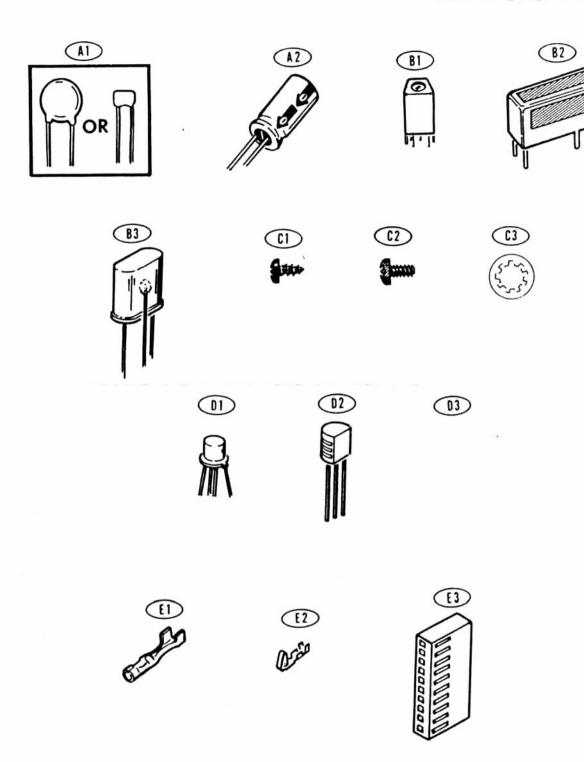
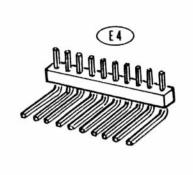
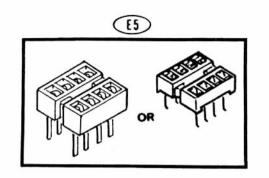
### 595-3437-01

## **ILLUSTRATION BOOKLET**









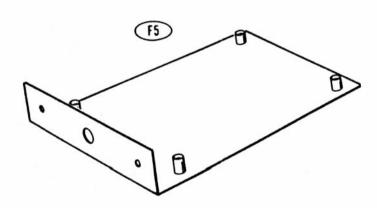














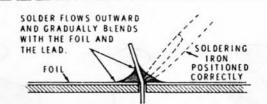


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**PICTORIAL 1-1** 

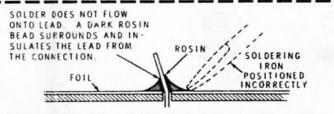
#### A GOOD SOLDER CONNECTION



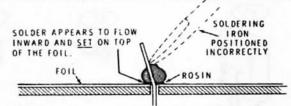
When you heat the lead and the circuit board foil at the same time, the solder will flow evenly onto the lead and the foil.

The solder will make a good electrical connection between the lead and the foil.

#### POOR SOLDER CONNECTIONS



When the lead is not heated sufficiently, the solder will not flow onto the lead as shown above. To correct, reheat the connection and, if necessary, apply a small amount of additional solder to obtain a good connection.

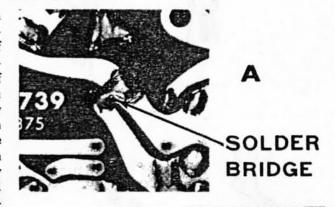


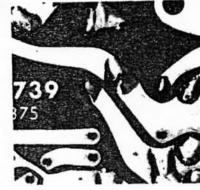
When the foil is not heated sufficiently the solder will blob on the circuit board as shown above. To correct, reheat the connection and, if necessary, apply a small amount of additional solder to obtain a good connection.

#### SOLDER BRIDGES

A solder bridge between two adjacent foils is shown in photograph A. Photograph B shows how the connection should appear. A solder bridge may occur if you accidentally touch an adjacent previously soldered connection, if you use too much solder, or if you "drag" the soldering iron across other foils as you remove it from the connection. A good rule to follow is: always take a good look at the foil area around each lead before you solder it. Then, when you solder the connection, make sure the solder remains in this area and does not bridge to another foil. This is especially important when the foils are small and close together. NOTE: It is alright for solder to bridge two connections on the same foil.

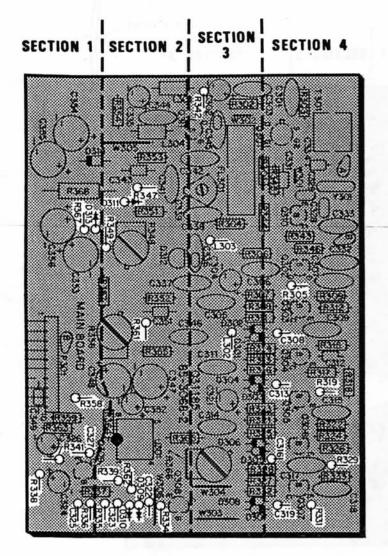
Use only enough solder to make a good connection, and lift the soldering iron straight up from the circuit board. If a solder bridge should develop, turn the circuit board foil-side-down and heat the solder between connections. The excess solder will run onto the tip of the soldering iron, and this will remove the solder bridge. NOTE: The foil side of most circuit boards has a coating on it called "solder resist." This is a protective insulation to help prevent solder bridges.



