

# section 7

---

## illustrations

### NOTE

The period covered by this instruction book is from February 1968 to the date on the book title page.

Each equipment that had circuit changes made during the period of time covered by this instruction has the changes identified on the applicable sheet of the schematic diagram and in the parts list. Circuit changes on the schematic diagram are flagged with a change identifier pointed at the component or group of components. The identifier indicates that the component or group of components has been changed, and the number in the identifier indexes the specific change. If several components have been changed by the same equipment change, there may be more than one identifier with the same index number.


The index changes are listed on the schematic changes and equipment difference sheet inserted in front of the schematic sheet to which they are indexed.

The identifier-description describes the differences and reasons for changes and includes a recommendation as to what action should be followed during repair on maintenance.

The reason for identifying changes in this manner is that the manufacturer has scrambled serial numbers on amateur products during the period covered by this instruction book. Therefore changes cannot be identified by conventional methods.

None of the equipment changes have been made because the equipment has failed to meet the equipment

specifications and are not recommended changes for all units. Equipment changes have been made to improve performance or reliability of radios that are built using different fabrication processes. These changes will not necessarily improve the operation of your equipment.

The change identifier number is used in the parts list section of this instruction book. However, in the parts list the identifier is enclosed in slashes (for example, /1/) instead of the  symbol.

Voltage and resistance measurements for the 75S-3B/3C are located in the service instructions section of this instruction book.

The following service bulletins have been written against the 75S-3B and 75S-3C Receivers:

<u>SERVICE BULLETIN</u>	<u>DESCRIPTION</u>	<u>DATE ISSUED</u>
1	Improved performance in presence of extremely strong signals, improved performance of mechanical filters, cw operation and headphone audio quality.	Sep 29/67 (2nd revision)
2	Minimize background hum levels.	May 10/62
3	Convert 75S-3B to 75S-3C.	Apr 15/73 (1st revision)



**SCHEMATIC CHANGES**

REVISION IDENTIFICATION	DESCRIPTION OF REVISION AND REASON FOR CHANGE	SERVICE BULLETIN	EFFECTIVITY
1	Changed value of C32 from 6 pF to 12 pF to provide tighter coupling between T4 and T5 and between T4 and FL1. An overall increase in gain (approximately 2 dB) should also result from this change.	Na	Na
2	CR1, CR2 and CR3 changed from 1N1492 to 1N4005 for cost reduction.	Na	Na
3	Resistor R83 changed from 17.8 to 28.7 k $\Omega$ and R85 changed from 51.1 to 21.5 k $\Omega$ to provide better tracking of variable bfo frequency with the front panel calibration points.	Na	Na
4	Changed value of C1 and C2 from 510 to 620 to correct low output injection from vfo.	Na	Na
5	Changed C63 from 100 to 510 and changed C61 from 8-50 to 5-25 to improve performance of crystal calibration.	Na	Na
6	Added R94, C168, and CR8 and changed value of C12 from 1 to 3 to improve the crystal calibrator harmonics.	Na	Na
7	Diode CR8 was changed from JAN 1N826 to 1N4454 to improve calibrator output.	Na	Na
8	CR301 in the 70K-2 Oscillator was changed from 1N34A to 1N4454 for greater reliability.	Na	Na

Figure 7-1. 75S-3B/3C Receiver, Schematic Diagram (Sheet A)

