

*Cancelled  
now AP 120N-0118-1*

**Chapter 1**

**FAULT SIMULATOR TEST SET AC GENERATING SYSTEM  
ANDOVER MF/VIP AIRCRAFT**

**LIST OF CONTENTS**

|                             | <i>Para.</i> |                           | <i>Para.</i> |
|-----------------------------|--------------|---------------------------|--------------|
| <i>Introduction</i> .. .. . | 1            | <i>Case</i> .. .. .       | 5            |
| <b>Description</b>          |              | <i>Test leads</i> .. .. . | 6            |
| <i>General</i> .. .. .      | 4            | <b>Operation</b> .. .. .  | 7            |
|                             |              | <b>Servicing</b> .. .. .  | 9            |

**LIST OF ILLUSTRATIONS**

|   | <i>Fig.</i> |
|---|-------------|
| <i>Test set</i> .. .. .                 | 1           |
| <i>Test panel</i> .. .. .               | 2           |
| <i>Circuit diagram</i> .. .. .          | 3           |
| <i>Test lead wiring diagram</i> .. .. . | 4           |

**LEADING PARTICULARS**

|  |                  |
|--|------------------|
| <b>Test set</b> .. .. .                | Ref. No. 5G/4287 |
| <i>Overall dimensions (in)</i> .. .. . | 17½ × 13½ × 9¼   |
| <i>Weight</i> .. .. .                  | 25 lb            |

**Introduction**

1. The fault simulator test set is designed for use with the a.c. generating system used in the Andover MF and VIP aircraft. The test set enables the line to line, line unbalance and earth leakage protection circuits associa-

ted with this generating system to be checked for correct operation during an engine ground run.

2. Line to line and line unbalance faults are simulated by connecting a fixed resistor

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Fig. 1. Test set

between the selected a.c. bus-bars. This resistor is intermittently rated at 150 volts and should not be in circuit for a period more than 1 second. Earth leakage faults are simulated by connecting a variable resistor between the a.c. output and earth.

3. The test set is primarily intended for testing the protection circuits during aircraft periodic servicing. It can also be used for checking these circuits after rectification of faults.

## DESCRIPTION

### General

4. The test set (fig. 1) consists of a front panel assembly and test leads housed in a wooden case. The front panel (fig. 2), which is of aluminium alloy, is fitted with two fuse blocks, three indicating instruments, five rotary switches, one toggle switch, one

variable resistor, one neon indicator and one test socket, and is secured to battens in the wooden case by four wood screws. Fitted to the underside of the front panel are two aluminium alloy brackets on which are mounted two Mk 4 brass fixed plugs and the Merz Price protection circuit fault resistors respectively. Handles are fitted to the front panel assembly to facilitate the removal of the assembly for servicing. A theoretical circuit diagram for the test set is shown in fig. 3.

### Case

5. The wooden case has a removable lid and is fitted with two snap fasteners and a leather carrying handle. Cooling grilles are fitted to the right hand and undersides of the case to permit cooling of the resistors. On the left hand side of the case a cut out is provided to allow connection of the test

