# SERVCEMANUAL

ZERO-9
SPEAKER SYSTEM



### 1. Specifications

Type

: 3-Way, 4-speaker bass reflex

Speakers

: 12" (30 cm) x 2 free edge woofer

4-1/2" (10 cm) metal dome & cone construction type midrange

Dynaflat ribbon type tweeter

Power handling capacity

: 150 W RMS (DIN) 300 W (MUSIC)

Frequency response

: 25 – 50 000 Hz

Impedance

: 6 Q

Sound pressure Crossover frequency

Weight

: 92 dB/W, m : 450 Hz, 5500 Hz

Level control : 0, -1, -2, -3, -4, -6 (dB)

constant resistance

Dimensions : 41-5/16"(H) x 16-1/8"(W) x

16-3/16"(D)

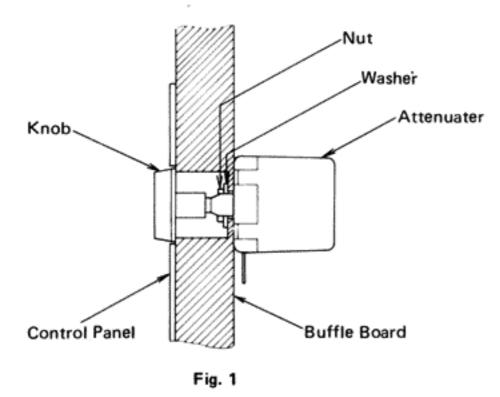
(104.8 x 40.8 x 41.0 cm)

92.6 lbs (42 kg)

#### 2. Removal Procedures

#### 2-(1) Attenuater

Pull off the knob and remove the hexagonal nut retaining the attenuater by using a pair of needle-nosed pliers or a box wrench. When the knob is excessively tight, wrap it with a piece of thick tape or a strip of rubber and then grasp with a pair of pliers.



## 2-(2) Removal and attachment of the speaker units

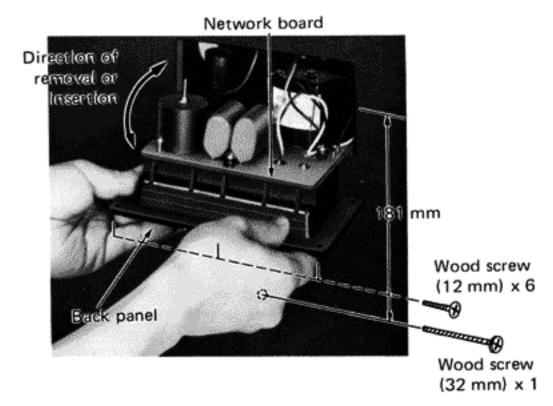
Loosen the screws with a 5-mm hexagonal wrench. Vinyl tubes are employed as spacers for the midrange speaker and tweeter. When these speaker units are replaced, also replace the spacers together with them.

#### 2-(3) Removal and attachment of the speaker protector

When removing the speaker protector, insert a small pointed object into a hole at the rim of the protector and pull toward you. Pull the protector at several equidistant points along its outer edge in this same way. When attaching the protector, apply a slight amount of adhesive into the six slots of the equalizer and then push the protector in its place.

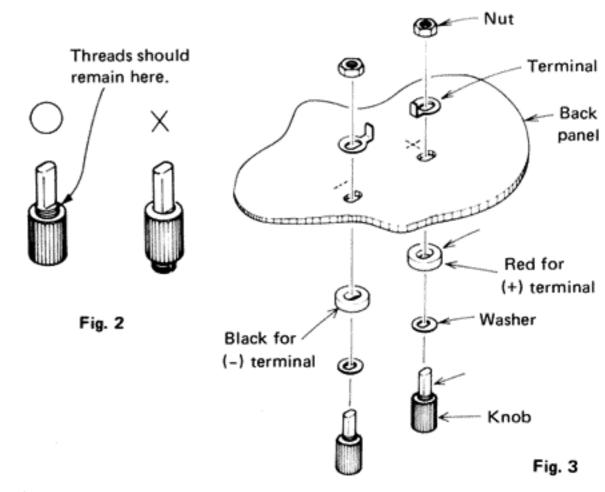
#### 2-(4) Removal of the dividing network

Loosen the six screws on the back panel and the single screw below the back panel (181 mm below the center of the back panel). Then the back panel can be taken off.

