

JVC

No. 2342

SERVICE MANUAL

MODEL

VS-5313 MARK III

OMNI-DIRECTIONAL
SPEAKER SYSTEM
WITH 5901 STAND



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Specifications

Type	: Acoustic-suspension globular speaker system
Speakers	: Four-5inch roll free-edge cone speakers for the woofer Four-2¾inch cone speakers for the tweeter
Power Handling Capacity	: 100W peak music
Frequency Range	: 35~20,000Hz
Crossover Frequency	: 3,500Hz
Dimensions	: 13½" (34cm)
Weight (Net)	: 20.9 lbs (9.5kg)
Enclosure	: Perforated metal

Accessories

Envelope	E64207-003
Instruction Book	E30580-467A
Speaker Cord Ass'y	E41577-1
Warranty Card	BT20002B for (J) BT20008 for (M)

Technical Information

A unique speaker system that surrounds you with sound

This is the most unique speaker system you can buy. The JVC 5313 MARK III surrounds you with the most natural and the most breathtaking sound you've ever heard. Sound so lifelike, you'll find it hard to believe it comes from a speaker.

Perfect sound dispersion

With ordinary speaker systems room placement is often difficult for proper sound. As a listener, you must sit almost exactly in the center for good stereo and proper balance.

However, with the JVC 5313 MARK III, you can place them almost anywhere. No matter where you are in the listening room, you will obtain all the effects of full concert hall stereo.

The secret lies in its special spherical design, which allows full 360° dispersion. This means that its full circle of sound allows perfect listening anywhere in the room. In stereo, you'll hear total separation throughout the entire listening area. If you're planning to step up to 4-channel sound, the JVC 5313's are the perfect speakers to add rear ambience, or to create the ideal sound field for listening in quad.

Quality components

Each globe contains 4 woofers of the perfect seal enclosure type, for low distortion and deep frequency response. Special sound absorbing materials enable the speakers to reproduce the rich low base necessary for realistic stereo. In addition, 4 tweeters provide silky highs and even sound dispersion throughout the listening room. A special crossover network designed for minimum phase shift and distortion assures excellent transient response and smooth natural sound.

Final Packing Ass'y

Ref. No.	Parts No.	Parts Name
1	VS-5313MARK III-PK	CARTON CASE
2	VS-5313MARK III-NZ	PACKING MATERIALS