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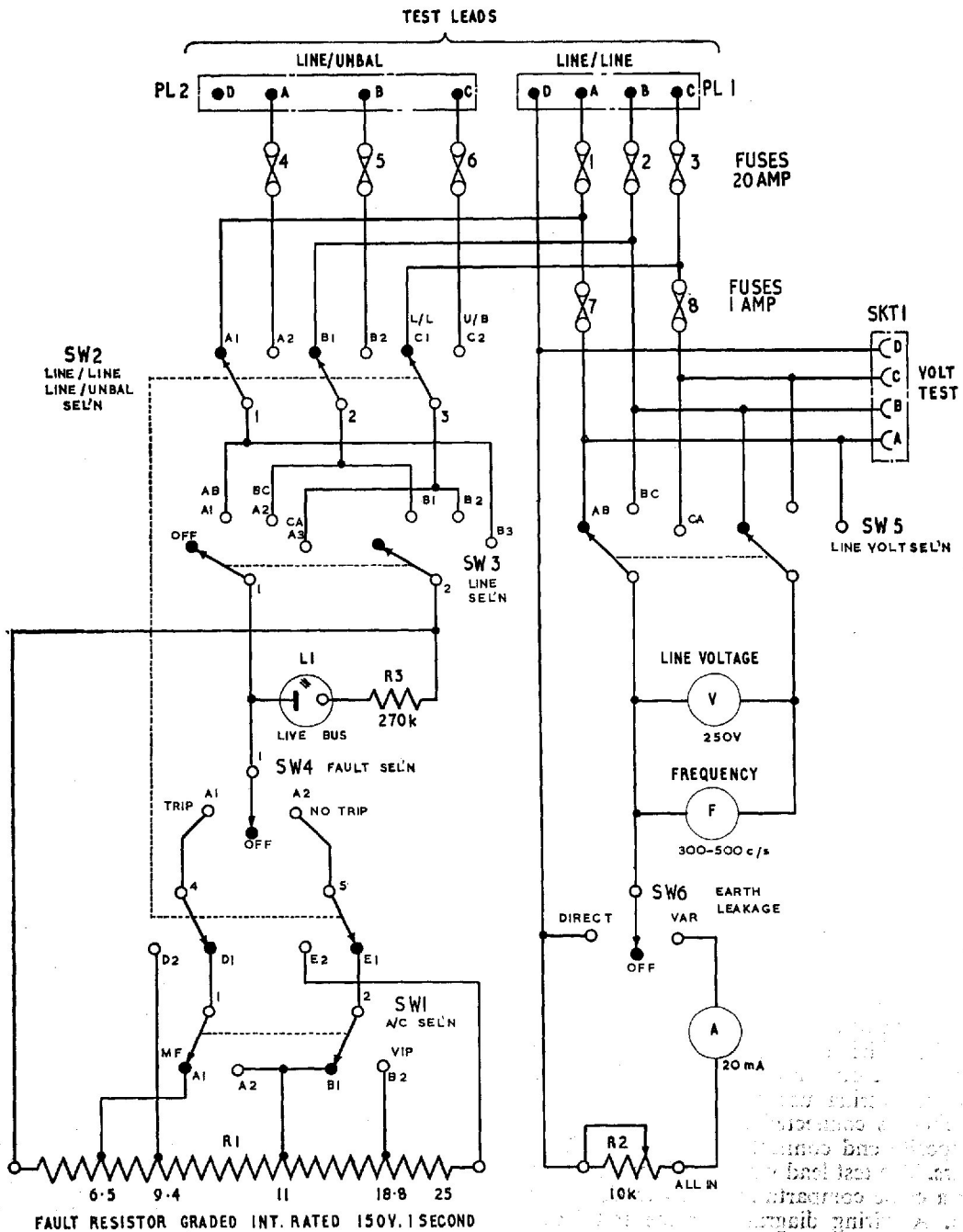


Fig. 3. Circuit diagram

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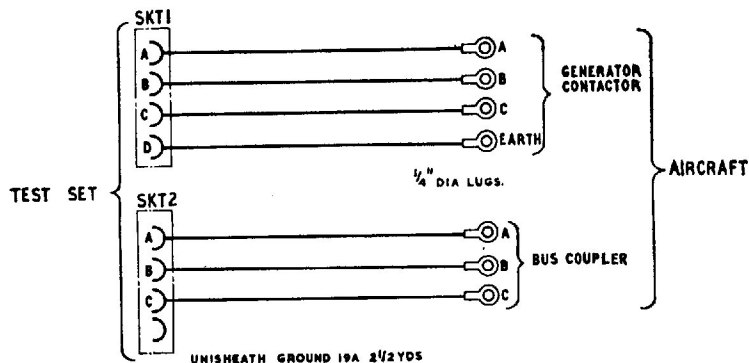


Fig. 4. Test lead wiring diagram

**SERVICING**

9. Routine servicing is restricted to examination of test set components for security of connections, overheating of resistances and signs of damage or deterioration of the test leads.

10. To ensure serviceability of the test set before use on the aircraft, continuity tests should be made, using a Multimeter type 12889 (Ref. No. 5QP/17447) or similar type of instrument.

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