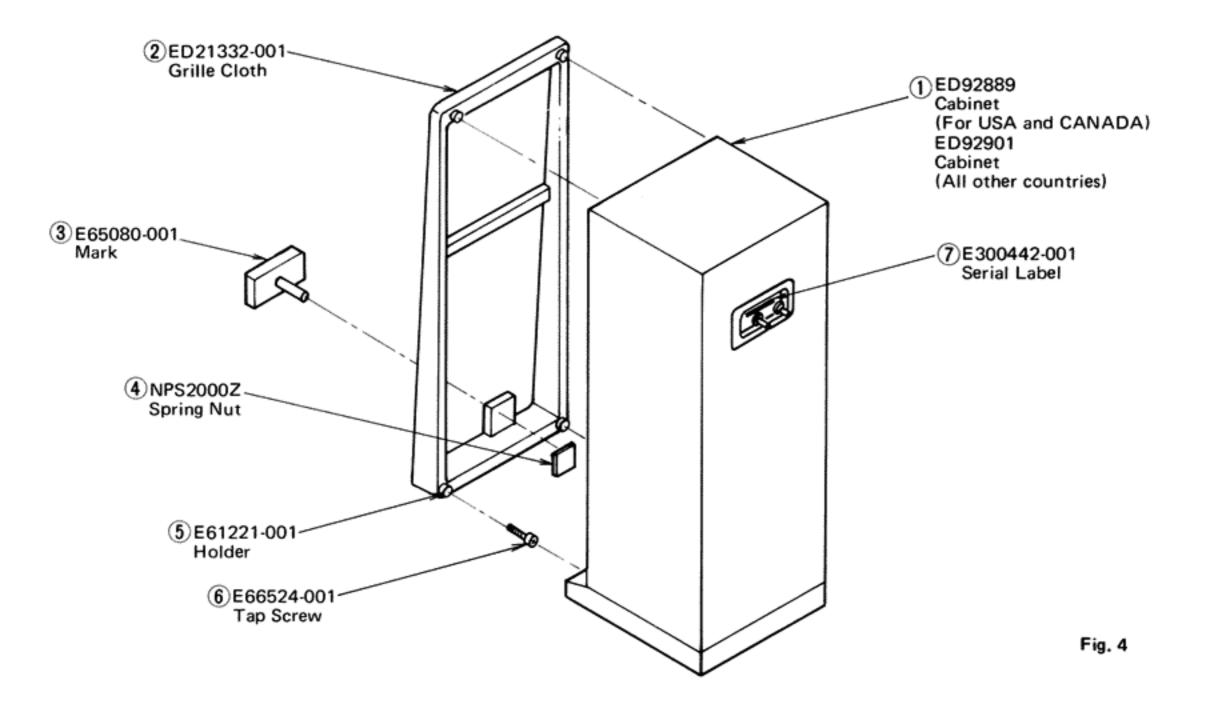


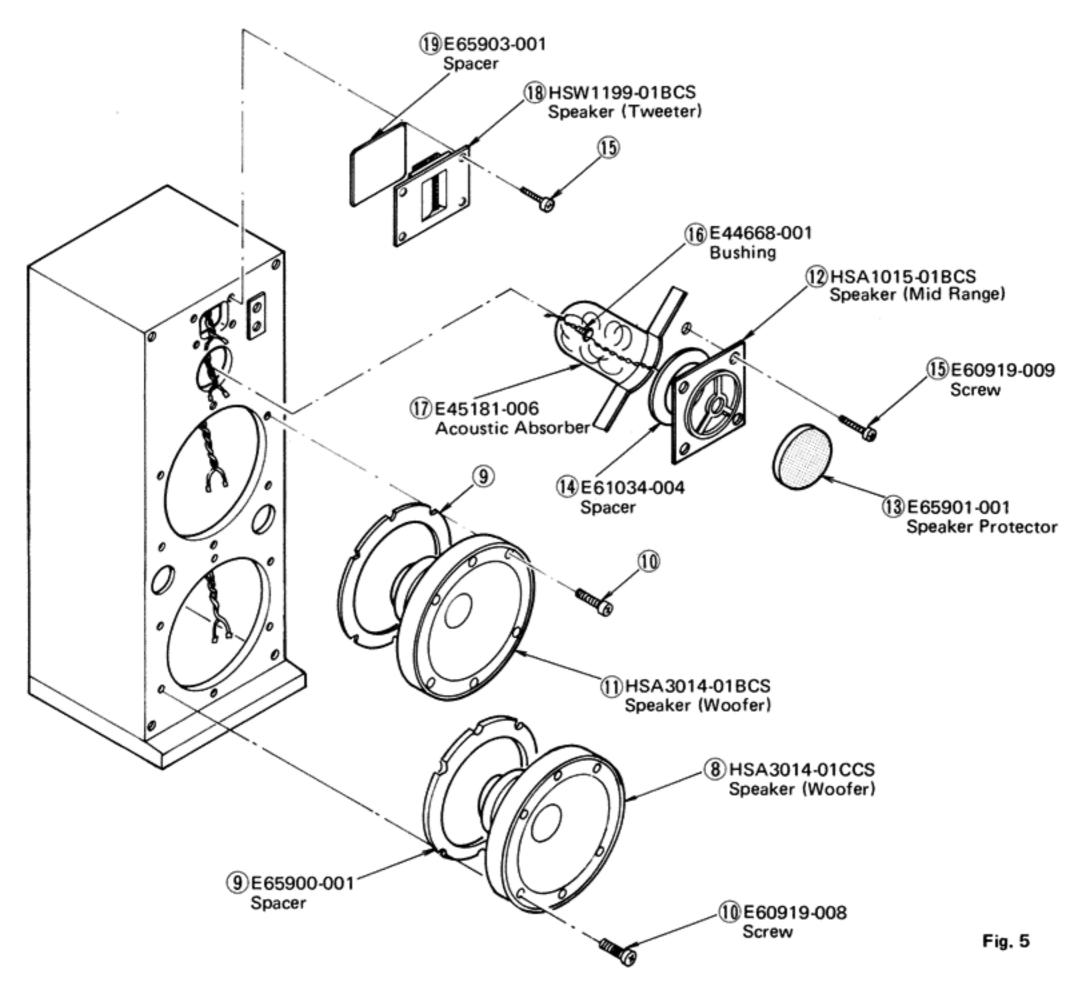
#### 2-(5) INPUT terminals