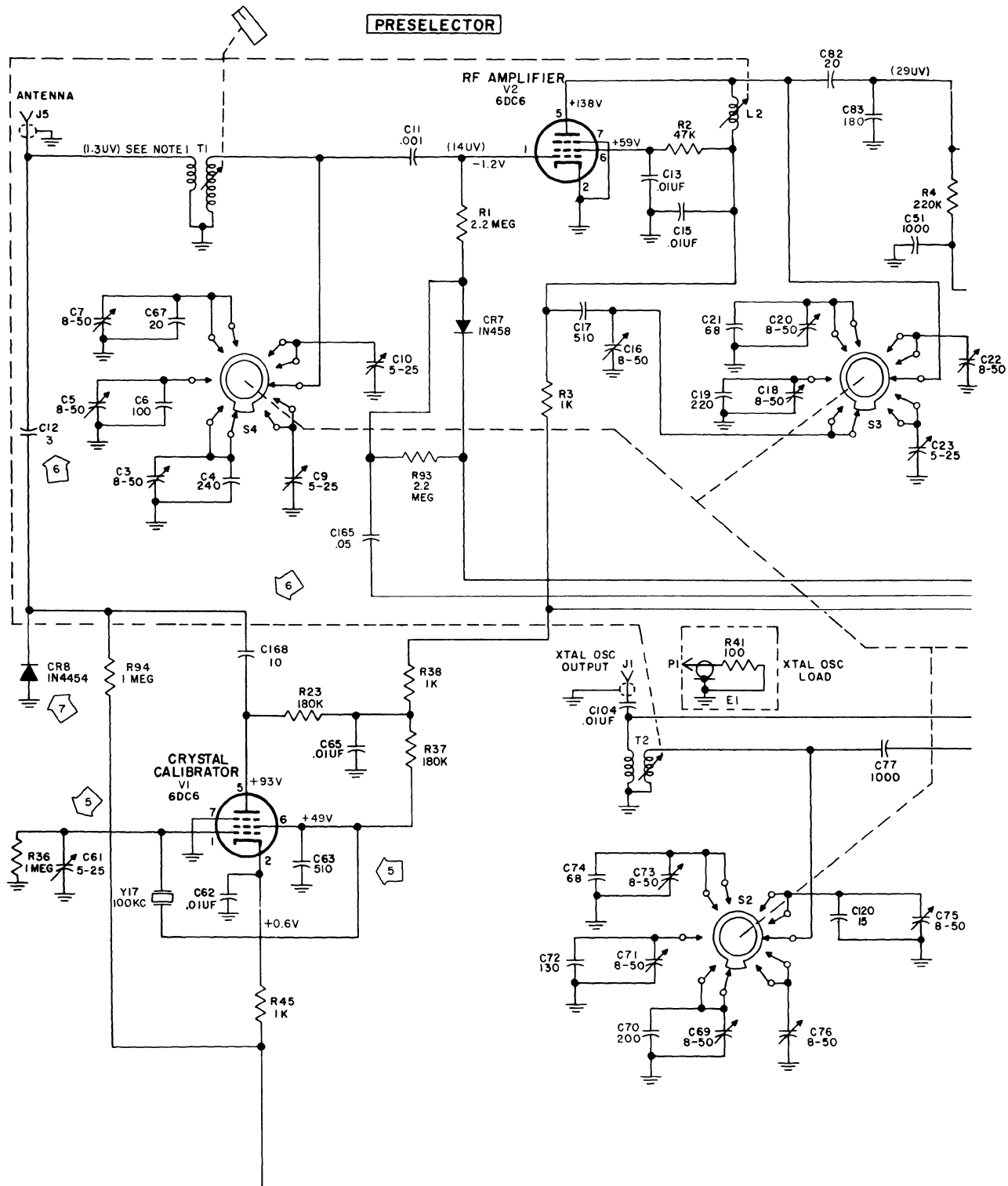
SECTION 7  
Illustrations

***SCHEMATIC CHANGES***

REVISION IDENTIFICATION	DESCRIPTION OF REVISION AND REASON FOR CHANGE	SERVICE BULLETIN	EFFECTIVITY
9	Zener diode CR5 changed from 1N732 to 1N979B due to nonavailability of parts.	Na	Na
10	Changed screen grid choke L15, in hf oscillator from 2 mH to 1 mH to prevent spurious oscillations.	Na	Na
11	Changed zener type to allow tighter tolerances.		