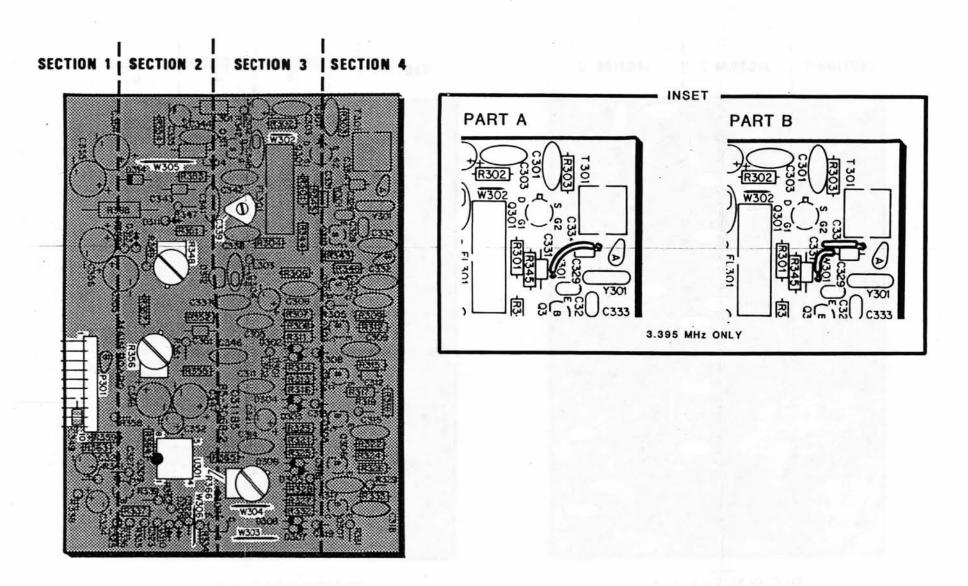


Detail 1-1A-

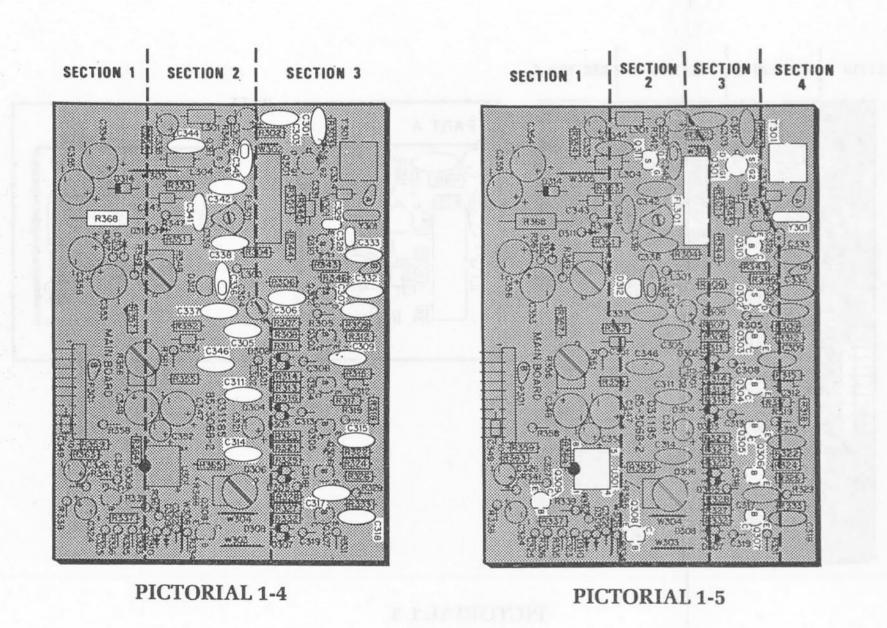
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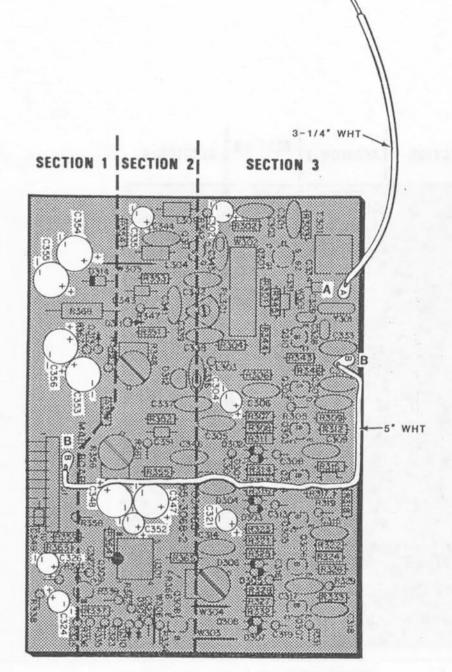


