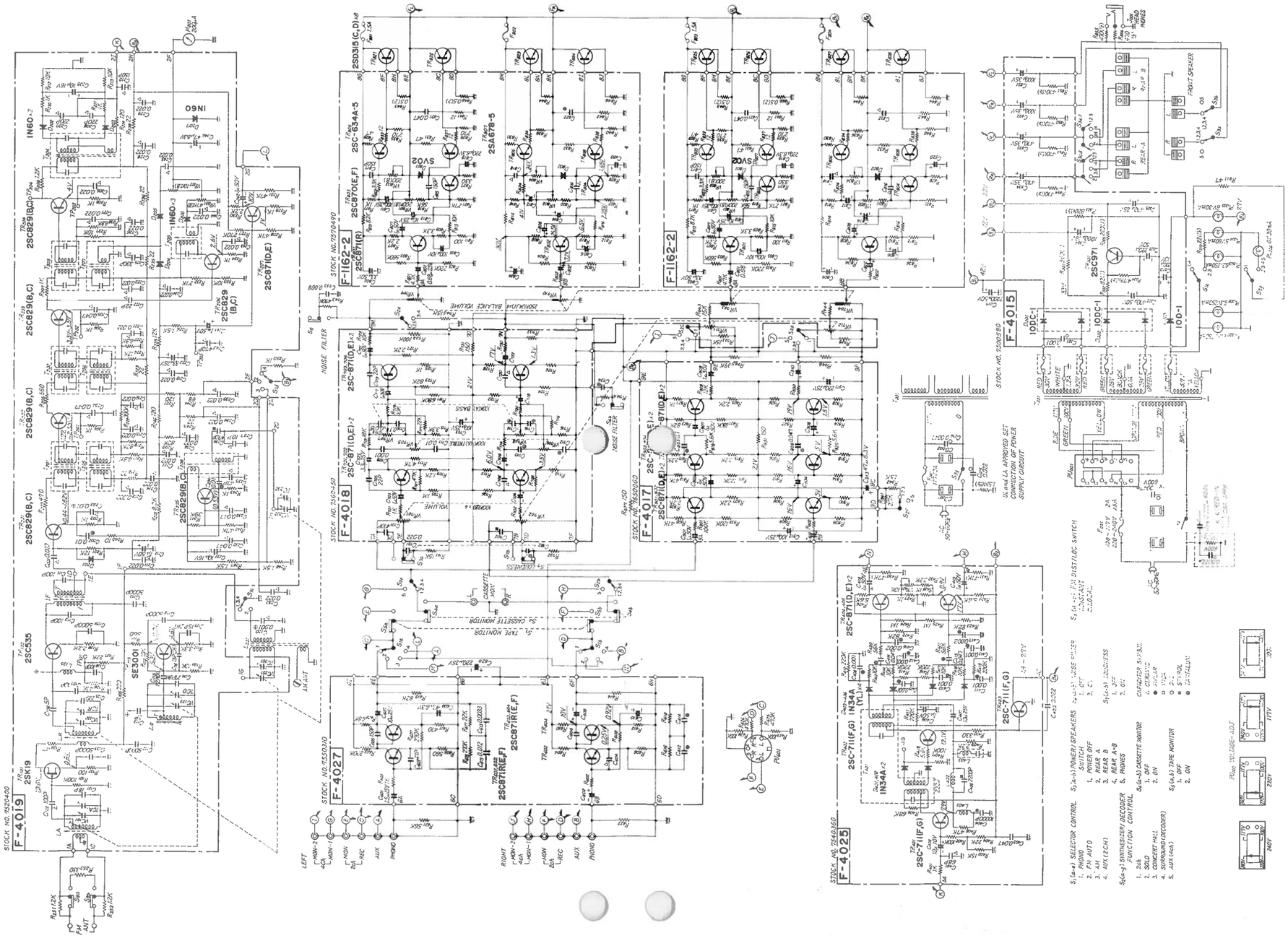


〈Fig. 1〉 Quick-ACTING FUSE HOLDER

OUTPUT ADJUSTMENT

STEP	WHAT TO DO	NOTE
1.	Adjust volume control to minimum	
2.	Set oscillator to 1,000Hz and connect it to 4CH. AUX LEFT FRONT input	Oscillator used should have oscillation frequency of 20 to 20,000Hz and output voltage of more than 200mV
3.	Set Synthesizer/Decoder Function control to AUX (4CH)	Set other controls and switches as follows: Balance to CENTER Tape Monitor to OFF Tone to CENTER Other to OFF
4.	Connect 8- or 16-ohm load resistor with capacity of more than 14 watts to LEFT SPEAKER output	
5.	Connect oscilloscope to SPEAKER terminal	
6.	Turn on the receiver and slowly raise volume. Check output at terminal by means of oscilloscope	
7.	Adjust VR_{801} (left channel) so that peak of sine wave is clipped simultaneously	
8.	Adjust right channel similarly, and then rear channels	

SCHEMATIC DIAGRAM



SPECIFICATIONS

AUDIO SECTION

POWER OUTPUT

MUSIC POWER (IHF): 74W at 4-ohm load
70W at 8-ohm load

CONTINUOUS POWER: 15W × 4 at 4-ohm load
14W × 4 at 8-ohm load

TOTAL HARMONIC DISTORTION:
less than 1% at rated output

INTERMODULATION DISTORTION:
(60Hz: 7,000Hz=4:1, SMPTE method)
less than 1%

POWER BANDWIDTH: 30 to 30,000Hz at 8-ohm load

FREQUENCY RESPONSE: (at normal listening level)
30 to 30,000Hz ±2dB

CHANNEL SEPARATION: (at 1,000Hz, rated output)
better than 50dB

HUM AND NOISE (IHF)
- PHONO: better than −60dB
- AUX: better than −70dB

INPUT SENSITIVITY (at rated output, 1,000Hz)
- PHONO (2-CHANNEL): 4mV (50k ohms)
- AUX (2-CHANNEL): 180mV (50k ohms)
- 4-CHANNEL INPUT: 180mV (50k ohms)
- TAPE MON (pin): 180mV (50k ohms)
- TAPE RECORDER (DIN): 180mV (50k ohms)

RECORDING OUTPUT (at rated output, 1,000Hz)
- TAPE REC (pin): 180mV
- TAPE RECORDER (DIN): 30mV

LOAD IMPEDANCE: 4 to 16 ohms

DAMPING FACTOR: 50 at 8 ohm load

EQUALIZER
- PHONO: RIAA NF Type

TONE CONTROLS (Front channel only)
- BASS: +10dB −10dB at 50Hz
- TREBLE: +10dB −10dB at 10,000Hz
- LOUDNESS: +6dB at 50Hz, +4dB at 10kHz
(Volume Control at −30dB)

TUNER SECTION

<FM>

TUNING RANGE: 88 to 108MHz

SENSITIVITY: 2.5μV 20dB quieting
5.0μV IHF

TOTAL HARMONIC DISTORTION:
less than 1%

SIGNAL TO NOISE RATIO: better than 50dB

SELECTIVITY: better than 35dB

CAPTURE RATIO: 3dB

IMAGE REJECTION: better than 45dB

IF REJECTION: better than 60dB

SPURIOUS RESPONSE REJECTION:
better than 60dB

STEREO SEPARATION: better than 30dB at 400Hz

SPURIOUS RADIATION: less than 34dB

ANTENNA INPUT IMPEDANCE:
300-ohm balanced

<AM>

TUNING RANGE: 535 to 1,605kHz

SENSITIVITY: 350μV at 1,000kHz (bar antenna)

IMAGE FREQUENCY REJECTION:
better than 50dB at 1,000Hz

IF REJECTION: better than 50dB at 1,000Hz

SELECTIVITY: better than 20dB

CONTROLS/SWITCHES

SWITCHES

SELECTOR: PHONO, FM-AUTO, AM, AUX (2CH)

SYNTHESIZER/DECODER: 2CH, SOLO, CONCERT HALL, SURROUND (DECODER) AUX (4CH)

SPEAKERS SELECTOR: POWER OFF, REAR A, REAR B, REAR A+B, PHONES

TAPE MONITOR (2CH): SOURCE, PLAYBACK

CASSETTE MONITOR: PLAYBACK

LOUDNESS: OFF, ON (Front only)

NOISE FILTER: OFF, ON (Front only)

CONTROLS
- VOLUME,
- BASS (Front only),
- TREBLE (Front only),
- BALANCE (Front←→Rear)

OTHER SPECIAL FEATURES

Signal Strength Meter, FET Frontend,
FM Mono/Stereo Automatic Switching and Stereo Indicator, AM Ferrite Bar Antenna, Stereo Headphone Jack (Front only),
Cassette Monitor,
4-Channel Indicator

SYNTHESIZER/DECODER SECTION

INPUT LEVEL:

RATED INPUT 2-CHANNEL:
180mV (50k ohms)

FREQUENCY RESPONSE:
- FRONT CHANNEL: 30 to 20,000Hz±1dB
- REAR CHANNEL: 30 to 20,000Hz+1dB −2dB

REAR CHANNEL PHASE SHIFT:
- LEFT: −90 degree at 300Hz
- RIGHT: +90 degree at 600Hz

SEMICONDUCTORS

TRANSISTORS: 53

DIODES: 22

FET: 1

POWER REQUIREMENTS

POWER VOLTAGE: 100, 117, 220, 240V 50/60Hz

POWER CONSUMPTION: 150VA (max. signal)

DIMENSIONS

486mm (19⅛") W
443.5mm (17½") D
115mm (4⅝") H

WEIGHT

17.1kg (37.6 lbs)

RECORD CHANGER SECTION

TYPE: 3-Speed Automatic Changer

MOTOR: 2-Coil 4-Pole Induction Type

SPEEDS: 33⅓, 45, 78 rpm

CHANGER PLATTER: Sheet Metal 273mm (10¾")
Weight 1.1kg (2½ lbs)

ANTI-SKATING DEVICE: Automatic Adjustment

FLUTTER AND WOW: ±0.20%

FINE ADJUSTMENT OF THE REVOLUTION SPEED (PITCH CONTROL): ±3%

STYLUS PRESSURE: 3.0 Grams (0-6 Grams Adjustable)

CARTRIDGE: SHURE M75-6 (With the Changer Stylus)

CHANNEL SEPARATION: 25dB (at 1kHz)

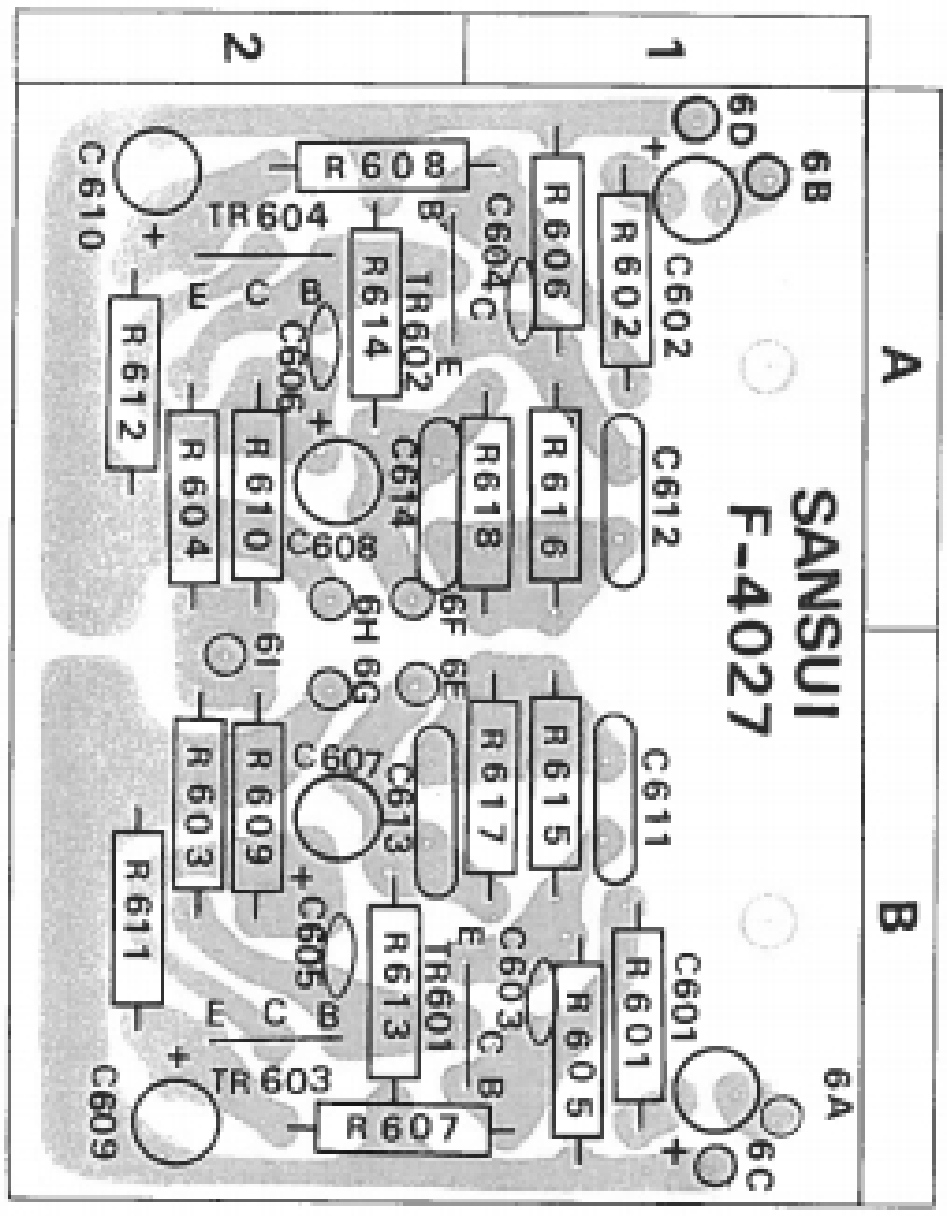
OUTPUT LEVEL: 5mV (50mm/sec)

FREQUENCY RANGE: 20 to 20,000Hz

PRINTED CIRCUIT BOARDS AND PARTS LIST

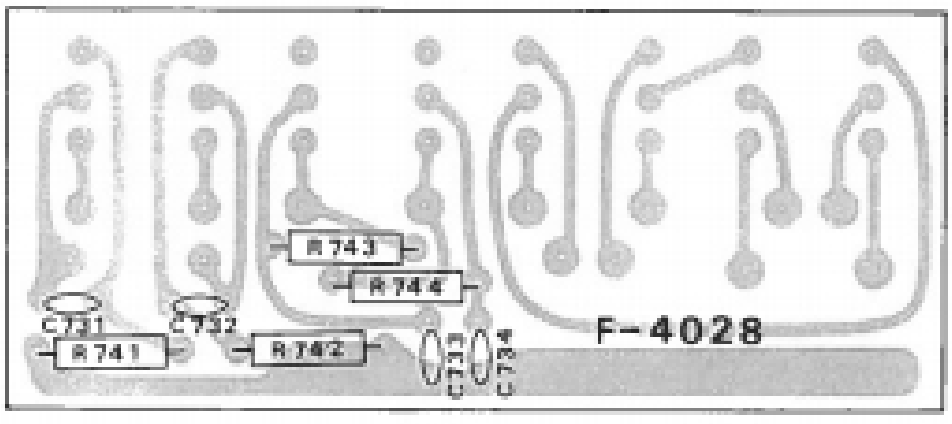
W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

EQUALIZER BLOCK 〈F-4027〉



W	X		Y	Z
R601	1kΩ		0101102	1 B
R602	1kΩ		0101102	1 A
R603	220kΩ		0101224	2 B
R604	220kΩ		0101224	2 A
R605	560Ω		0101561	1 B
R606	560Ω		0101561	1 A
R607	270kΩ		0101274	1, 2 B
R608	270kΩ		0101274	1, 2 A
R609	6.8kΩ	±10% ¼W CR.	0101682	2 B
R610	6.8kΩ		0101682	2 A
R611	470Ω		0101471	2 B
R612	470Ω		0101471	2 A
R613	82kΩ		0101823	2 B
R614	82kΩ		0101823	2 A
R615	270kΩ		0101274	1 B
R616	270kΩ		0101274	1 A
R617	22kΩ		0101223	1 B
R618	22kΩ		0101223	1 A
C601	1.5μF	10 V TC.	0571159	1 B
C602	1.5μF		0571159	1 A
C603	47pF		0660470	1 B
C604	47pF	±10% 50 V CC.	0660470	1 A
C605	150pF		0660151	2 B
C606	150pF		0660151	2 A
C607	10μF	25 V EC.	0513100	2 B
C608	10μF		0513100	2 A
C609	47μF	6.3 V EC.	0510470	2 B
C610	47μF		0510470	2 A
C611	0.012μF		0601127	1 B
C612	0.012μF	±10% 25 V MC.	0601127	1 A
C613	0.0033μF		0601336	2 B
C614	0.0033μF		0601336	2 A
TR601	2SC871R (E, F)		0305474, 5	1 B
TR602			0305474, 5	1, 2 A
TR603			0305474, 5	2 B
TR604			0305474, 5	2 A