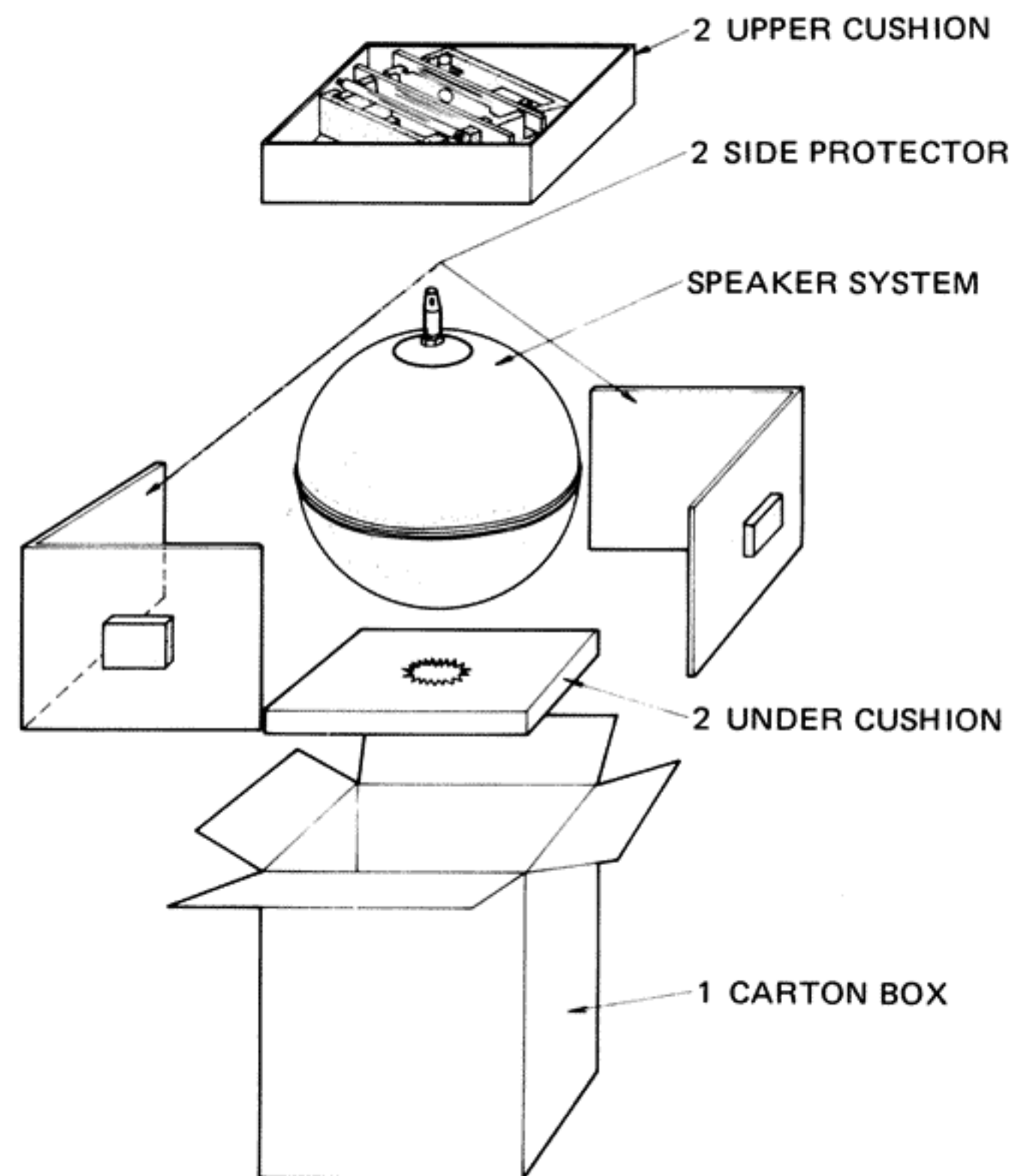


Fig. 1

List of Parts for Replacement I

Ref. No.	Parts No.	Parts Name	Description
1	E1865-001	Cabinet	Woofer 001A (001A, 001B 1set) for 13cm Speaker Tweeter
2	SK2142Fe	13cm Speaker	
3	E49370-001	Spacer	
4	SBSA4016M	Tapping Screw	
5	SK2072Ee	7cm Speaker	
6	E49500-001	Acoustic Absorber	for Tweeter
7	E49438-001	Tweeter Cover	for Tweeter
8	E44668-001	Bushing	for Tweeter
9	E49370-001	Spacer	001A (001A, 001B 1set)
10	SBSA4016M	Tapping Screw	for Tweeter
11	E33782-001	Spacer	for Cabinet
12	E45181-001	Acoustic Absorber	Brack for Network Ass'y
13	E30861-002	Punching Metal Cover	
14	E33781-002	Sub Cover	
15	E33780-001	Mounting Board	
16	E03475-122	Inductor Coil	
17	E03475-821	Inductor Coil	L1,L3 1.2mH
18	QEZ0015-155	N.P.E. Capacitor (Condenser)	L2,L4 0.82mH
19	QEZ0015-335	N.P.E. Capacitor (Condenser)	C2,C4 1.5 μ F/50WV
20	QRF101K-2R7	Unflamable Resistor	C1,C3 3.3 μ F/50WV
			R1,R2 2.7 Ω /10WV
21	QML1011-053	Lug Strip Ass'y	for Network Ass'y

