

## **50-HZ MODIFICATION OPTION**

H316 General Purpose  
Digital Computer

**Honeywell**

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H316 - 9500  
50-HZ MODIFICATION OPTION

INTRODUCTION

The H316 50-Hz Modification (Option H316-9500) enables the H316 to be operated with a 50-Hz ( $\pm 2$  Hz) power source. With this modification the main frame can operate with any of the following ac power sources depending on how the power input transformer has been wired: 100, 104, 110, 120 or 127, 214, 220, 224, 230, and 240 volts.

The 50-Hz modification is normally factory installed and involves modification of the power supply, the ASR-33, and the addition of a transformer to accommodate the various voltages mentioned. This manual describes these modifications.

POWER SUPPLY MODIFICATION

Two types of power supplies are used with the H316; one is manufactured by Ault, Inc., the other by Acme Electric Corp. The manufacturer of a particular power supply can be ascertained from the metal name plate located on the outside of the unit. The following paragraphs list wiring changes that were made to implement 50-Hz operation.

AULT Power Supply (See Figure 1)

60-Hz Operation	50-Hz Operation
Move Jumper wires from:	To:
TB3-2	TB3-3
TB3-4	TB3-5
TB3-6	TB3-7
TB3-8	TB3-10
TB3-9	TB3-11
TB4-1	TB4-3
TB4-2	TB4-4
TB4-5	TB4-7
TB4-6	TB4-8

## ACME Power Supply (See Figure 2)

### Jumpers for 60-Hz Operation

TB5-4 to CR2  
TB5-2 to CR1  
TB5-9 to CR4  
TB5-7 to CR3  
TB2-9 to CR6  
TB2-7 to CR5  
TB2-4 to CR7  
TB2-2 to CR8  
TB1-2 to B4B-2  
TB1-5 to C10 Pin 2  
TB4-5 to C5 Pin 2  
TB4-2 to B4B-2

### Jumpers for 50-Hz Operation

TB5-5 to CR2  
TB5-1 to CR1  
TB5-10 to CR4  
TB5-6 to CR3  
TB2-10 to CR6  
TB2-6 to CR5  
TB2-5 to CR7  
TB2-1 to CR8  
TB1-3 to B4B-2  
TB1-4 to C10 Pin 2  
TB4-4 to C5 Pin 2  
TB4-3 to B4B-2

## ASR-33 MODIFICATION

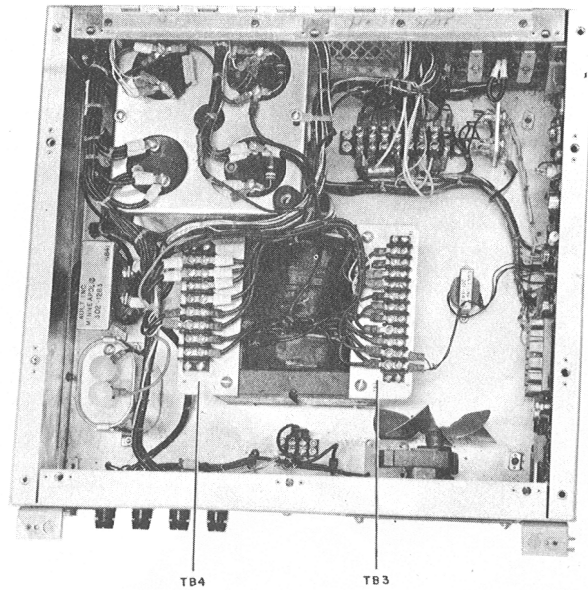
The 50-Hz conversion for the ASR-33 requires replacement of the main drive motor with a 50-Hz motor, and may require replacement of the power transformer and the selector magnet driver (SMD) transformer (Figure 3). The power transformer is replaced unless its Teletype Corp. part number is 181879, and the SMD transformer is replaced unless its part number is 181878. The modification is normally installed at the factory by using a special ASR-33 50-Hz modification kit.

## REAL TIME CLOCK

No modification is needed to implement the real time clock option (H316-12) when converting to a 50-Hz power source.