PUSH BUTTON BLOCK 〈F-4028〉



W	X		Y
R741	15kΩ	±10% ¼W CR.	0101153
R742	15kΩ		0101153
R743	470kΩ		0101474
R744	470kΩ		0101474
C731	0.022μF	±10% 50 V MC.	0601227
C732	0.022μF		0601227
C733	0.008μF		0601806
C734	0.008μF		0601806
S4	Cassette Monitor		1130300
S5	Tape Monitor		
S6	Noise Filter		
S7	Loudness		

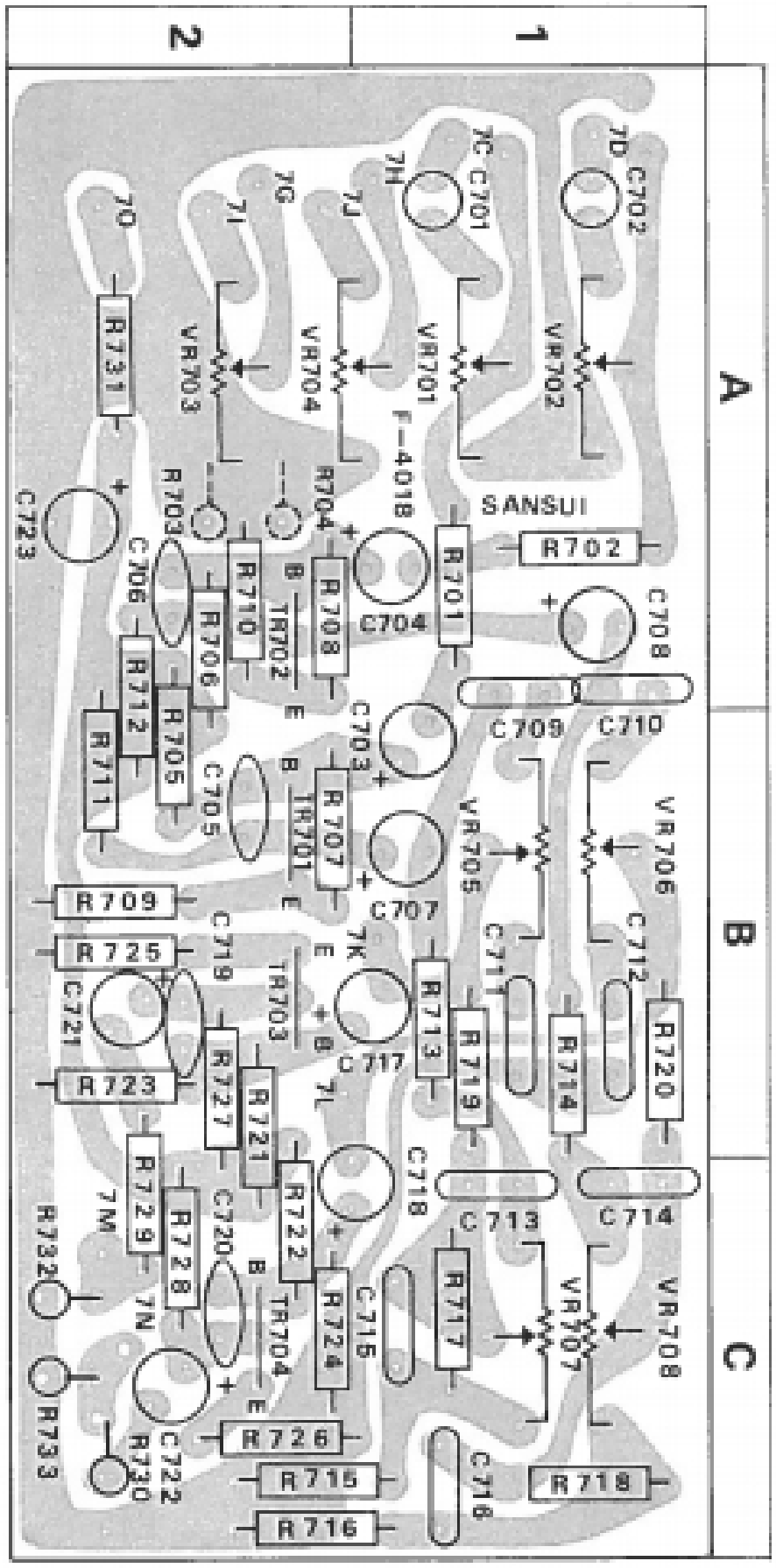
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

TONE CONTROL BLOCK ⟨F-4018⟩

W	X	Y	Z
R701	1kΩ }	0101102	1 A
R702	1kΩ	0101102	1 A
R703	15kΩ	0101153	2 A
R704	15kΩ	0101153	2 A
R705	1MΩ	0101105	2 A, B
R706	1MΩ	0101105	2 A, B
R707	47kΩ	0101473	2 B
R708	47kΩ	0101473	2 A
R709	1.2kΩ	0101122	2 B
R710	1.2kΩ	0101122	2 A
R711	4.7kΩ	0101472	2 A, B
R712	4.7kΩ	0101472	2 A, B
R713	18kΩ	0101183	1 B
R714	18kΩ	0101183	1 B
R715	3.3kΩ	0101332	1, 2 C
R716	3.3kΩ	0101332	1, 2 C
R717	22kΩ } ±10% ¼W CR.	0101223	1 C
R718	22kΩ	0101223	1 C
R719	10kΩ	0101103	1 B
R720	10kΩ	0101103	1 B
R721	680kΩ	0101684	2 B, C
R722	680kΩ	0101684	2 B, C
R723	82kΩ	0101823	2 B
R724	82kΩ	0101823	2 C
R725	1kΩ	0101102	2 B
R726	1kΩ	0101102	1, 2 C
R727	2.2kΩ	0101222	2 B, C
R728	2.2kΩ	0101222	2 C
R729	10kΩ	0101103	2 B, C
R730	10kΩ	0101103	2 C
R731	150Ω	0101151	2 A
R732	100kΩ	0101104	2 C
R733	100kΩ }	0101104	2 C
VR701~704	100kΩ(B) × 4 Volume Control	1060070, 1	1, 2 A
VR705, 706	100kΩ(A) × 2 Treble Control	1010790, 1	1 B
VR707, 708	100kΩ(A) × 2 Bass Control	1010790, 1	1 C
C701	470pF } ±10% 50 V SC.	0611471	1 A
C702	470pF	0611471	1 A
C703	1μF } 50 V EC.	0515109	1 A, B
C704	1μF	0515109	1 A
C705	22pF } ±10% 50 V CC.	0660220	2 B
C706	22pF	0660220	2 A
C707	3.3μF } 25 V EC.	0513339	1 B
C708	3.3μF	0513339	1 A
C709	0.001μF	0601106	1 A
C710	0.001μF	0601106	1 A
C711	0.01μF	0601107	1 B
C712	0.01μF	0601107	1 B
C713	0.015μF ±10% 50 V MC.	0601157	1 C
C714	0.015μF	0601157	1 C
C715	0.1μF	0601108	1 C
C716	0.1μF	0601108	1 C
C717	1μF } 50 V EC.	0515109	1, 2 B
C718	1μF	0515109	1, 2 B C
C719	22pF } ±10% 50 V CC.	0660220	2 B
C720	22pF	0660220	2 C

W	X		Y	Z
C721	1μF }	50 V EC.	0515109	2 B
C722	1μF }		0515109	2 C
C723	100μF	25 V EC.	0513101	2 A
TR701	2SC871 (D, E)		0305470, 1	2 B
TR702			0305470, 1	2 A
TR703			0305470, 1	2 B
TR704			0305470, 1	2 C



SYNTHESIZER BLOCK 〈F-4017〉

W	X	Y	Z
R901	100kΩ	0101104	1 B
R902	100kΩ	0101104	2 B
R903	120kΩ	0101124	1 B
R904	120kΩ	0101124	2 B
R905	47kΩ	0101473	1 B
R906	47kΩ	0101473	2 B
R907	2.2kΩ	0101222	1 B
R908	2.2kΩ	0101222	2 B
R909	2.2kΩ	0101222	1 B
R910	2.2kΩ	0101222	2 B
R911	120kΩ	0101124	1 B
R912	120kΩ	0101124	2 B
R913	47kΩ	0101473	1 B
R914	47kΩ	0101473	2 B
R915	2.2kΩ	0101222	1 A
R916	2.2kΩ	0101222	2 A
R917	2.2kΩ	0101222	1 B
R918	2.2kΩ	0101222	2 B
R919	5.6kΩ	0101562	1 A
R920	5.6kΩ	0101562	2 A, B
R921	680kΩ	0101684	1 A
R922	680kΩ	0101684	2 A
R923	82kΩ	0101823	1 A
R924	82kΩ	0101823	2 A
R925	2.2kΩ	0101222	1, 2 A
R926	2.2kΩ	0101222	1, 2 A
R927	1kΩ	0101102	1 A
R928	1kΩ	0101102	2 A
R929	12kΩ	0101123	1 A
R930	12kΩ	0101123	2 A
R931	150Ω	0101151	1, 2 A
C901	1μF	0515109	1 B
C902	1μF	0515109	2 B
C903	1μF	0515109	1 B
C904	1μF	0515109	2 B
C905	0.1μF	0601108	1 A, B
C906	0.047μF	0601477	2 A
C907	1μF	0515109	1 A
C908	1μF	0515109	2 A
C909	1μF	0515109	1 A
C910	1μF	0515109	2 A
C911	220μF	0513221	1, 2 A
C912	100μF	0513101	1, 2 B
C913	47μF	0510470	1 B
TR901	2SC871 (D, E)	0305470, 1	1 B
TR902		0305470, 1	2 B
TR903		0305470, 1	1 B
TR904		0305470, 1	2 B
TR905		0305470, 1	1 A
TR906		0305470, 1	2 A