Exploded View of Parts I

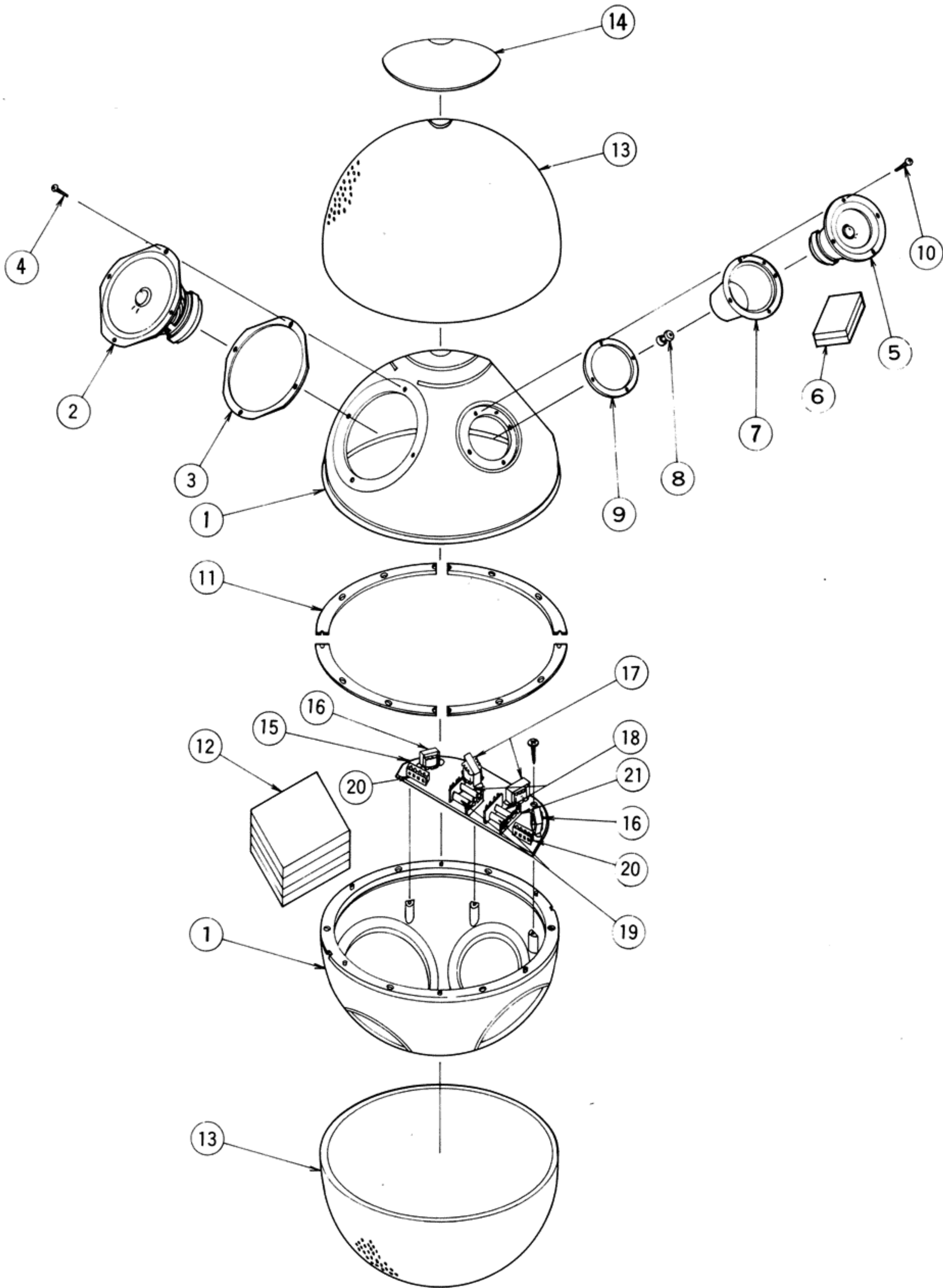


Fig. 2

List of Parts for Replacement II

Exploded View of Parts II

Ref. No.	Parts No.	Parts Name	Discription
22	E49413-001	Shaft Bracket	for Input
23	QMC9007-001	4P Plug Ass'y	
24	E49412-001	Nut	
25	QMC9006-001	4P Socket Ass'y	
26	E49371-001	Joint	
27	E20445-001	Rubber Belt	for Fixing Cabinet
28	E42799-001	Shaft Ass'y	