PICTORIAL 1-2

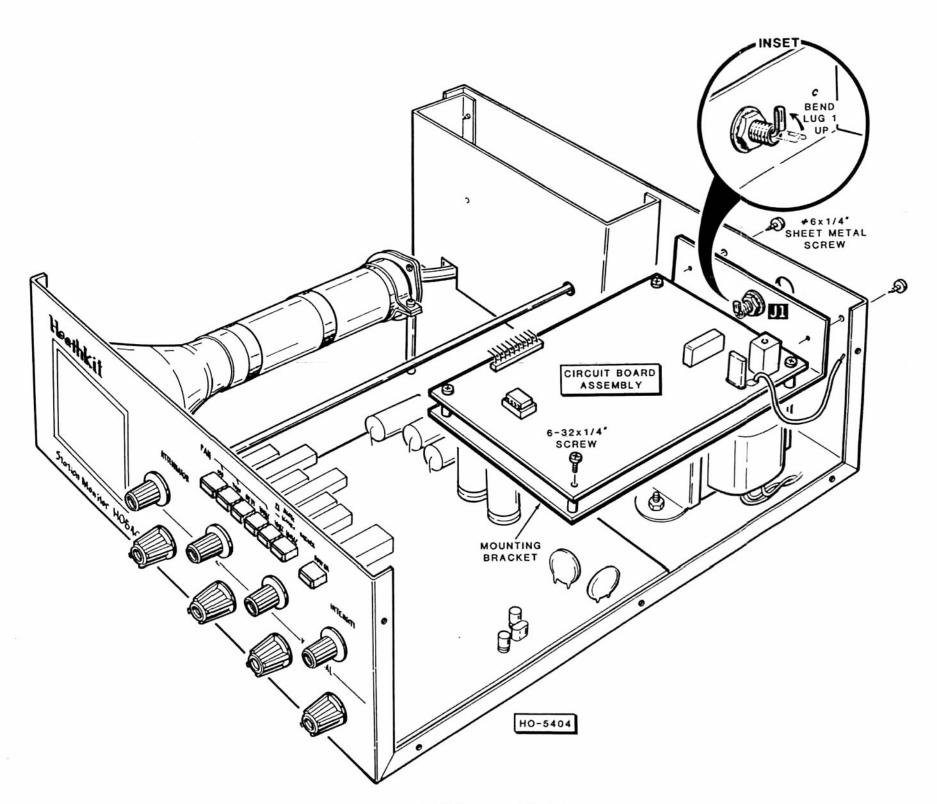


PICTORIAL 1-3

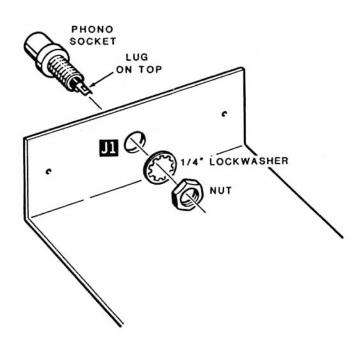




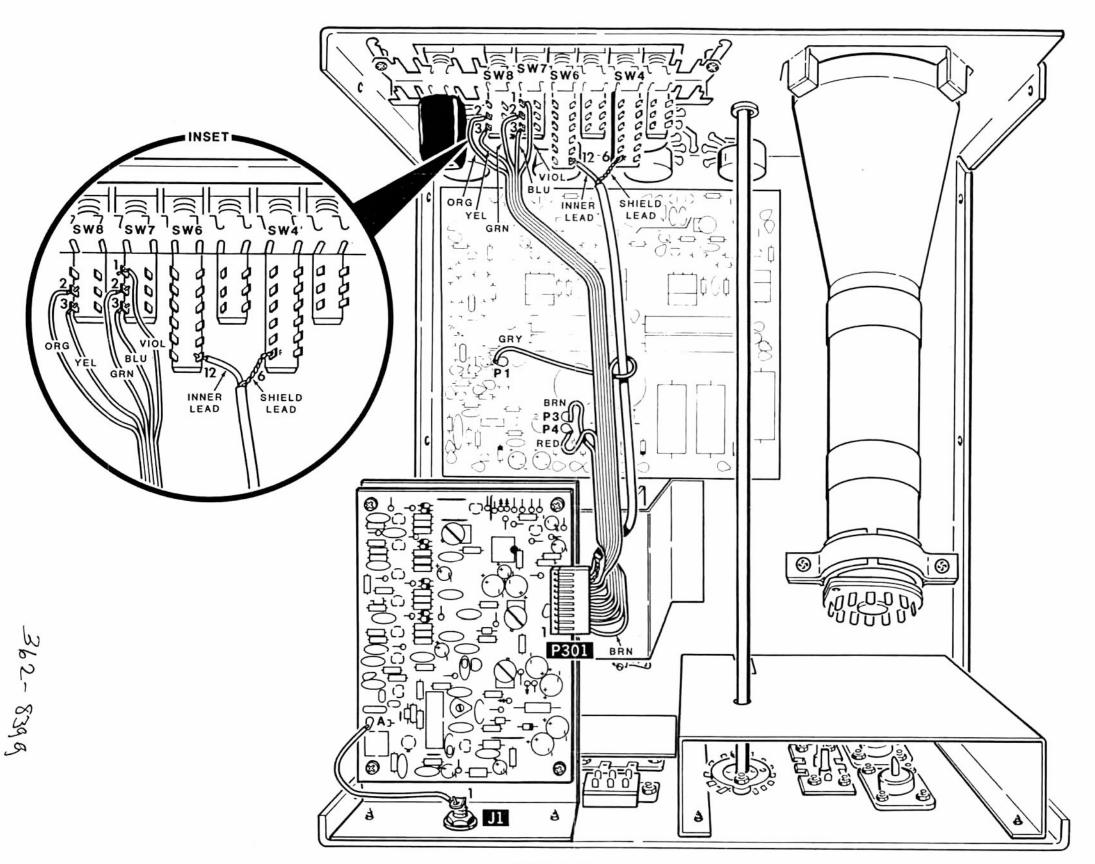
PICTORIAL 1-6



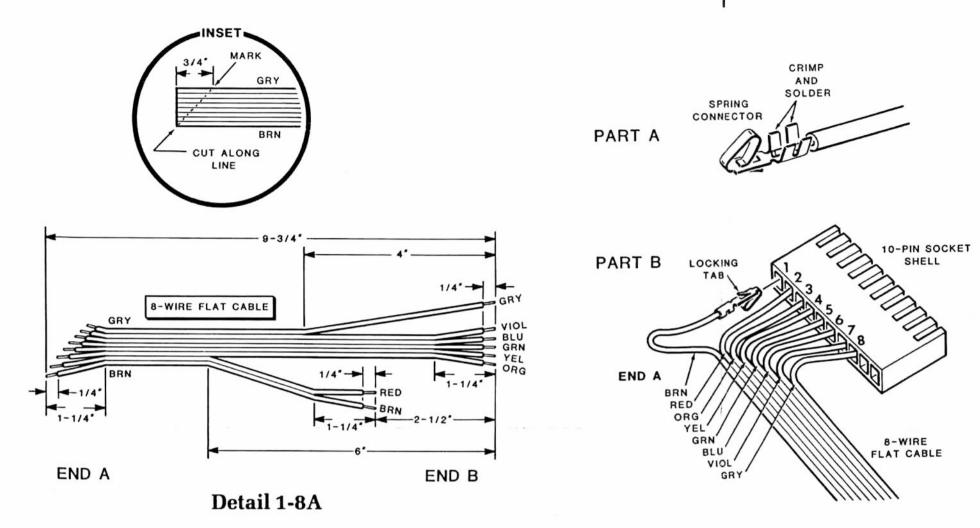
PICTORIAL 1-7