Figure 7-1. 75S-3B/3C Receiver, Schematic Diagram (Sheet B)





SECTION 7  
Illustrations

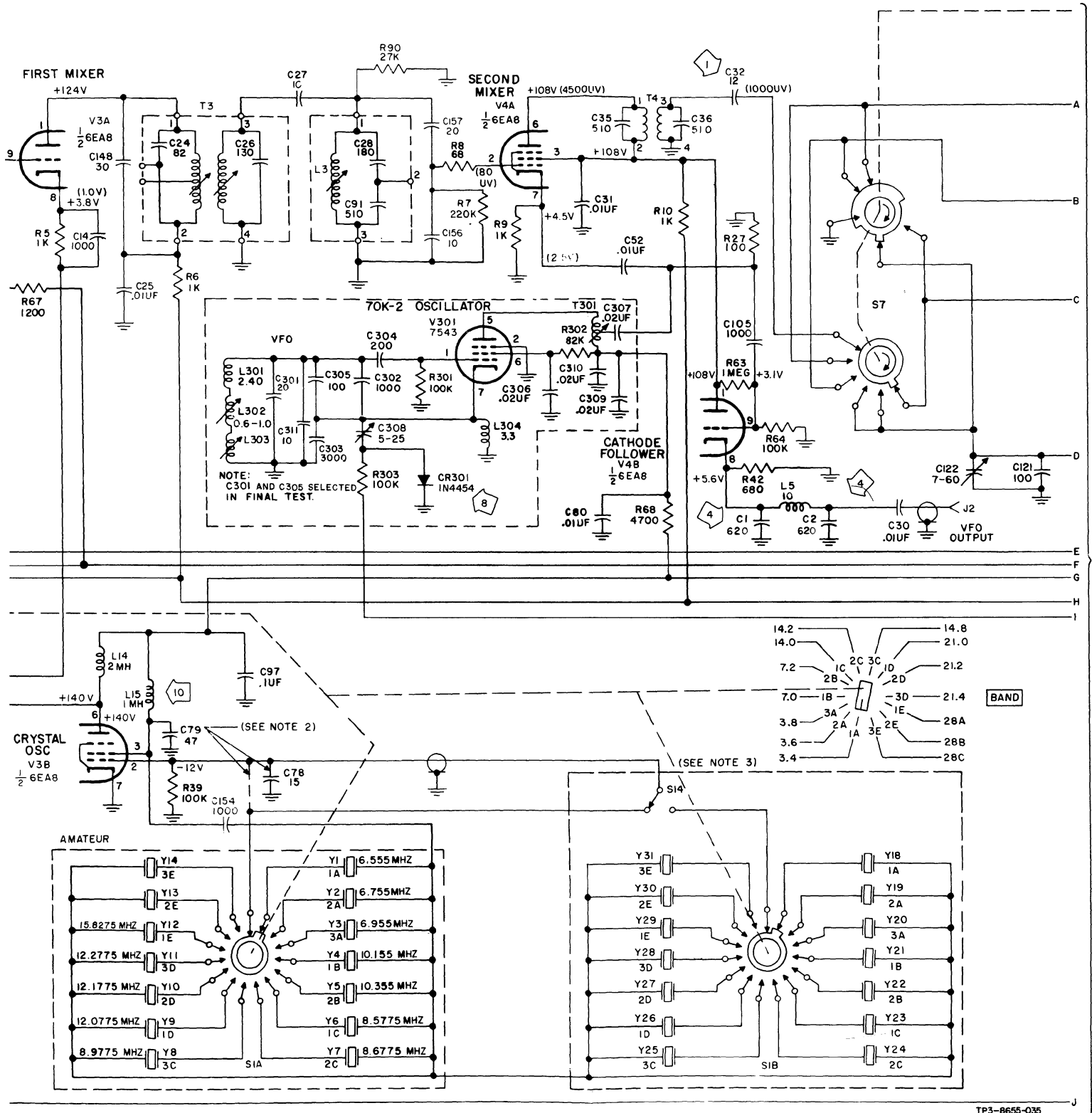


Figure 7-1. 75S-3B/3C Receiver, Schematic Diagram (Sheet 1 of 2)