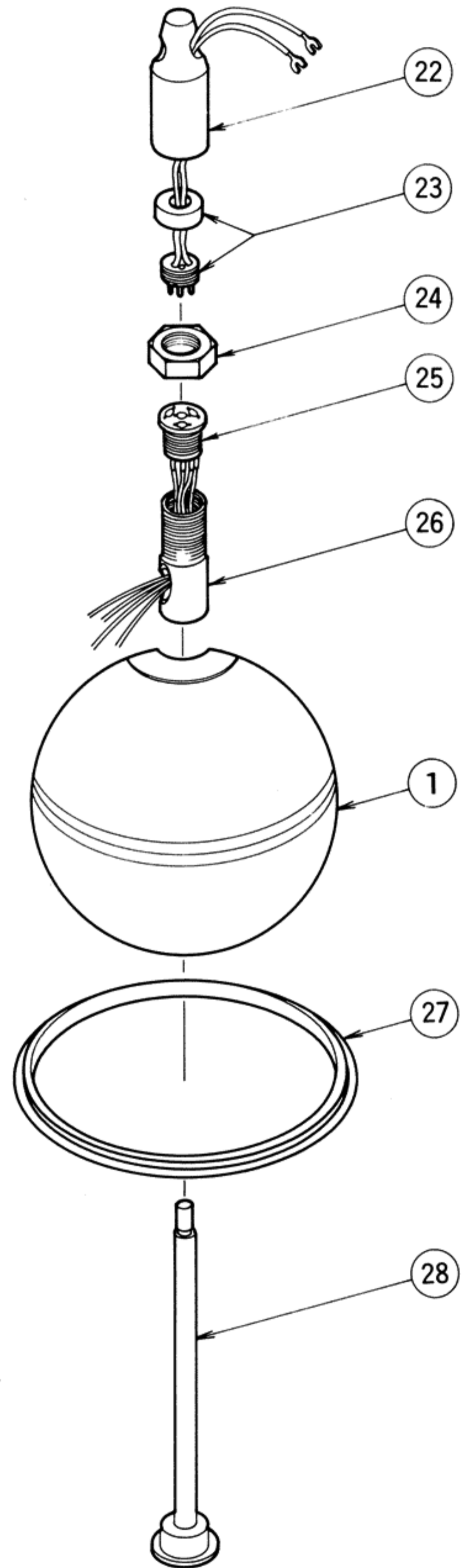


Fig. 3

Schematic Diagram of Model VS-5313 MARK III

Net Work Sub Ass'y

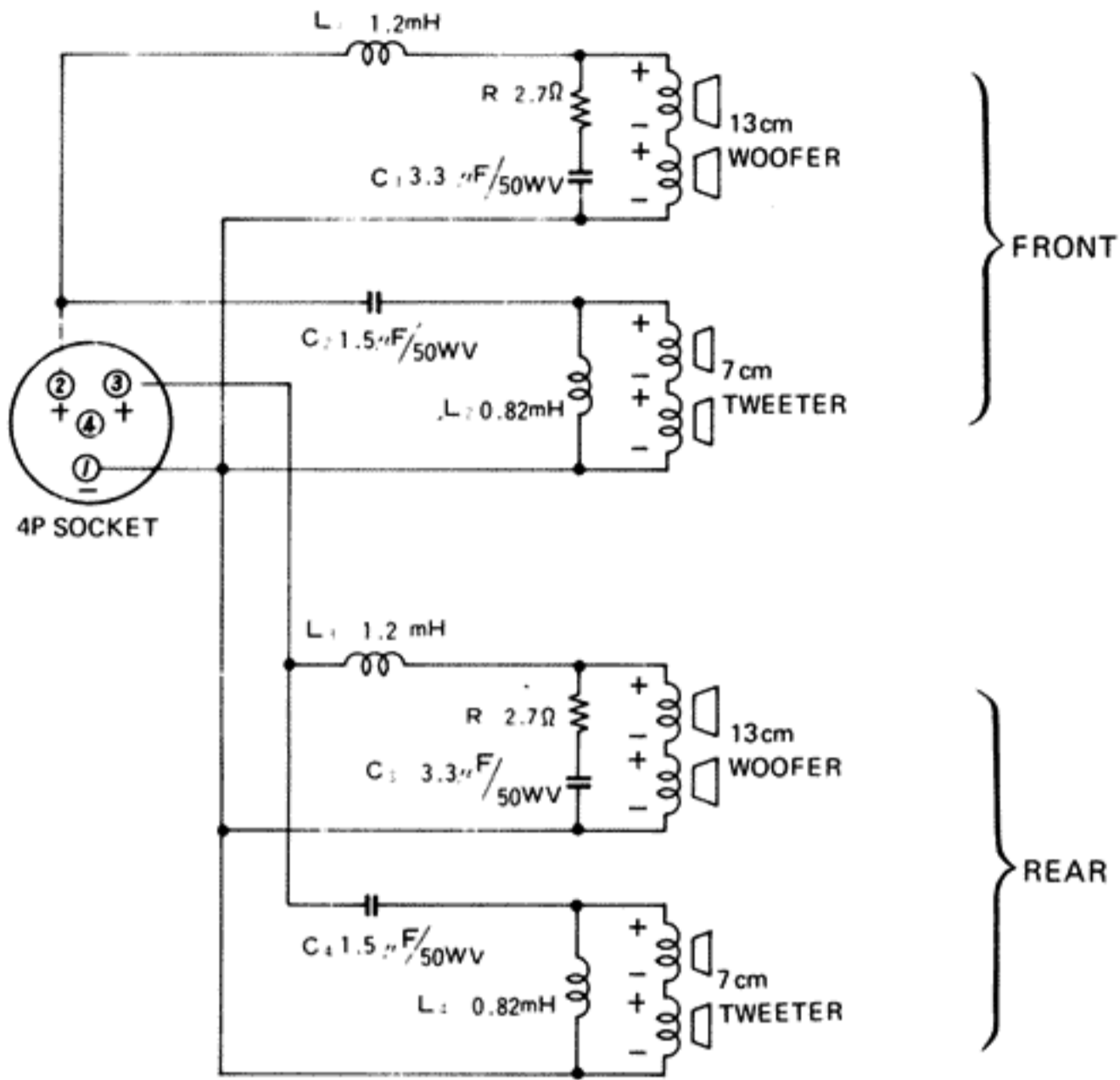


Fig. 4

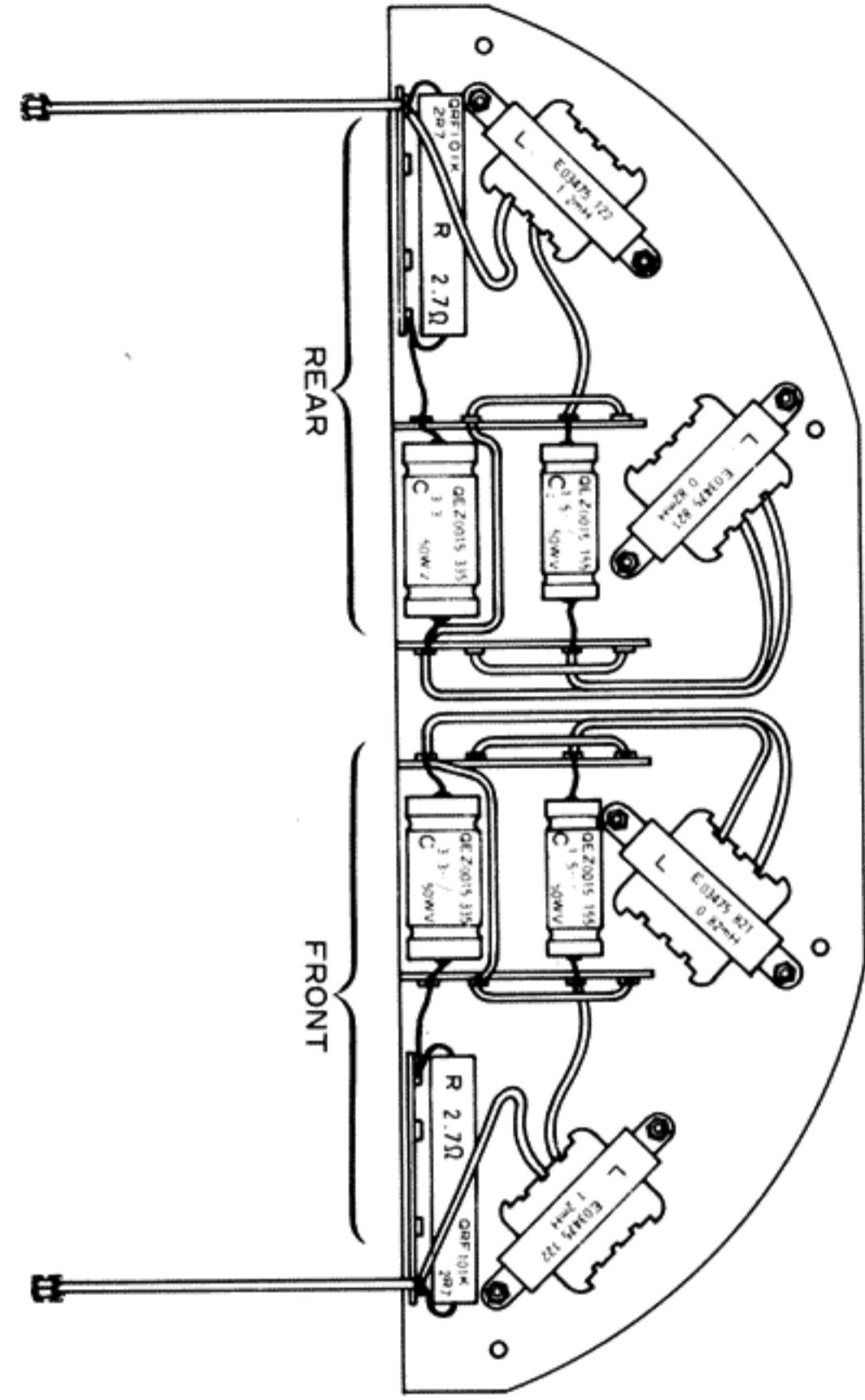


Fig. 5