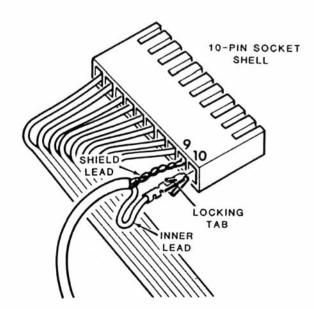
Detail 1-7A



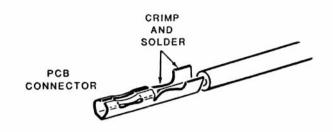
PICTORIAL 1-8



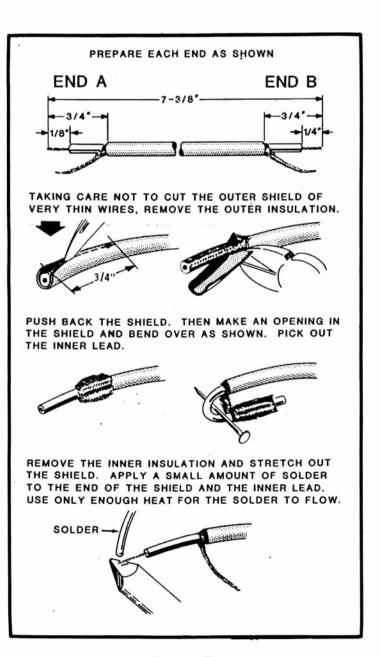
Detail 1-8B



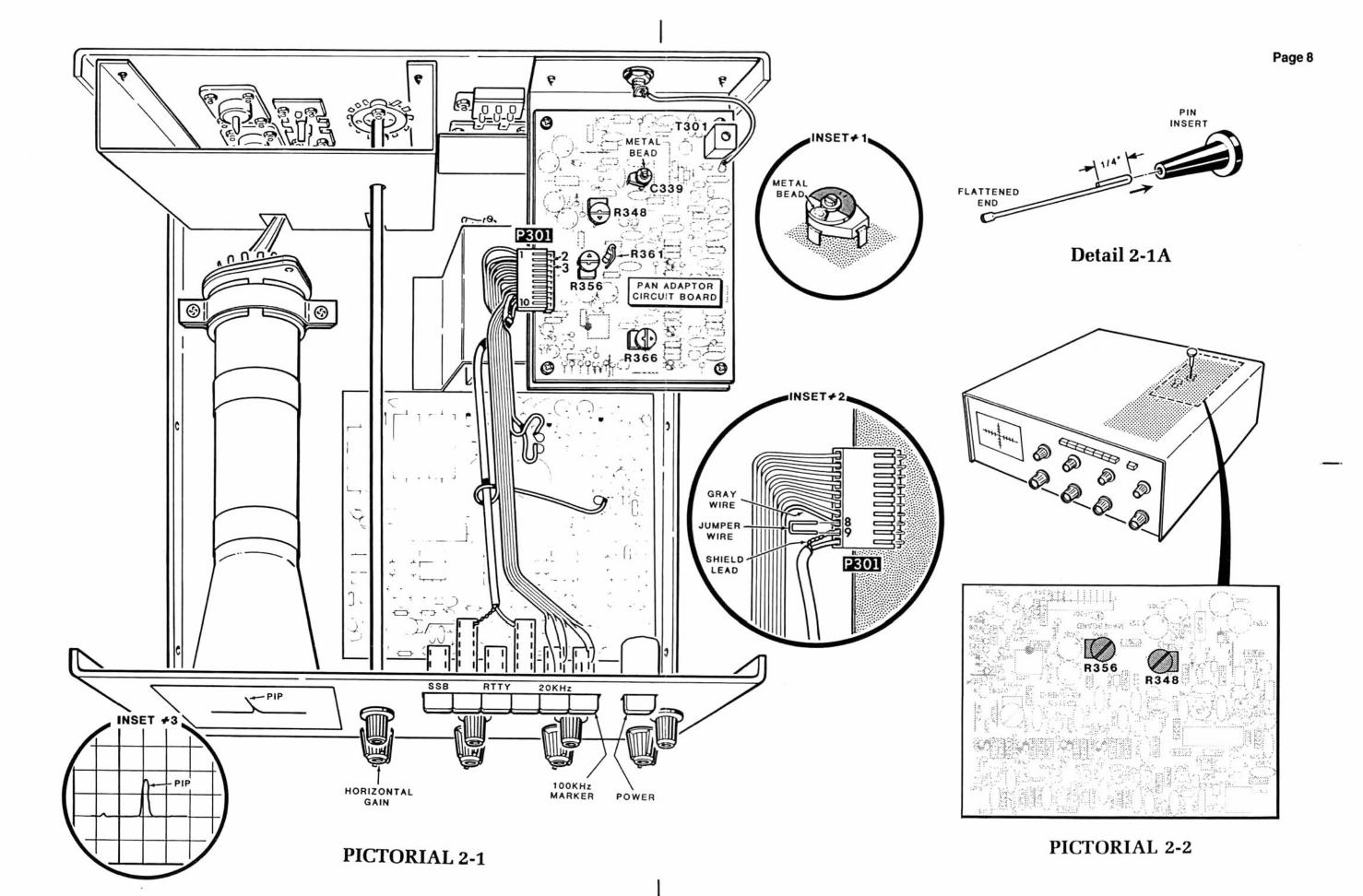
Detail 1-8E

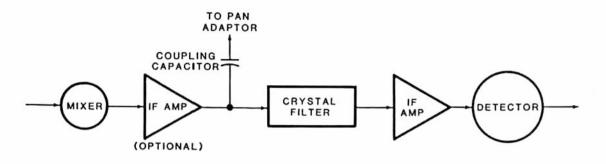