W: R901 100kΩ, R902 100kΩ, R903 120kΩ, R904 120kΩ, R905 47kΩ, R906 47kΩ, R907 2.2kΩ, R908 2.2kΩ, R909 2.2kΩ, R910 2.2kΩ, R911 120kΩ, R912 120kΩ, R913 47kΩ, R914 47kΩ, R915 2.2kΩ, R916 2.2kΩ, R917 2.2kΩ, R918 2.2kΩ, R919 5.6kΩ, R920 5.6kΩ, R921 680kΩ, R922 680kΩ, R923 82kΩ, R924 82kΩ, R925 2.2kΩ, R926 2.2kΩ, R927 1kΩ, R928 1kΩ, R929 12kΩ, R930 12kΩ, R931 150Ω — ±10% ¼W CR.

X: C901 1μF, C902 1μF, C903 1μF, C904 1μF — 50 V EC.

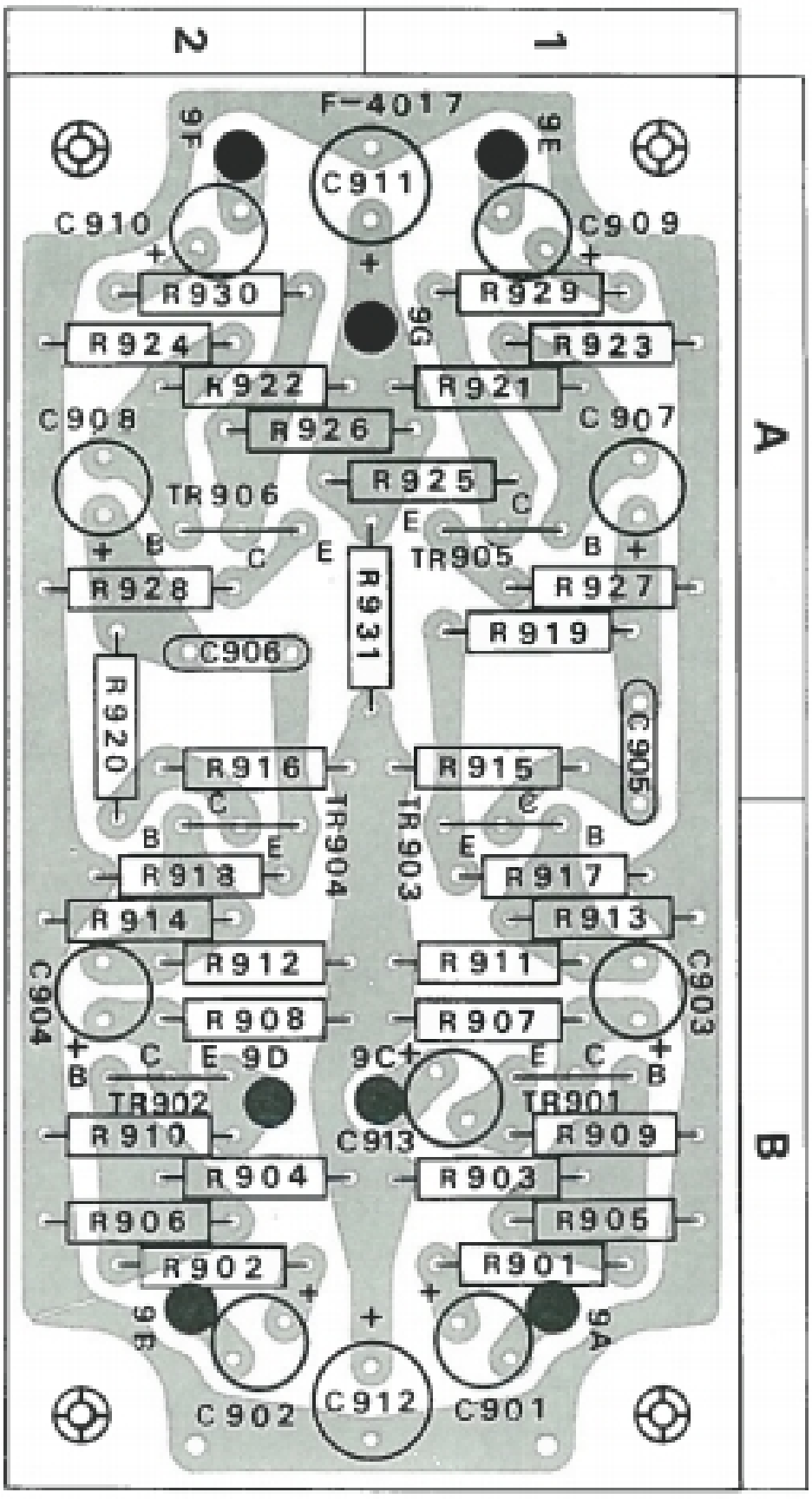
X: C905 0.1μF, C906 0.047μF — ±10% 50 V MC.

X: C907 1μF, C908 1μF, C909 1μF, C910 1μF — 50 V EC.

X: C911 220μF, C912 100μF — 25 V EC.

X: C913 47μF — 6.3 V EC.

X: TR901, TR902, TR903, TR904, TR905, TR906 — 2SC871 (D, E)

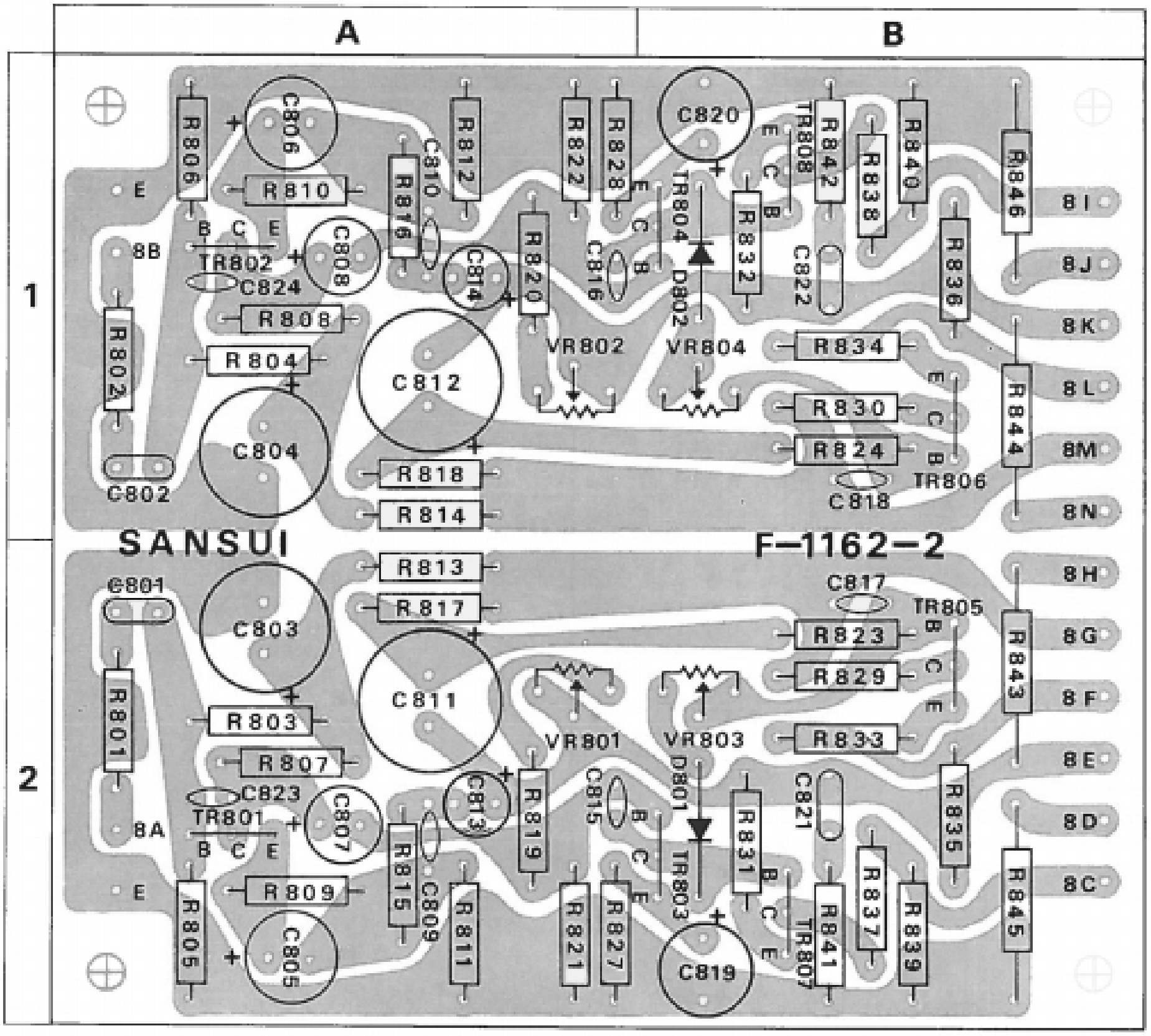


PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X**: Parts Name **Y**: Stock No. **Z**: Position of Parts