Wiring of Model VS-5313 MARK III

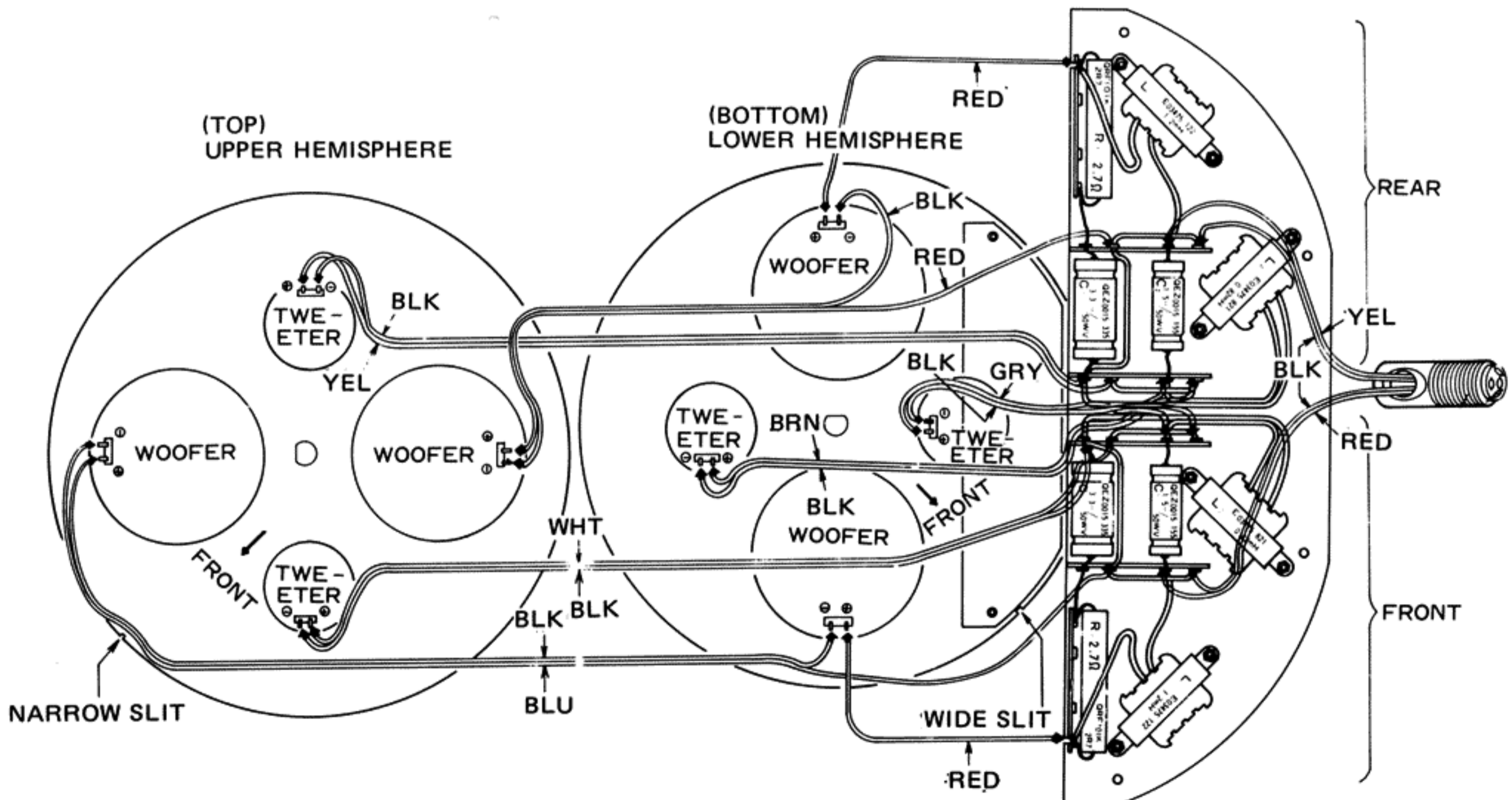


Fig. 6

Installation

(1) Suspending from the ceiling

Because of the relatively heavy weight (20.9 lbs./9.5 kg) of the J V C VS-5313 MARK III, it is strongly recommended to consult an architect or carpenter before attempting to suspend it from the ceiling of your room. Also, be sure to use the adaptor (shaft bracket) attached to the speaker system for this purpose.