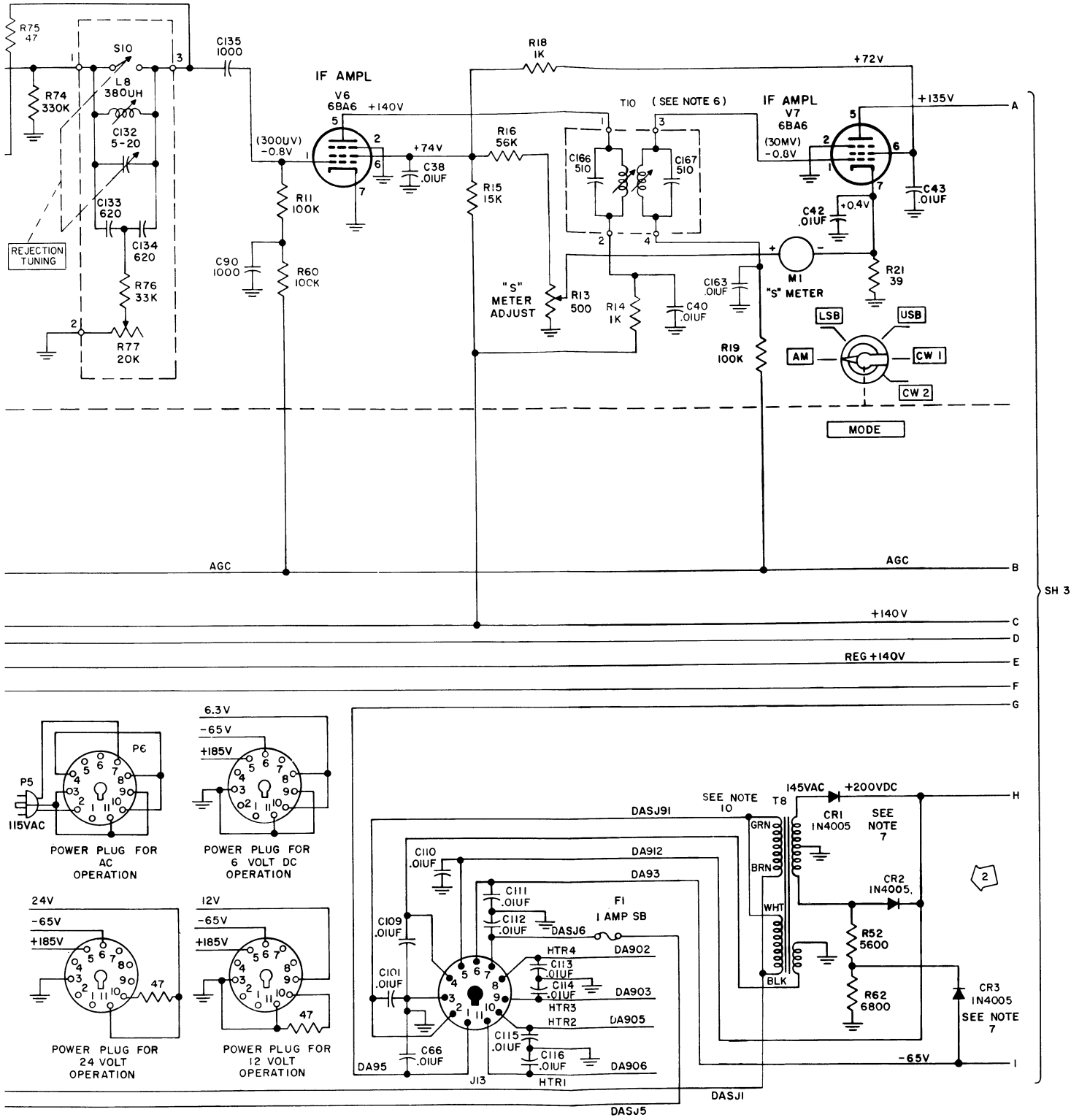