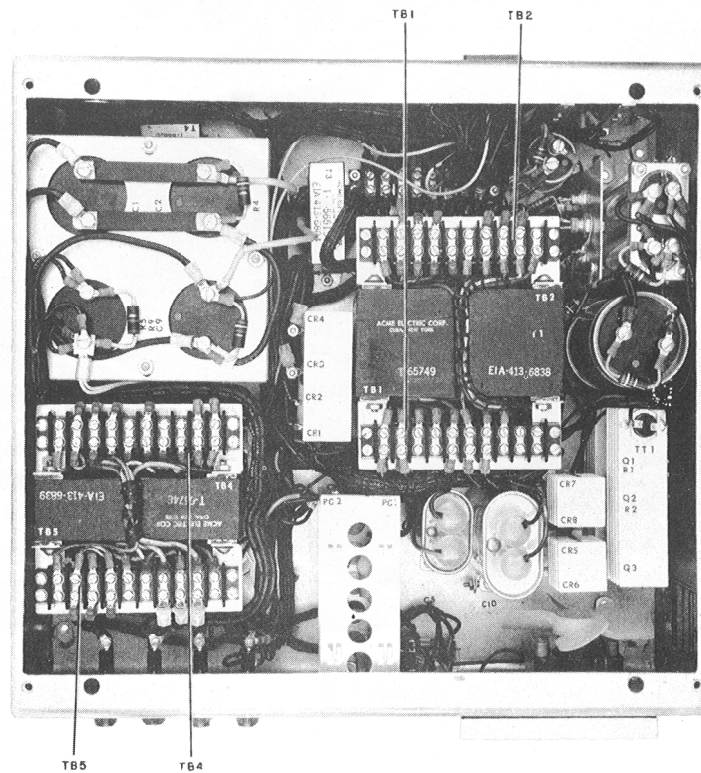
## 50-HZ IDENTIFICATION

The ACME and AULT power supplies and the ASR-33 are provided with a 50-Hz warning tag which must be displayed after a conversion has been accomplished.



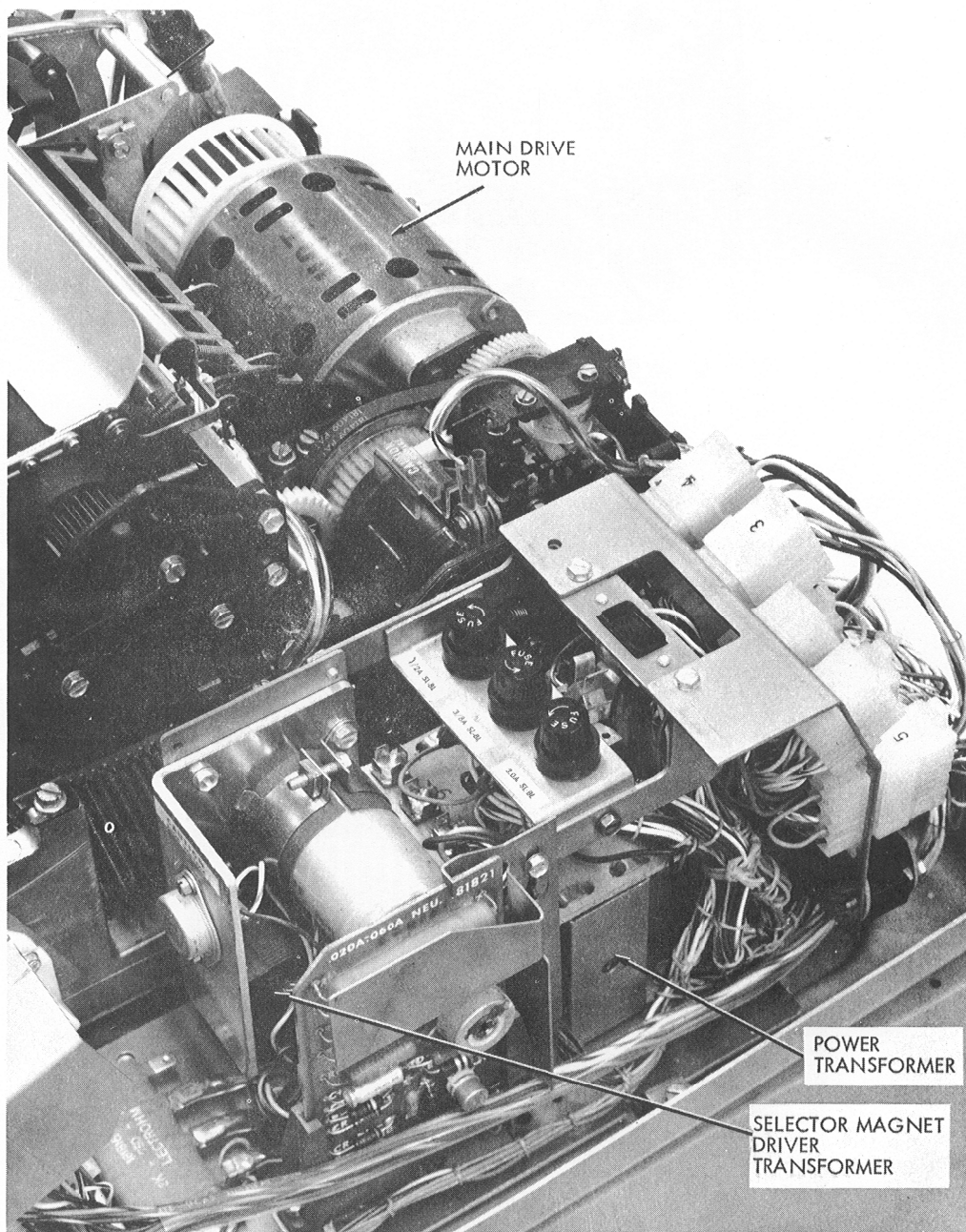
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Figure 1. Terminal Boards (AULT Power Supply)



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Figure 2. Terminal Boards (ACME Power Supply)



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Figure 3. ASR-33 Modifications



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