Detail1-8C

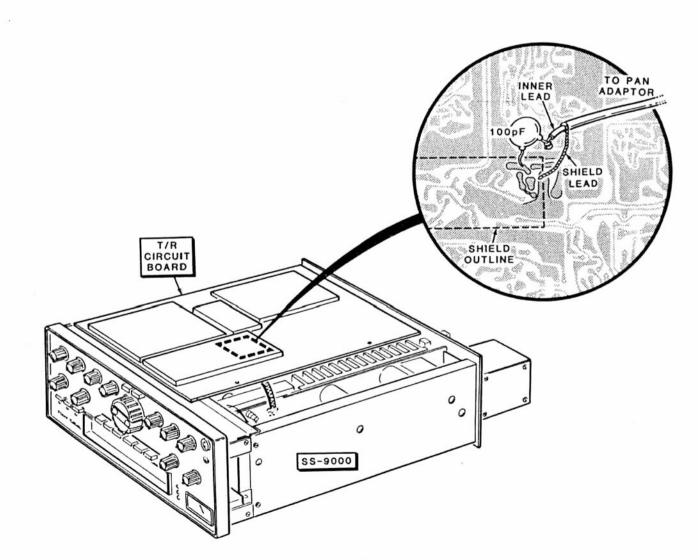


Detail 1-8D

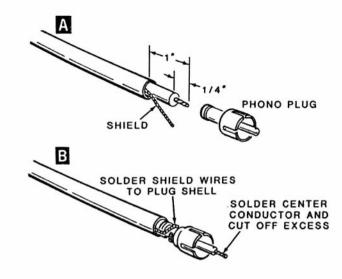




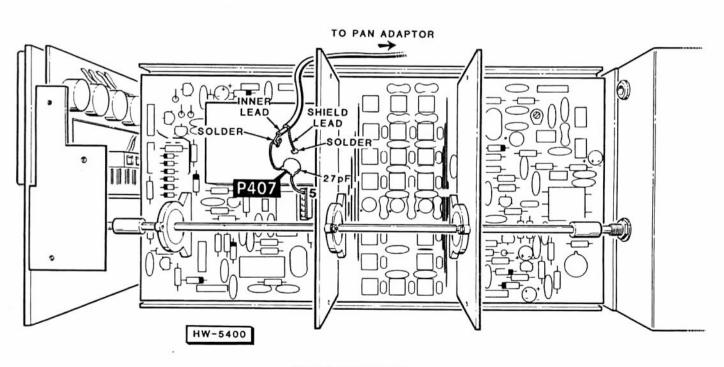
**PICTORIAL 3-1** 



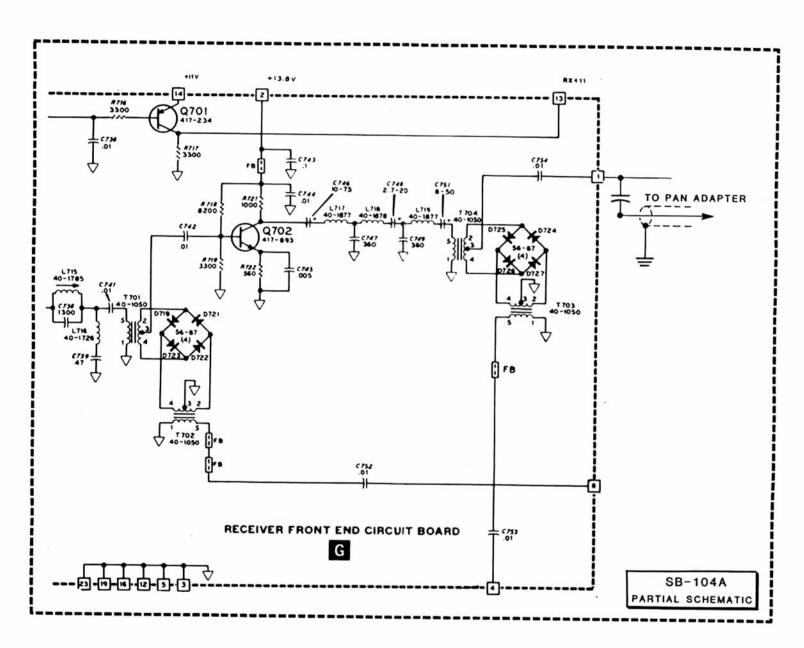
PICTORIAL 3-2