DRIVER BLOCK 〈F-1162-2〉

W	X	Y	Z
R801	4.7kΩ ±10% ¼W Cir.	0101472	2 A
R802	4.7kΩ	0101472	1 A
R803	560kΩ	0101564	2 A
R804	560kΩ	0101564	1 A
R805	220kΩ	0101224	2 A
R806	220kΩ	0101224	1 A
R807	2.2kΩ	0101222	2 A
R808	2.2kΩ	0101222	1 A
R809	3.3kΩ	0101332	2 A
R810	3.3kΩ	0101332	1 A
R811	100Ω	0101101	2 A
R812	100Ω	0101101	1 A
R813	8.2kΩ	0101822	2 A
R814	8.2kΩ	0101822	1 A
R815	10kΩ	0101103	2 A
R816	10kΩ	0101103	1 A
R817	1kΩ	0101102	2 A
R818	1kΩ	0101102	1 A
R819	56kΩ	0101563	2 A
R820	56kΩ	0101563	1 A
R821	27kΩ	0101273	2 A
R822	27kΩ	0101273	1 A
R823	3.3kΩ	0101332	2 B
R824	3.3kΩ	0101332	1 B
R827	330Ω	0101331	2 A
R828	330Ω	0101331	1 A
R829	47Ω	0101470	2 B
R830	47Ω	0101470	1 B
R831	47Ω	0101470	2 B
R832	47Ω	0101470	1 B
R833	12Ω	0101120	2 B
R834	12Ω	0101120	1 B
R835	270Ω	0101271	2 B
R836	270Ω	0101271	1 B
R837	12Ω	0101120	2 B
R838	12Ω	0101120	1 B
R839	270Ω	0101271	2 B
R840	270Ω	0101271	1 B
R841	12Ω	0101120	2 B
R842	12Ω	0101120	1 B
R843	0.5Ω ±10% 2W Cer.	0152508	2 B
R844	0.5Ω	0152508	1 B
R855	0.5Ω	0152508	2 B
R846	0.5Ω	0152508	1 B
VR801	200kΩ(B) AC Balance Adj. (Left)	1030351	2 A
VR802	200kΩ(B) AC Balance Adj. (Right)	1030351	1 A
VR803	200Ω Bias Adj. (Left)	1032021	2 B
VR804	200Ω Bias Adj. (Right)	1032021	1 B
C801	0.68μF 25 V AEC.	0563688	2 A
C802	0.68μF	0563688	1 A
C803	33μF 50 V EC.	0515330	2 A
C804	33μF	0515330	1 A
C805	100μF 10 V EC.	0511101	2 A
C806	100μF	0511101	1 A
C807	1μF 50 V EC.	0515109	2 A
C808	1μF	0515109	1 A
C811	100μF 35 V EC.	0514101	2 A
C812	100μF	0514101	1 A
C813	10μF 25 V EC.	0513100	2 A
C814	10μF	0513100	1 A
C815	150pF ±10% 50 V CC.	0660151	2 A
C816	150pF	0660151	1 A
C817	150pF	0660151	2 B
C818	150pF	0660151	1 B
C819	220μF 6.3 V EC.	0510221	2 B
C820	220μF	0510221	1 B
C821	0.047μF ±10% 50 V MC.	0601477	2 B
C822	0.047μF	0601477	1 B
TR801	2SC871 (E, F)	0305471, 2	2 A
TR802		0305471, 2	1 A
TR803	2SC870 (E, F)	0305510, 1	2 B
TR804		0305510, 1	1 B
TR805	2SC634A-5, 6	0305890, 1	2 B
TR806		0305890, 1	1 B
TR807	2SA678-5, 6	0300290, 1	2 B
TR808		0300290, 1	1 B
D801	5V-02	0310490	2 B
D802	5V-02	0310490	1 B


A
B
1
2
SANSUI
F-1162-2
R806
C806
R810
C808
R816
C810
R812
R822
R828
C820
TR808
R842
R838
R840
R846
R802
R808
R804
C804
C812
R818
R814
C802
C824
TR802
VR802
VR804
R834
R830
R824
C818
TR806
R844
C801
C803
R813
R817
C811
R803
R807
C823
TR801
C807
R809
C805
R805
R801
C813
R819
VR801
VR803
C815
D801
TR803
R831
C821
R833
C817
TR805
R823
R829
R835
R843
R837
R839
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R821
R827
R815
C809
R811
8A
8B
8C
8D
8E
8F
8G
8H
8I
8J
8K
8L
8M
8N

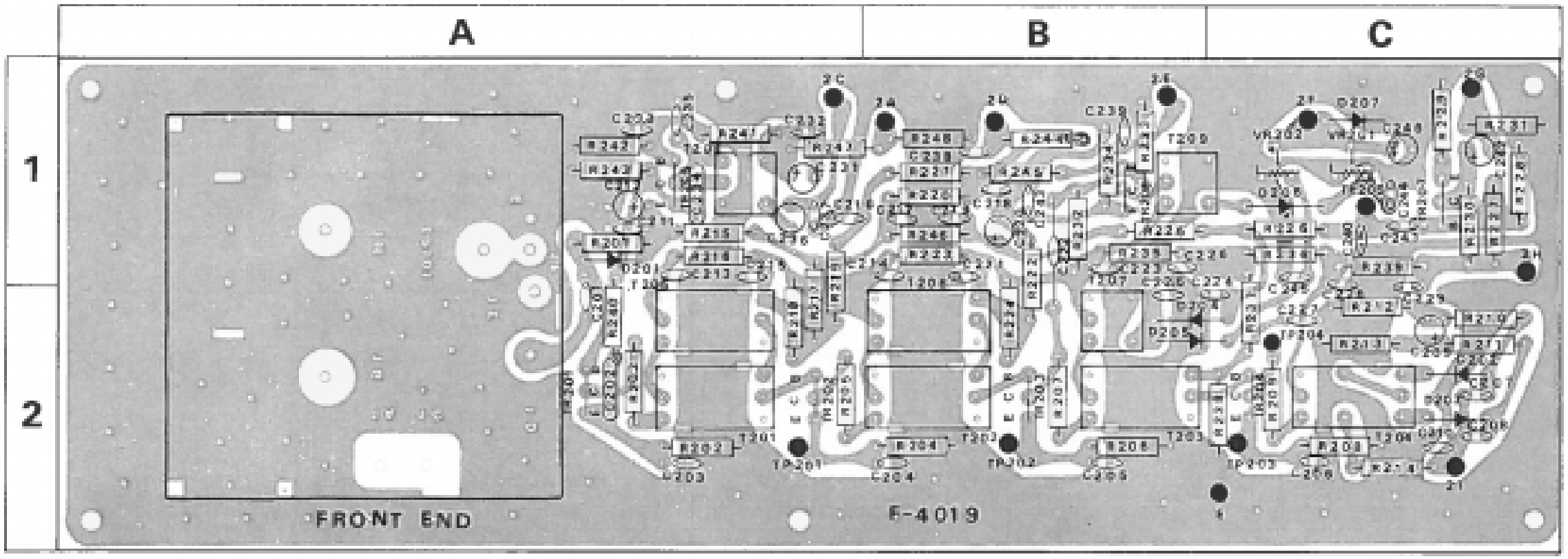
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