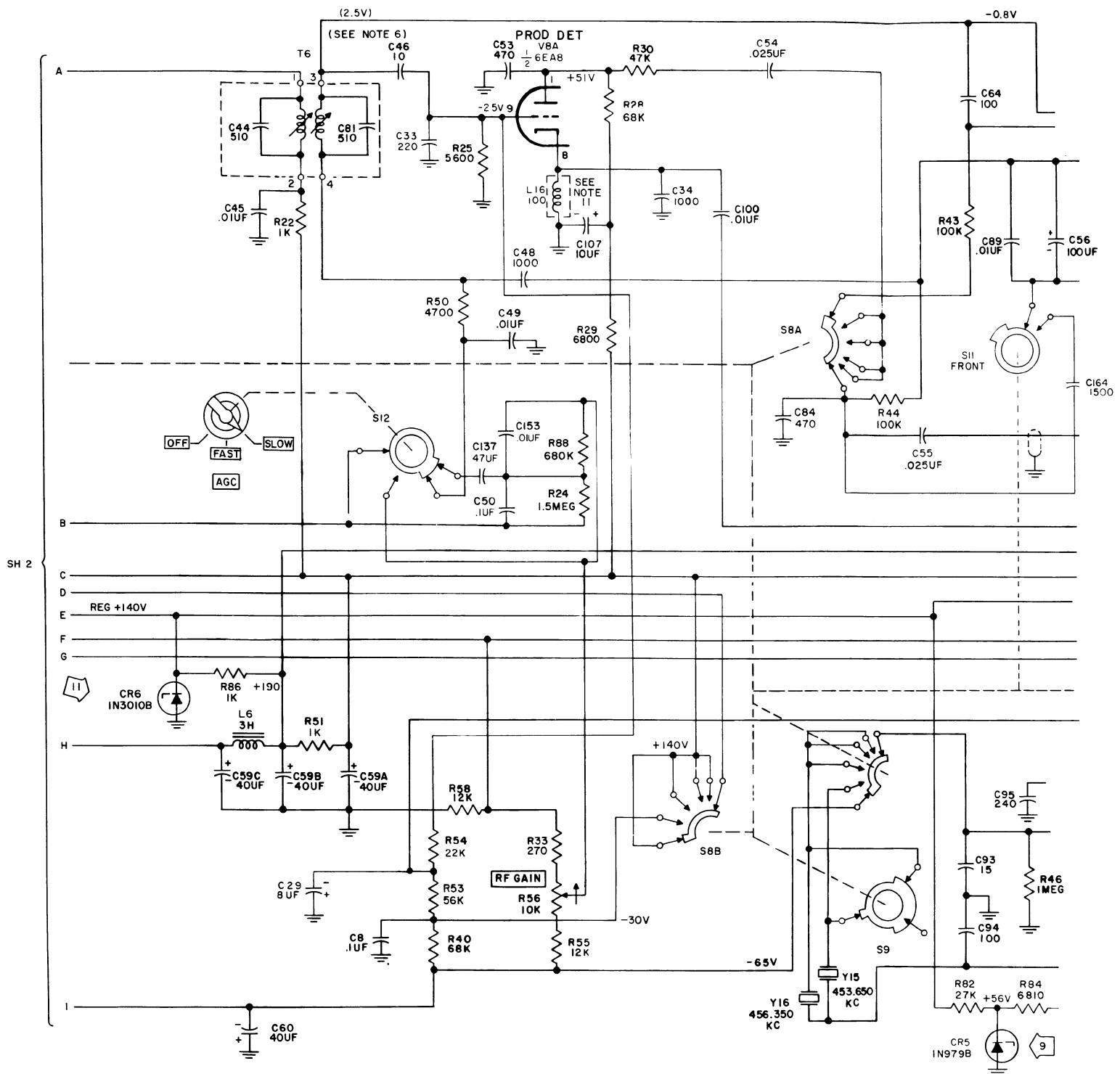