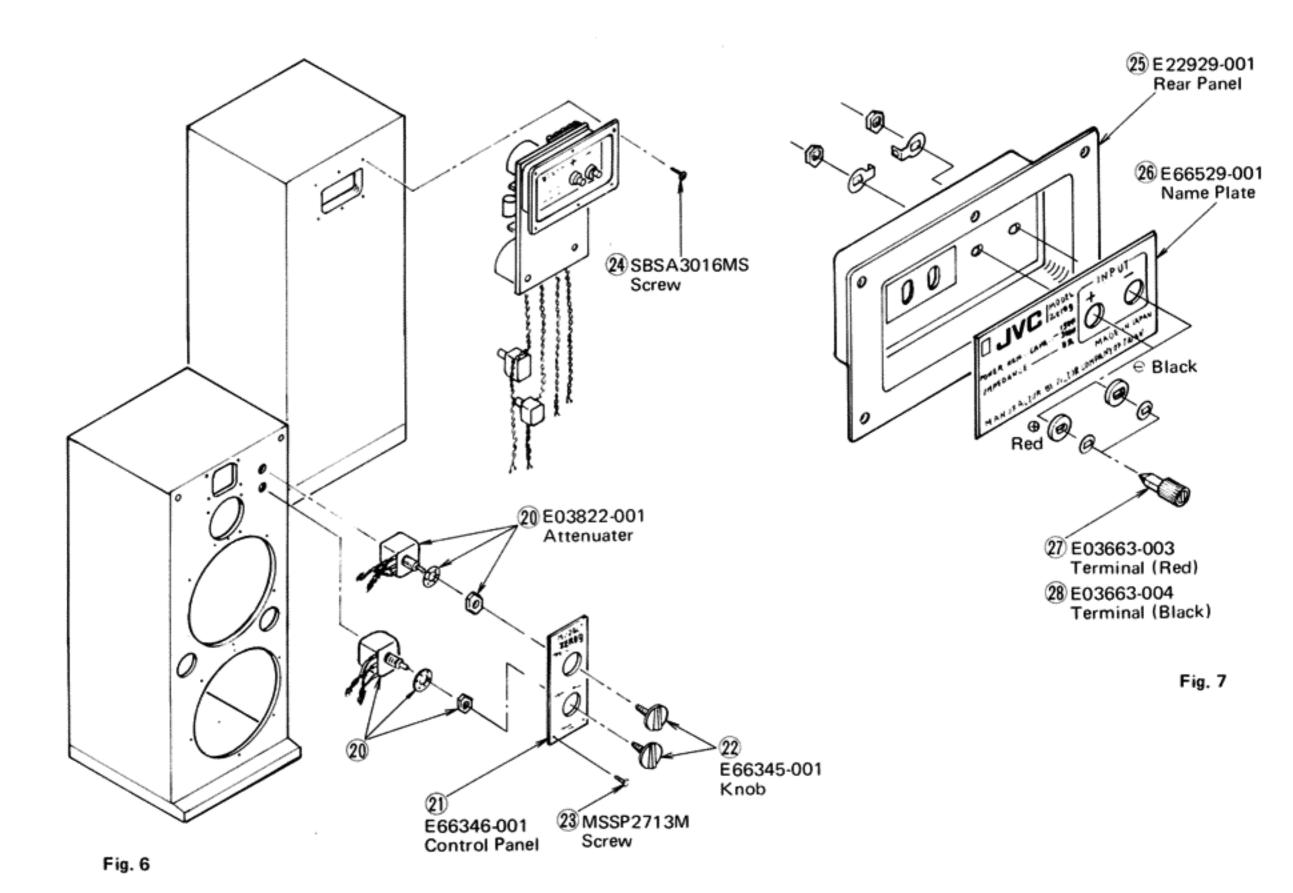
Before installing the terminal knob into the back panel, turn the terminal knob until a few of its threads on the stem remain exposed to receive the nut as illustrated in Fig. 3.