FM/AM BLOCK ⟨F-4019⟩

W	X	Y	Z
R201	12kΩ	0101123	1 A
R202	1kΩ	0101102	2 A
R203	470Ω	0101471	2 A
R204	1kΩ	0101102	2 B
R205	560Ω	0101561	2 A
R206	1kΩ	0101102	2 B
R207	1kΩ	0101102	2 B
R208	1kΩ	0101102	2 C
R209	1.2kΩ	0101122	2 C
R210	1kΩ	0101102	2 C
R211	1kΩ	0101102	2 C
R212	10kΩ	0101103	2 C
R213	10kΩ	0101103	2 C
R214	120Ω	0101121	2 C
R215	8.2kΩ	0101822	1 A
R216	22Ω	0101220	1 A
R217	6.8kΩ	0101682	1, 2 A
R218	82kΩ	0101823	1, 2 A
R219	390kΩ	0101394	1, 2 A
R220	82kΩ	0101823	1 B
R221	120Ω	0101121	1 B
R222	6.8kΩ	0101682	1, 2 B
R223	22Ω	0101220	1 B
R224	12kΩ	0101123	1, 2 B
R225	12kΩ	0101123	1 B
R226	1.5kΩ	0101152	1 C
R227	270kΩ	0101274	1 C
R228	47kΩ	0101473	1 C
R229	1kΩ	0101102	1 C
R230	2.2kΩ	0101222	1 C
R231	47kΩ	0101473	1 C
R232	27kΩ	0101273	1 B
R233	10kΩ	0101103	1 B
R234	1kΩ	0101102	1 B
R235	22Ω	0101220	1 B
R236	22Ω	0101220	1 C
R237	10kΩ	0101103	1, 2 C
R238	6.8kΩ	0101682	2 C
R239	22Ω	0101220	1 C
R240	10Ω	0101100	1, 2 A
R241	39kΩ	0101393	1 A
R242	4.7kΩ	0101472	1 A
R243	1kΩ	0101102	1 A
R244	68Ω	0101680	1 B
R245	22Ω	0101220	1 B
R246	120Ω	0101121	1 B
R247	1.5kΩ	0101152	1 A, B
R248	1.5kΩ	0101152	1 B
R201–R248	±10% ¼W CR.		
VR201	47kΩ(B) Tuning Meter Adj. (FM)	1035170	1 C
VR202	10kΩ(B) Tuning Meter Adj. (AM)	1035130	1 C
C201	0.022μF +80 −20% 25 V CC.	0656223	2 A
C202	0.01μF ±10% 50 V MC.	0601107	2 A
C203	0.01μF ±20% 50 V CC.	0652103	2 A
C204	0.047μF +80 −20% 25 V CC.	0656473	2 B
C205	0.047μF +80 −20% 25 V CC.	0656473	2 B
C206	0.022μF +80 −20% 25 V CC.	0656223	2 C
C207	220pF ±10% 50 V CC.	0660221	2 C
C208	220pF ±10% 50 V CC.	0660221	2 C

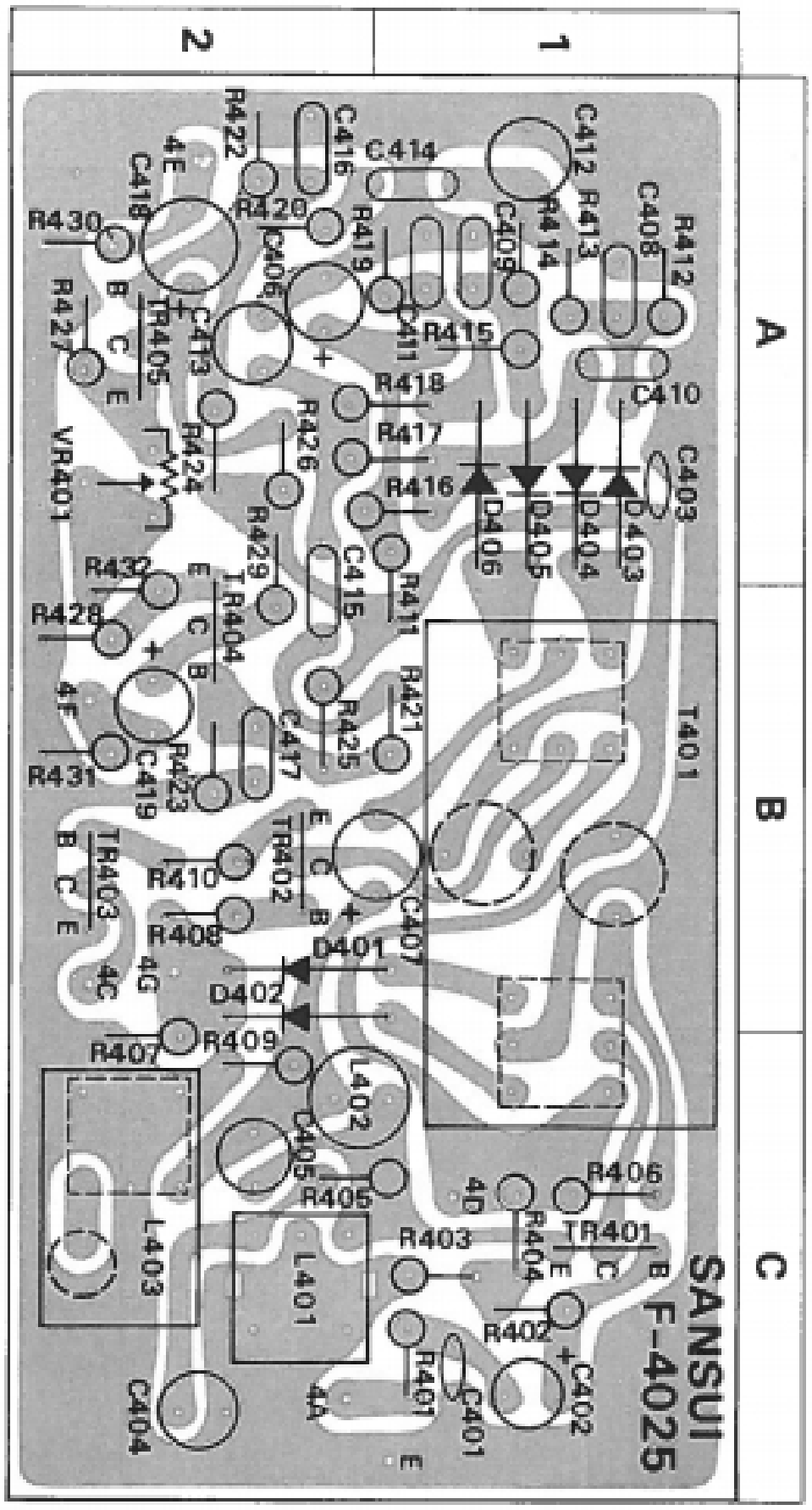
W	X	Y	Z
C209	3.3μF 25 V EC.	0513339	2 C
C210	150pF ±10% 50 V CC.	0660151	2 C
C211	0.022μF +80 −20% 25 V CC.	0656223	1 A
C212	1μF 50 V EC.	0505109	1 A
C213	0.022μF +80 −20% 25 V CC.	0656223	1 A
C214	0.022μF +80 −20% 25 V CC.	0656223	1 B
C215	0.022μF +80 −20% 25 V CC.	0656223	1 A
C216	0.022μF +80 −20% 25 V CC.	0656223	1 A
C217	0.022μF +80 −20% 25 V CC.	0656223	1 B
C218	0.022μF +80 −20% 25 V CC.	0656223	1 B
C219	0.022μF +80 −20% 25 V CC.	0656223	1 B
C220	3.3μF 25 V EC.	0513339	1 B
C221	0.022μF +80 −20% 25 V CC.	0656223	1 B
C222	22pF ±10% 50 V CC.	0660220	1, 2 B
C223	0.022μF +80 −20% 25 V CC.	0656223	1 B
C224	0.022μF +80 −20% 25 V CC.	0656223	2 B, C
C225	330pF ±10% 50 V CC.	0660331	2 B
C226	0.022μF +80 −20% 25 V CC.	0656223	1 C
C227	0.022μF +80 −20% 25 V CC.	0656223	2 C
C228	0.022μF +80 −20% 25 V CC.	0656223	1, 2 C
C229	0.022μF +80 −20% 25 V CC.	0656223	1, 2 C
C231	10μF 16 V EC.	0512100	1 A
C232	0.047μF +80 −20% 25 V CC.	0656473	1 A
C233	0.047μF +80 −20% 25 V CC.	0656473	1 A
C234	0.01μF ±10% 50 V MC.	0601107	1 A
C235	47pF ±10% 50 V CC.	0660470	1 A
C236	470pF ±10% 50 V SC.	0610401	1 A
C237	10pF ±10% 50 V CC.	0660100	1 A
C238	0.022μF +80 −20% 25 V CC.	0656223	1 B
C239	0.022μF +80 −20% 25 V CC.	0656223	1 B
C240	470pF +80 −20% 25 V CC.	0660471	1 C
C241	1μF 50 V EC.	0515109	1 C
C242	1μF 50 V EC.	0515109	1 C
C243	0.022μF +80 −20% 25 V CC.	0656223	1 B
C244	0.022μF +80 −20% 25 V CC.	0656223	1 C
C245	0.022μF +80 −20% 25 V CC.	0556223	1 C
C246	47μF 6.3 V EC.	0510470	1 C
TR201	2SC829 (B, C)	0305460, 1	2 A
TR202	2SC829 (B, C)	0305460, 1	2 A
TR203	2SC829 (B, C)	0305460, 1	2 B
TR204	2SC829 (B, C)	0305460, 1	2 C
TR205	2SC829 (B, C)	0305460, 1	1 A
TR206	2SC829 (B, C)	0305460, 1	1 B
TR207	2SC871 (D, E)	0305470, 1	1 C
D201	IN60	0310330	1 A
D202	IN60	0310330	2 C
D203	IN60	0310330	2 C
D204	IN60	0310330	2 B, C
D205	IN60	0310330	2 B, C
D206	IN60	0310330	1 C
D207	IN60	0310330	1 C
T201	FM IFT	4235610	2 A
T202	FM IFT	4235610	2 B
T203	FM IFT	4235600	2 B
T204	FM Detector	4235620	2 C
T205	AM IFT	4230370	2 A
T206	AM IFT	4230370	2 B
T207	AM IFT	4230380	2 B
T208	AM OSC	4220330	1 A
T209	FM Meter Coil	4235400	1 B
	FM PACK	7510470	1, 2 A