(2) Setting on a floor stand

To mount the speaker system on an optional floor stand, the GBS-1/5901, proceed as follows:

- 1) Place speaker system 1 on cushion 6, then remove shaft bracket 2 from speaker system.
- 2) Run speaker cords 3 through pipe 4, and screw pipe into speaker system.
- 3) Run speaker cords 3 through foot 5, and screw foot into pipe 4.

(3) Placing on a table

If your VS-5313 MARK III is to be placed on a table or desk, simply screw foot 5 into speaker system 1.

Note :

If two VS-5313 MARK III systems are used in a stereo system and their polarities differ in relation to the amplifier, reverse phase is created and hinders quality stereo sound reproduction. So be sure to check the polarities of speaker cords 3 when connecting them to an amplifier. The one with a blue line running its length is for the minus polarity.

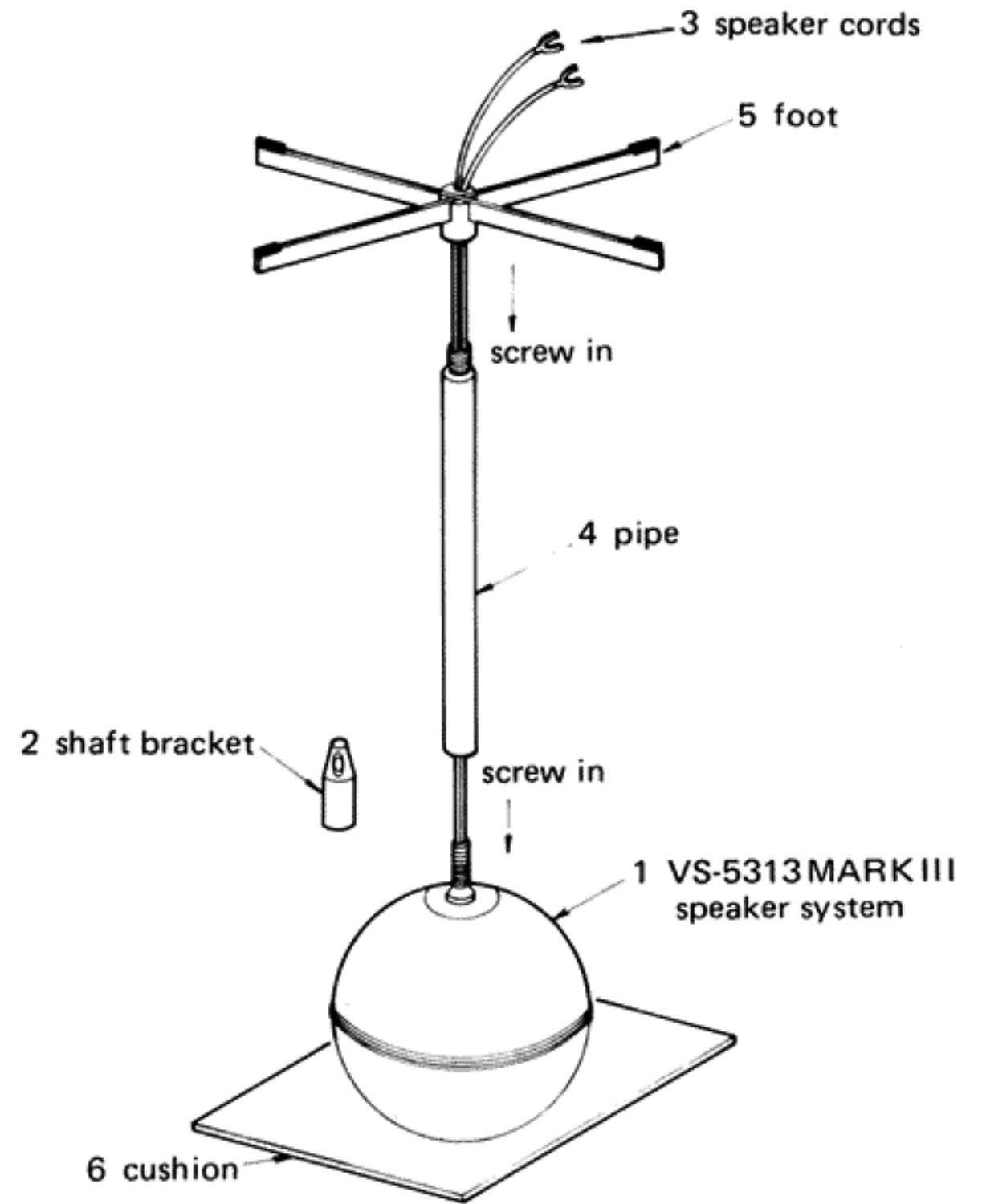


Fig. 7

Installation Reference

NUMBER & CONNECTION OF SPEAKER SYSTEMS			
TOTAL DYNAMIC POWER OUTPUT OF AMPLIFIER (IHF Standard)	AUDIOPHILE & HOME USE		CONTINUOUS HEAVY-DUTY COMMERCIAL USE
(50W + 50W) 100W or less (r.m.s.)	<p>Amps. Speakers</p>	Amplifier will not overload VS-5313 MARK III under any conditions.	
100W + 200W (50W + 50W)~ (100W + 100W) (r.m.s.)	<p>Amps. Speakers</p>	(1) VS-5313 MARK III will tolerate input of 80 to 100 watts peak up to 5 minutes in succession.	
200W + 300W (100W + 100W)~ (150W + 150W) (r.m.s.)	<p>Amps. Speakers</p>	(2) Never feed more than 100 watts peak regardless of maximum power output of amplifier.	
300W~400W (150W + 150W)~ (200W + 200W) (r.m.s.)	<p>Amps. Speakers</p>	(3) If you wish to avoid any possibility of accidental overload, use additional VS-5313 MARK III's or insert 8ohms/30W dummy resistors according to right-hand commercial use diagrams.	

Note : Recommended number of speaker systems for any given room is a pair of VS-5313 MARK III's for 200 square feet (approximately 20 square meters).

Cautions

While the J V C VS-5313 MARK III is primarily designed for audiophiles, its omni-directional performance makes it also ideal for use in places of public accommodation, such as churches, restaurants, etc. However, if it is to be used in such places, it is very important to observe the following:

(1) The VS-5313 MARK III is designed to provide clean, undistorted sound reproduction at an input of 50 watts r.m.s. or a peak power input (momentary maximum input) of 100 watts. Also, it can, by design, accept a greater power input, particularly of higher frequencies, than many other speaker systems. But if it is to be operated for an extended period of time at a time, care should be taken to hold the peak power input below 100 watts (8 ohms) or 28 volts.

(2) The recommended number-of-speakers for any given room or auditorium is one VS-5313 MARK III system per 100 square feet. This means that an auditorium 800 square feet in area should be equipped with eight systems for best results.

(3) The VS-5313 MARK III is a precision instrument which is exceptionally sensitive to higher frequencies. Precisely because of this, however, it will pick up any distortion from the amplifier or receiver in use. It is therefore advisable to utilize a quality amplifier or receiver, capable of delivering a minimum of 25 watts r.m.s. per channel. This is desirable even if the desired volume level may never require a power output in excess of 25 watts r.m.s. per channel.

Should you require any additional technical information on the installation and operation of the VS-5313 MARK III, consult your nearest J V C dealer or write to us directly.

Operations

(1) To operate the VS-5313 MARK III as a front radiation type system

The VS-5313 MARK III can be made to radiate sound only in one direction merely by altering the wiring of the 4-pin plug inside the shaft bracket from Fig. 8 to Fig. 9. In this case, the side of the speaker system indicated as FRONT on its name plate should face the desired direction. Also, take care to hold the maximum input power below half that allowed for normal usage in the system's specifications.

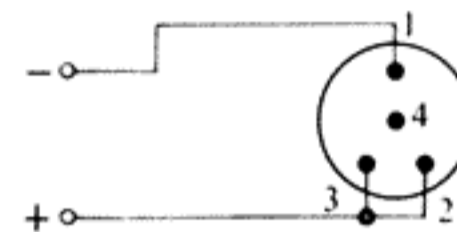


Fig. 8



Fig. 9

(2) To obtain stereo sound from one VS-5313 MARK III system

To obtain stereo sound reproduction from one J V C VS-5313 MARK III system, change the wiring of the 4-pin plug inside the shaft bracket as indicated in Fig. 10, then connect the wires properly to a stereo amplifier. In this case, the side of the speaker system indicated as FRONT on its name plate should face right. Be careful to keep the input power in each stereo channel below half that allowed for the speaker system in normal usage.

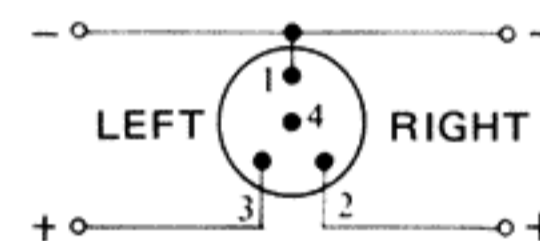


Fig. 10