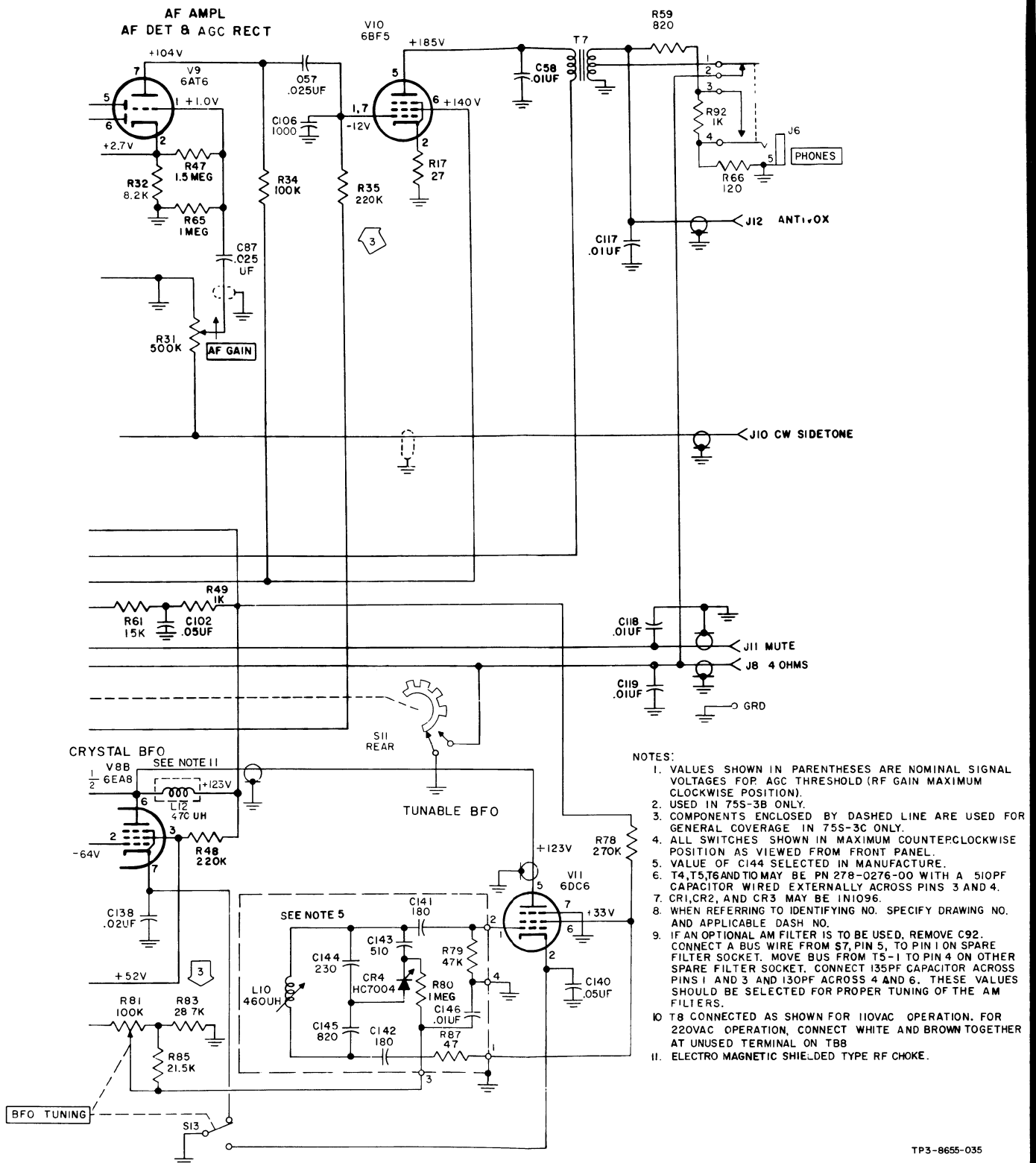