A
B
C
1
2
FRONT END
E-4019

PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

FM MPX BLOCK ⟨F-4025⟩

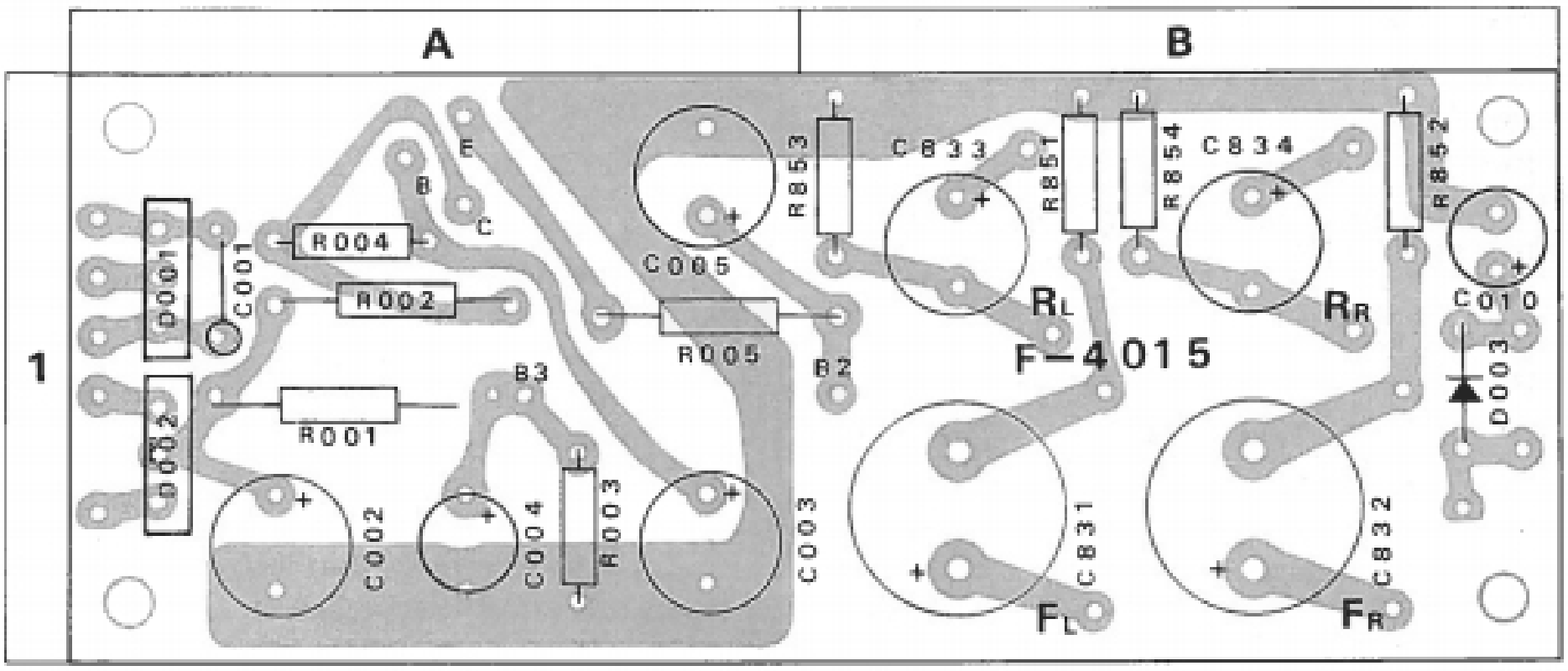


W	X		Y	Z
R401	1kΩ		0101102	1 C
R402	100kΩ		0101104	1 C
R403	15kΩ		0101153	1 C
R404	22kΩ		0101223	1 C
R405	47kΩ		0101473	1, 2 C
R406	68kΩ		0101683	1 C
R407	100kΩ		0101104	2 C
R408	5.6kΩ		0101562	2 B
R409	2.2kΩ		0101222	2 C
R410	330Ω		0101331	2 B
R411	220kΩ		0101224	1 A, B
R412	220kΩ		0101224	1 A
R413	10kΩ		0101103	1 A
R414	10kΩ		0101103	1 A
R415	220kΩ		0101224	1 A
R416	220kΩ		0101224	1, 2 A
R417	10kΩ	±10% 1/4W CR.	0101103	1, 2 A
R418	10kΩ		0101103	1, 2 A
R419	220kΩ		0101224	1 A
R420	56kΩ		0101563	2 A
R421	56kΩ		0101563	1 B
R422	82kΩ		0101823	2 A
R423	82kΩ		0101823	2 B
R424	1MΩ		0101105	2 A
R425	1MΩ		0101105	2 B
R426	5.6kΩ		0101562	2 A
R427	1kΩ		0101102	2 A
R428	1kΩ		0101102	2 B
R429	5.6kΩ		0101562	2 A, B
R430	47kΩ		0101473	2 A
R431	47kΩ		0101473	2 B
R432	2.2kΩ		0101222	2 A, B
R433	39kΩ		0101393	2 B (underneath)
VR401	10kΩ (B)	FM Separation Adj.	1035130	2 A
C401	68pF	±10% 50 V CC.	0660680	1 C
C402	10μF	10 V EC.	0511100	1 C
C403	0.047μF	+80 −20% 50 V CC.	0657473	1 A
C404	10000pF	±10% 50 V SC.	0611103	2 C
C405	2200pF	± 5 % 50 V SC.	0610222	2 C
C406	1μF	50 V EC.	0515109	2 A
C407	10μF	25 V EC.	0513100	1, 2 B
C408	0.001μF		0601106	1 A
C409	0.001μF		0601106	1 A
C410	0.001μF		0601106	1 A
C411	0.001μF		0601106	1 A
C412	0.001μF	±10% 50 V MC.	0601106	1 A
C413	0.001μF		0601106	2 A
C414	0.047μF		0601477	1 A
C415	0.047μF		0601477	2 A, B
C416	0.002μF		0601206	2 A
C417	0.002μF		0601206	2 B
C418	1μF	50 V EC.	0515109	2 A
C419	1μF		0515109	2 B
C420	0.022μF	+80 −20% 25 V CC.	0656223	
C421	3.3μF	25 V EC.	0513339	2 B (underneath)

W	X	Y	Z
TR401	2SC711 (F, G)	0305732, 3	1 C
TR402		0305732, 3	2 B
TR403	2SC711 (F, G)	0305732, 3	2 B
TR404	2SC871 (D, E)	0305470, 1	2 A, B
TR405		0305470, 1	2 A
D401	IN34A	0310400	1, 2 B
D402		0310400	1, 2 B
D403	IN34A (YELLOW)	0310401	1 A
D404		0310401	1 A
D405		0310401	1 A
D406		0310401	1 A
D407	DS-410	0340030	2 B
T401	19kHz, 38kHz MPX Coil	4240670	1 B, C
L401	19kHz MPX Coil	4240590	2 C
L402	Micro-Inductor	4900090	1, 2 C
L403	67kHz MPX Coil	4240680	2 C

POWER BLOCK 〈F-4015〉

W	X			Y	Z
R001	560Ω	±10%	1 W CR.	0104561	1 A
R002	82Ω			0104820	1 A
R003	820Ω	±10%	½W SR.	0111821	1 A
R004	4.7kΩ			0111472	1 A
R005	220Ω	±10%	1 W CR.	0104221	2 A, B
R851	470Ω	±10%	½W SR.	0111471	1 B
R852	470Ω			0111471	1 B
R853	470Ω			0111471	1 B
R854	470Ω			0111471	1 B
C001	0.001μF	±20%	400 V OC.	0590106	1 A
C002	470μF		50 V EC.	0515471	1 A
C003	220μF			0515221	1 A
C004	1000μF		16 V EC.	0512102	1 A
C005	470μF		25 V EC.	0513471	1 A
C810	220μF		10 V EC.	0511221	1 B
C831	1000μF		35 V EC.	0549004	1 B
C832	1000μF			0549004	1 B
C833	470μF			0514371	1 B
C834	470μF			0514371	1 B
TR001	2SC971			0305531	1 A
D001	10DC-1			0310680	1 A
D002				0310680	1 A
D003	10D-1			0310340	1 B



OTHER PARTS AND THEIR POSITIONS ON CHASSIS

W: Parts No. X: Parts Name Y: Stock No.