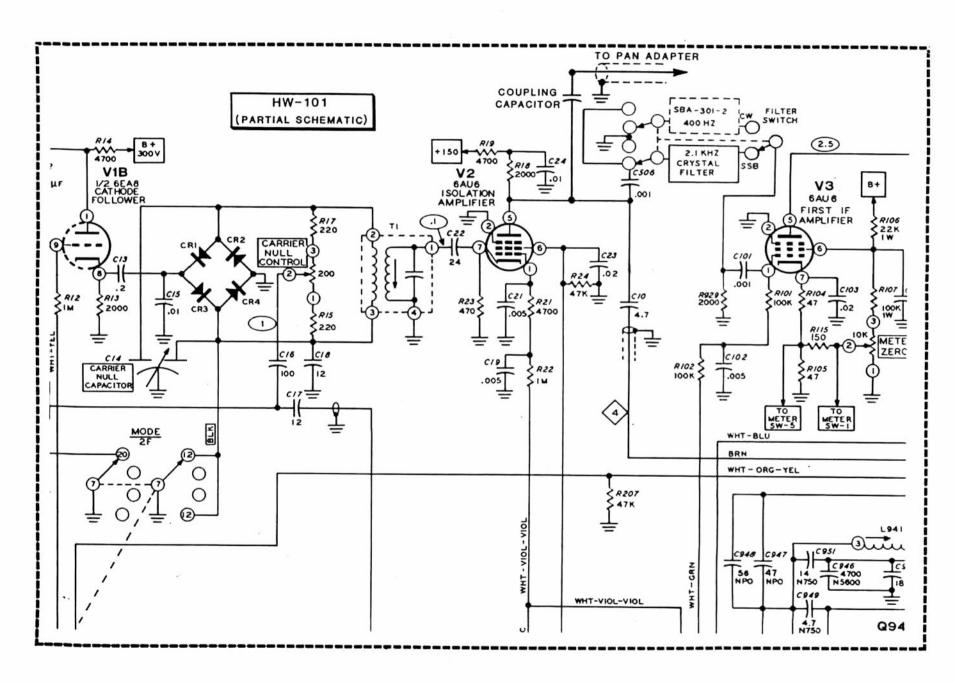
Detail 3-1 A



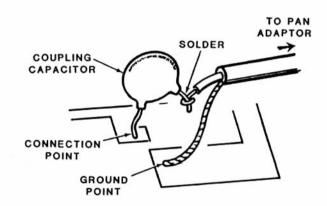
**PICTORIAL 3-3** 



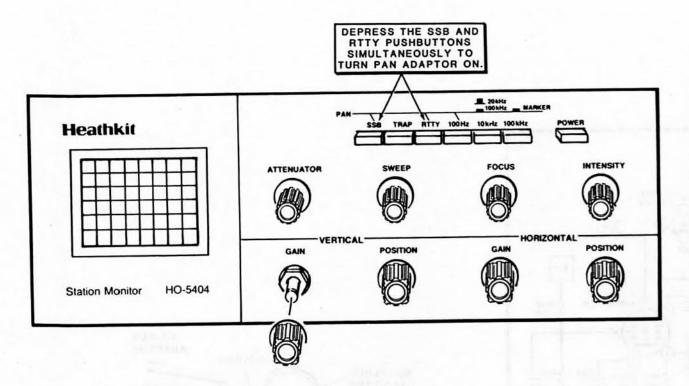
PICTORIAL 3-5



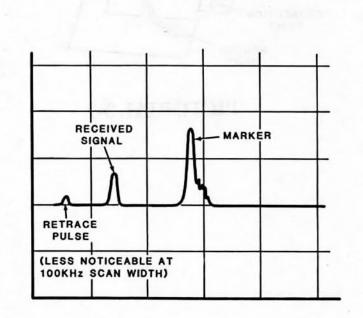
PICTORIAL 3-6



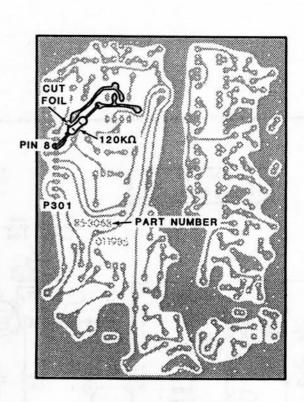