Figure 7-1. 75S-3B/3C Receiver, Schematic Diagram (Sheet 2)

TP3-8655-035





TP3-8655-035

Figure 7-1. 75S-3B/3C Receiver, Schematic Diagram (Sheet 3)

Revised 15 November 1975

SECTION 7  
Illustrations

NOTE:

ALL SWITCH WAFERS ARE MOUNTED WITH THEIR TOP FRONT IDENTIFICATION MARKS NEAREST THE CHASSIS AND TOWARD THE FRONT. TERMINAL NUMBER 1 IS THE FIRST TERMINAL CLOCKWISE FROM THE IDENTIFICATION MARK.

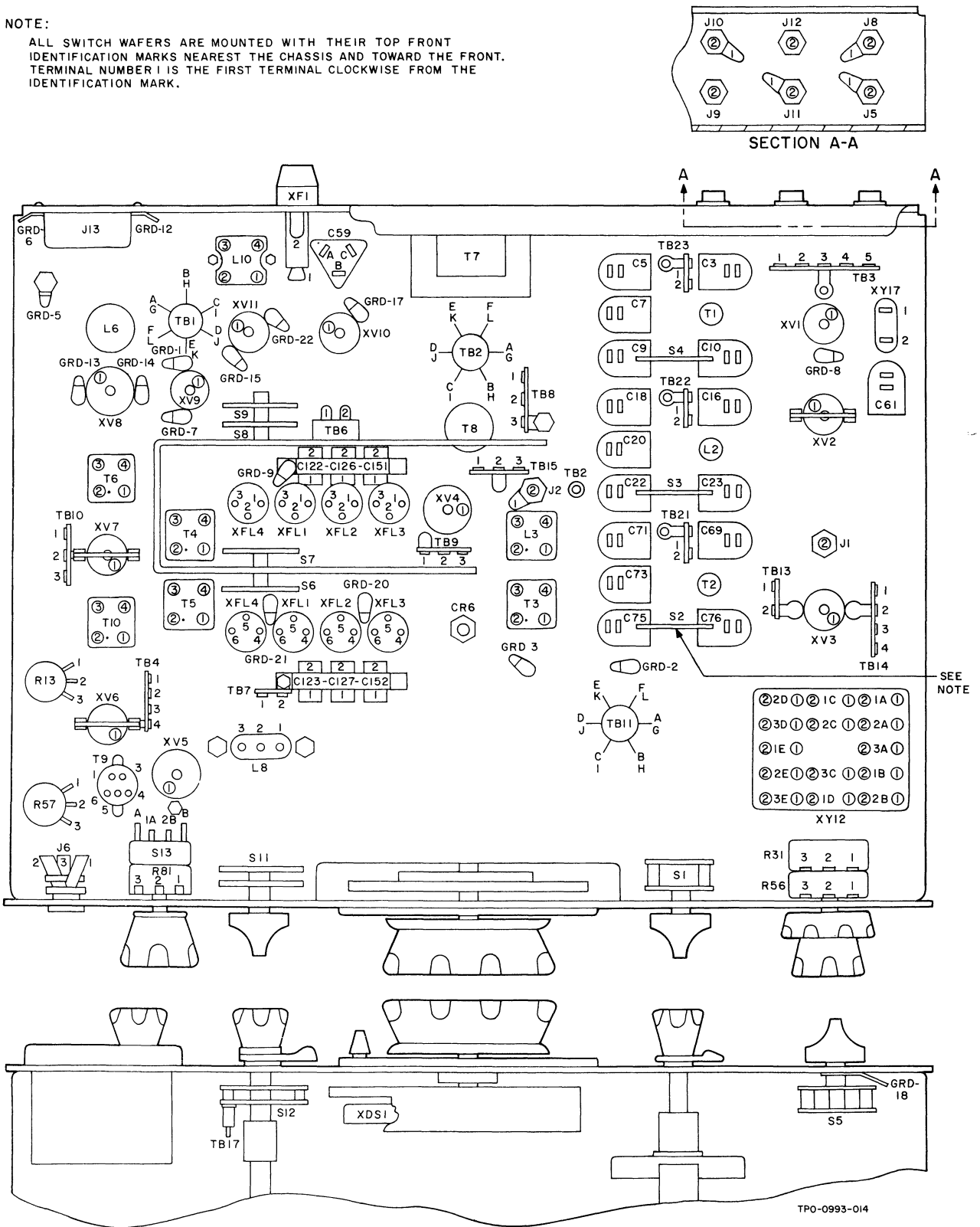


Figure 7-2. Chassis Component Location Display (Bottom View)





Rockwell  
International