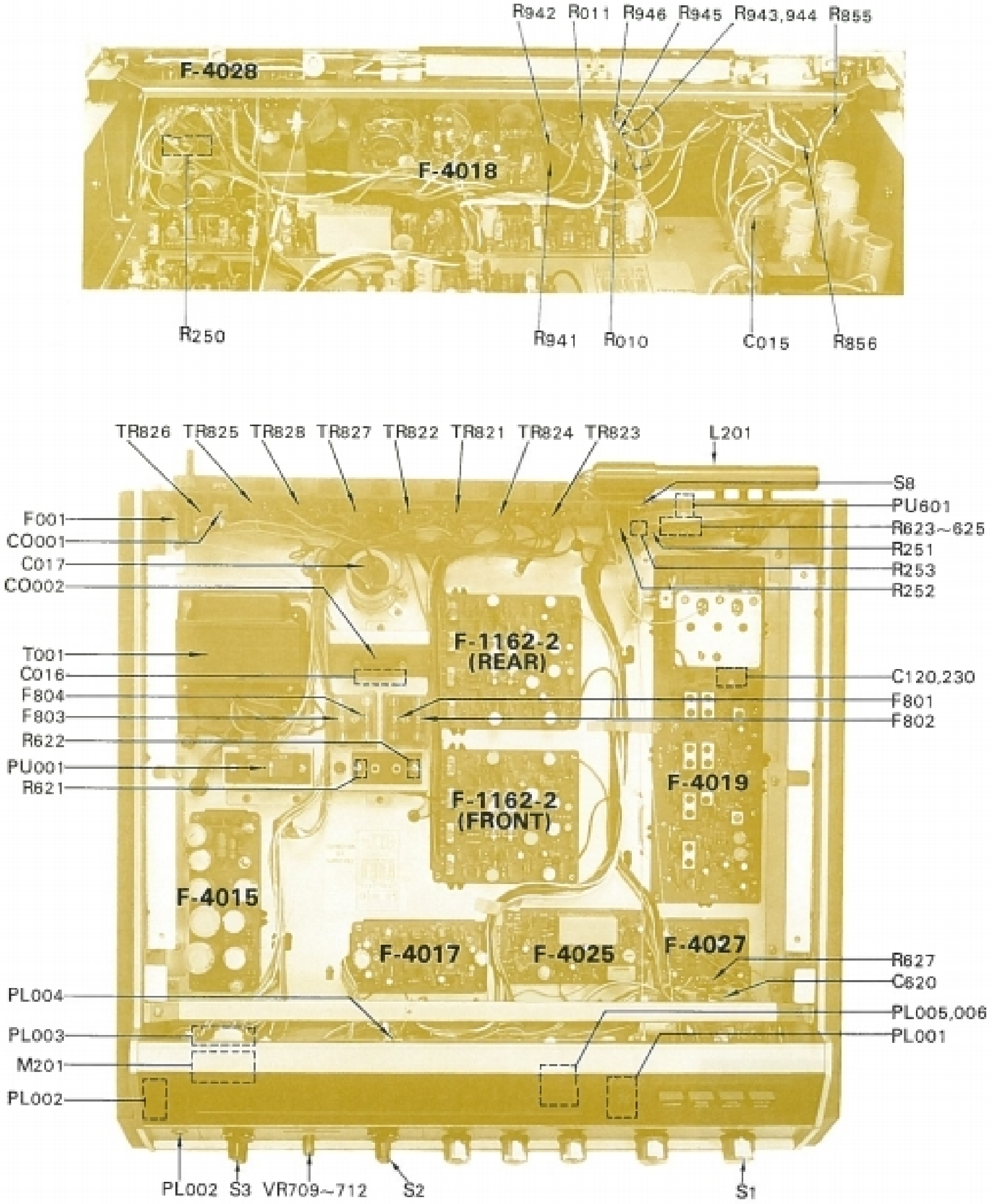
W	X		Y
R250	1kΩ }		0101102
R251	1.2kΩ		0101122
R252	1.2kΩ		0101122
R253	330Ω		0101331
R621	56kΩ		0101563
R622	56kΩ } ±10% ¼W CR.		0101563
R623	100kΩ		0101104
R624	100kΩ		0101104
R625	470kΩ		0101104
R626	470kΩ		0101104
R627	150Ω		0101151
R745	15kΩ }		0101153
R555	470Ω } ±10% ½W SR.		0111471
R556	470Ω		0111471
R941	2.7kΩ }		0101272
R942	1.5kΩ		0101152
R943	15kΩ } ±10% ¼W CR.		0101153
R944	15kΩ		0101153
R945	39kΩ		0101393
R946	39kΩ }		0101393
R010	22Ω ±10% ½W SR.		0111220
R011	47Ω ±10% ¼W CR.		0101470
VR709~712	230kΩ(MN)×4 Balance Control		1040130
C130	0.001μF ±20% 50V CC.		0652102
C330	0.022μF +80 −20 % 25V CC.		0656223
C620	220μF 25V EC.		0513221
C615	0.022μF } ±20% 600V OC.		0591227
C616	0.0047μF }		0591476
C617	2200μF 50V EC.		0559307
TR821	} 2SD315 (C, D) or 2SD155 (N, M)	Left Front	0308330, 1 or 0308320, 1
TR822		Left Front	0308330, 1 or 0308320, 1
TR823		Right Front	0308330, 1 or 0308320, 1
TR824		Right Front	0308330, 1 or 0308320, 1
TR825		Left Rear	0308330, 1 or 0308320, 1
TR826		Left Rear	0308330, 1 or 0308320, 1
TR827		Right Rear	0308330, 1 or 0308320, 1
TR828		Right Rear	0308330, 1 or 0308320, 1
T001	Power Transformer		4001020
L201	Ferrite Bar Antenna		4200280
M201	Tuning Meter (200μA)		4300390, 1
S1	Selector Control		1102340, 50
S2	Synthesizer/Decoder Function Control		1103420
S3	Power/Speakers Switch		1102330, 60
S8	FM DIST/LOC Switch		1110040
F001	Power Fuse		
	100~117V 2A		0430241
	220~240V 1A		
	Power Fuse Holder		2300040
F801	} Quick Acting Fuse 1.5A	Left Front	0430101
F802		Right Front	0430101

W	X		Y
F803	} Quick Acting Fuse 1.5A	Left Rear	0430101
F804		Right Rear	0430101
	Quick Acting Fuse Holder		2310070
PL001	} Dial Indicator 6.3V 250mA		0420020
PL002			0420020
PL003	Tuning Meter Lamp		0420020
	Lamp Holder PL001~003		2310030
PL004	Needle Lamp		0400101
PL005	FM Stereo Indicator }		0400190
PL006	4 CHANNEL Indicator }		
CO001	} AC Outlet		2450040
CO002			2450040
J001	Headphone Jack		2430060
PU501	DIN Socket		2430040
PU001	Voltage Selector		
	Plug		2410090
	Socket		2410080

Abbreviations

CR : Carbon Resistor
SR : Solid Resistor
CeR : Cement Resistor
CC : Ceramic Capacitor
EC : Electrolytic Capacitor
AEC : Aluminium Electrolytic Capacitor
MC : Mylar Capacitor
SC : Polystylene Capacitor
OC : Oil Capacitor
TC : Tantalum Capacitor

* Manufacturer reserves right to change design and/or specifications without notice for purpose of improvement.


R942
R011
R946
R945
R943,944
R855
F-4028
F-4018
R250
R941
R010
C015
R856
TR826
TR825
TR828
TR827
TR822
TR821
TR824
TR823
L201
S8
PU601
R623~625
R251
R253
R252
F001
CO001
C017
CO002
T001
C016
F804
F803
R622
PU001
R621
F-1162-2
(REAR)
F-1162-2
(FRONT)
C120,230
F801
F802
F-4019
F-4015
F-4017
F-4025
F-4027
R827
C820
PL005,006
PL001
PL004
PL003
M201
PL002
PL002
S3
VR709~712
S2
S1

Sansui

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