**PICTORIAL 3-7** 



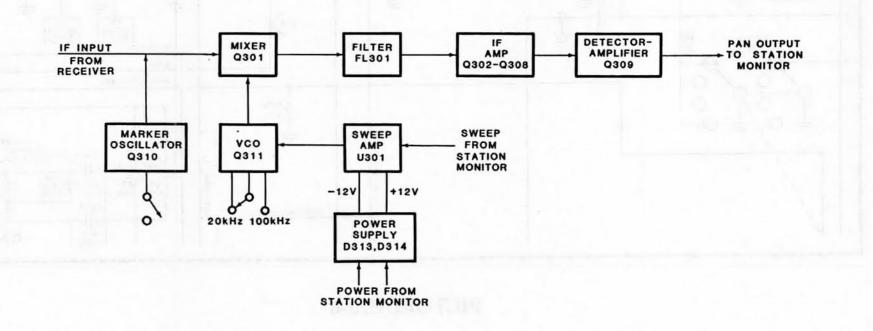
**PICTORIAL 4-1** 



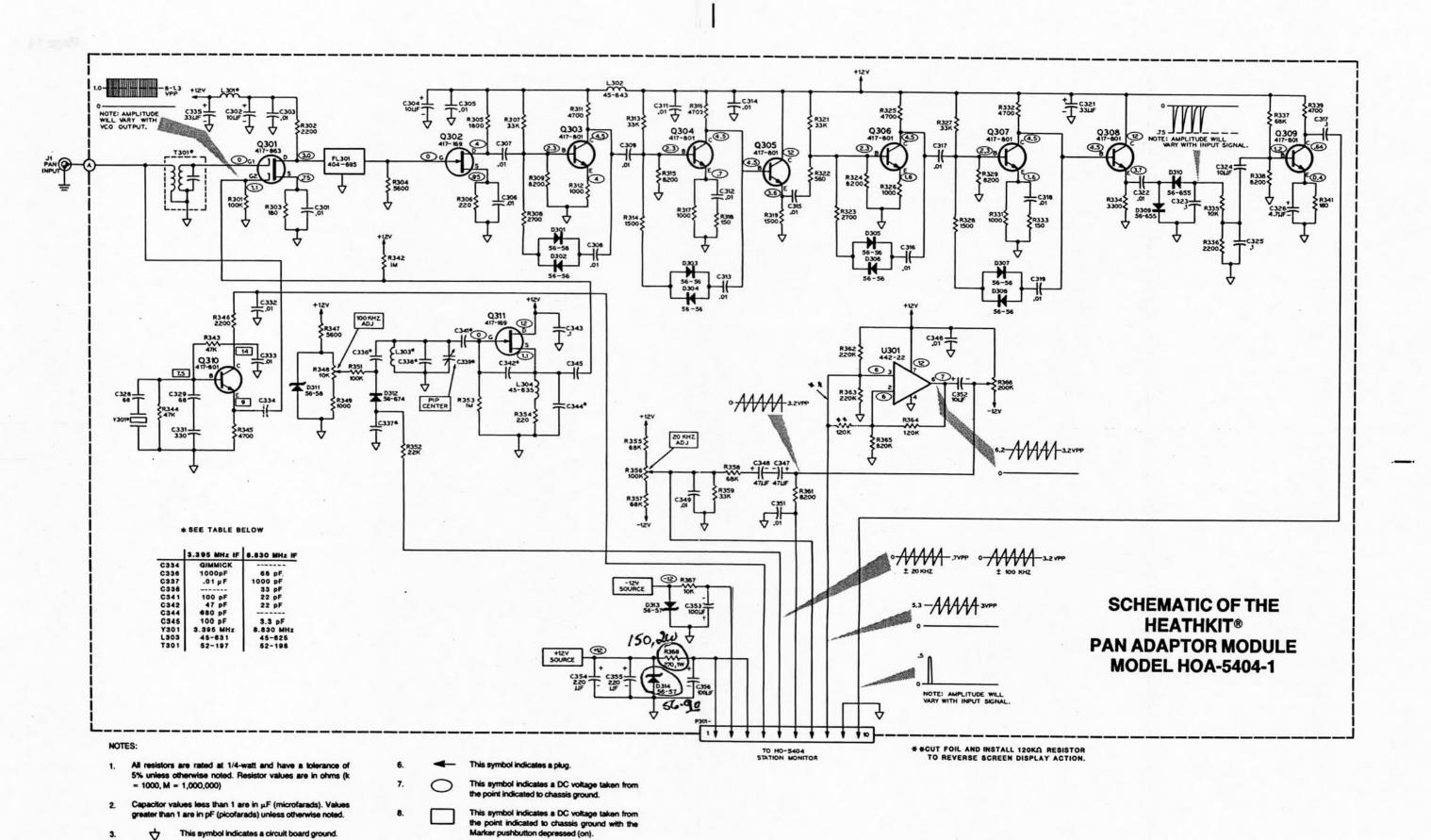
PICTORIAL 4-2



**PICTORIAL 4-3** 



**BLOCK DIAGRAM** 



The oscilloscope Time Base was set for 50 ms to obtain the indicated waveforms. The actual frequency will vary with

the sweep control setting.

This symbol indicates a chassis ground.

This symbol indicates a wire connection to the

0

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