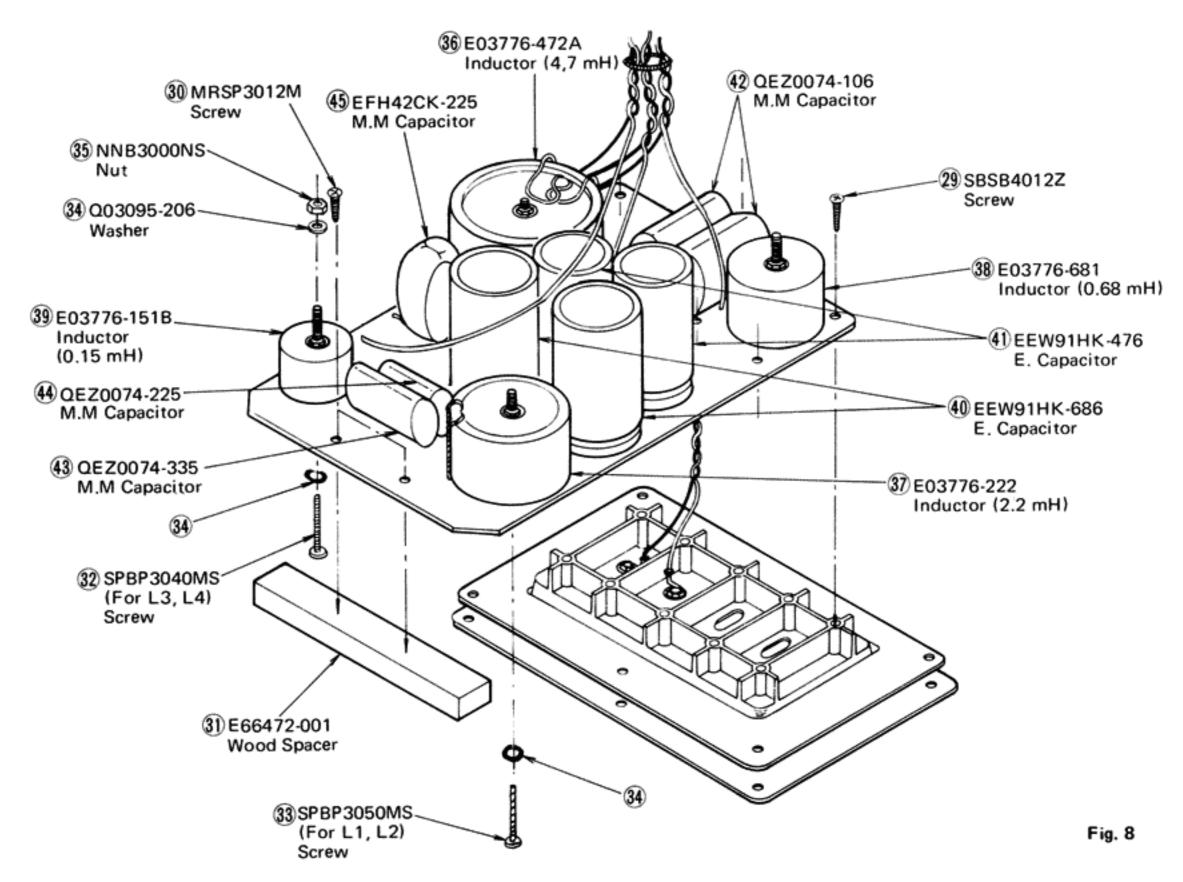


## 3. Exploded View and Part Numbers

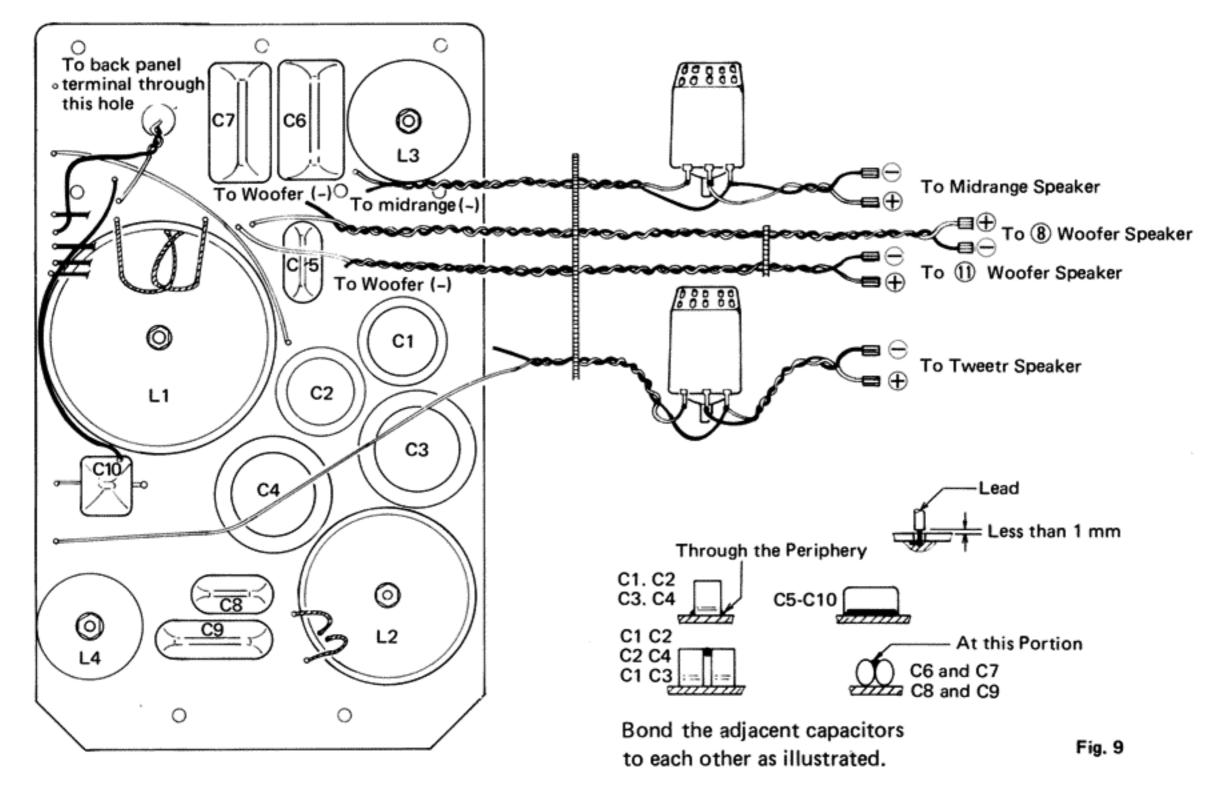








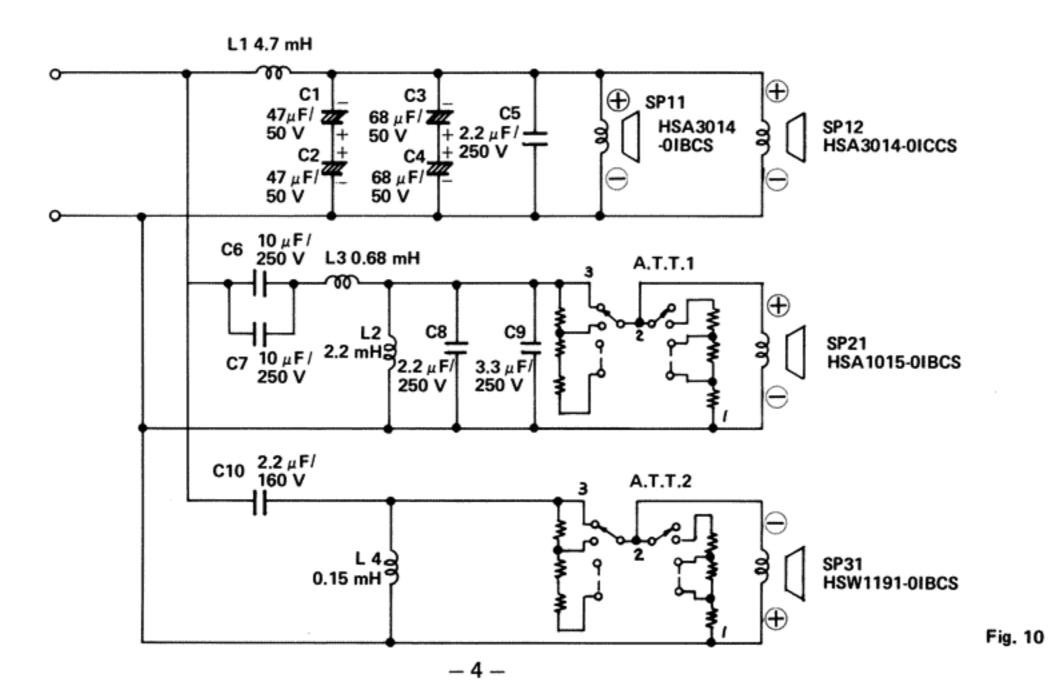
## 4. Connection Diagram



#### Service precautions

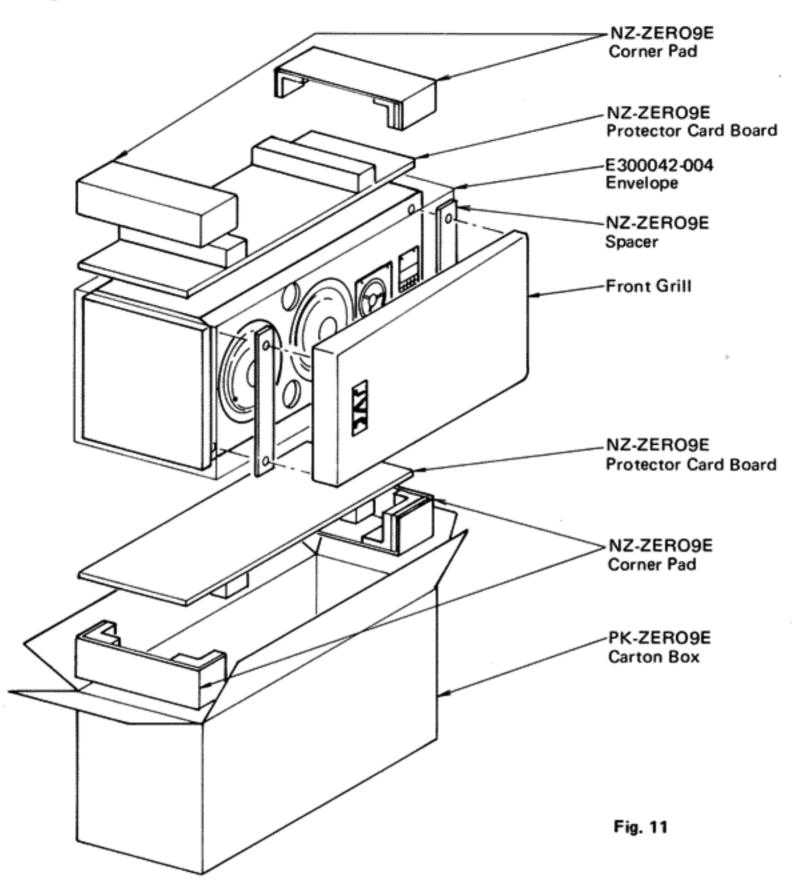
- All wires should be inserted directly into the board and soldered.
- 2. Soldering at each point should be completed within 5 seconds.
- All capacitors should be bonded to the board (at hatched portions).
- 4. The black/white wires are connected to the INPUT terminal on the back panel at the completion of the wiring procedure. Therefore, these wires must enter through the hole of the board.

## 5. Schematic Diagram



ZERO-9 No. 2489

## 6. Packing Material and Part Numbers



## 7. Accessories List

Item No.	Part Number	Description	Q'ty
1	E30580-786B	Instruction Book	1
2	See below	Warranty Card	1
3	E41202-2	Envelope for Instruction Book and Others	1
4	E33721-002	Speaker Cords Ass'y	1 set
5	BT 20023	Service Procedures (For U.S.A. only)	1
6	BT20024B	"Do It Better" (For U.S.A. only)	1

Item No.	Description	U.S.A.	Canada	U.K.	Australia	U.S. Military Market
2	Warranty Card	BT20032	BT20025B	BT20013B	BT20029B	BT20032





