



***GE Drives***

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***INSTRUCTIONS***

**MACHINE TOOL  
RELAY CARD  
193X553AAG03, G06**

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*These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation, operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes, the matter should be referred to General Electric Company.*

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## GENERAL

This instruction book provides the basic information required to check out the *Machine Tool Relay card*. Refer to the system diagrams for information as to the use of this card in the overall system.

### DESCRIPTION

There are two versions of the Machine Tool Relay card:

GO3: contains three relays and associated circuitry

GO6: contains six relays and associated circuitry

The relay circuitry is designed to operate from a 115 volt AC, 50/60 Hz source. A rectifier bridge, capacitor, and dropping resistor are used to obtain the nominal 48 volt DC relay operating voltage. Each relay has two form "C" contact pairs brought out to the terminal strip. LED indicators are provided in each coil circuit to indicate excitation of the coil circuitry.

NOTE: With low voltage input, it is possible to illuminate the LED without picking up the relay contacts.

### PERFORMANCE

#### NOMINAL COIL VOLTAGE

1. 115V AC  $\pm 10\%$ , 50/60 Hz.
2. Pull in by 98V.
3. Drop out by 20V.

#### COIL CURRENTS

1. Nominal coil current is 10ma/relay.
2. Since this is a DC operated coil, there is no major current inrush. The only inrush is the charging of the 2.0uf capacitor through 8.2K or about 20ma with a time constant of 16ms.

#### OPERATING TIME

1. Pickup time: 13ms.nominal; 18 ms. maximum
- 2 Drop out time: 18ms. nominal; 32ms. maximum

## CONTACT RATING

1. High Current Level 1.0 amp resistive load 115V AC 50/60 Hz or 29 VDC.
2. Pilot Duty: 2 amp holding. 1.0 amp inrush at 115V AC.
3. Low Current Level: 30ua @ 30mV.

NOTE: A relay which has been used to switch "power" circuits may no longer reliably switch "dry" circuits. When several Machine Tool Relay cards have been furnished, if removed, each card should be returned to its original receptacle.

### START-UP/CHECKOUT

Verify that the relays pick up and drop out at the appropriate time.

### TROUBLESHOOTING

Verify that the contacts are opening and closing properly when power is applied to the coil.

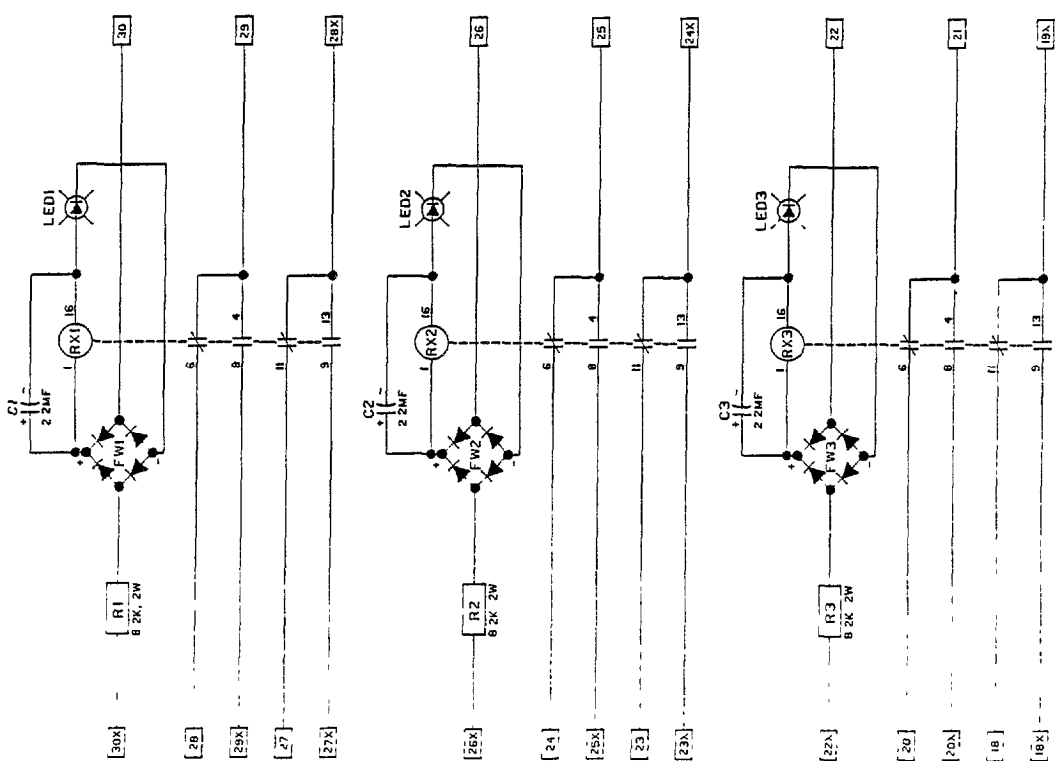
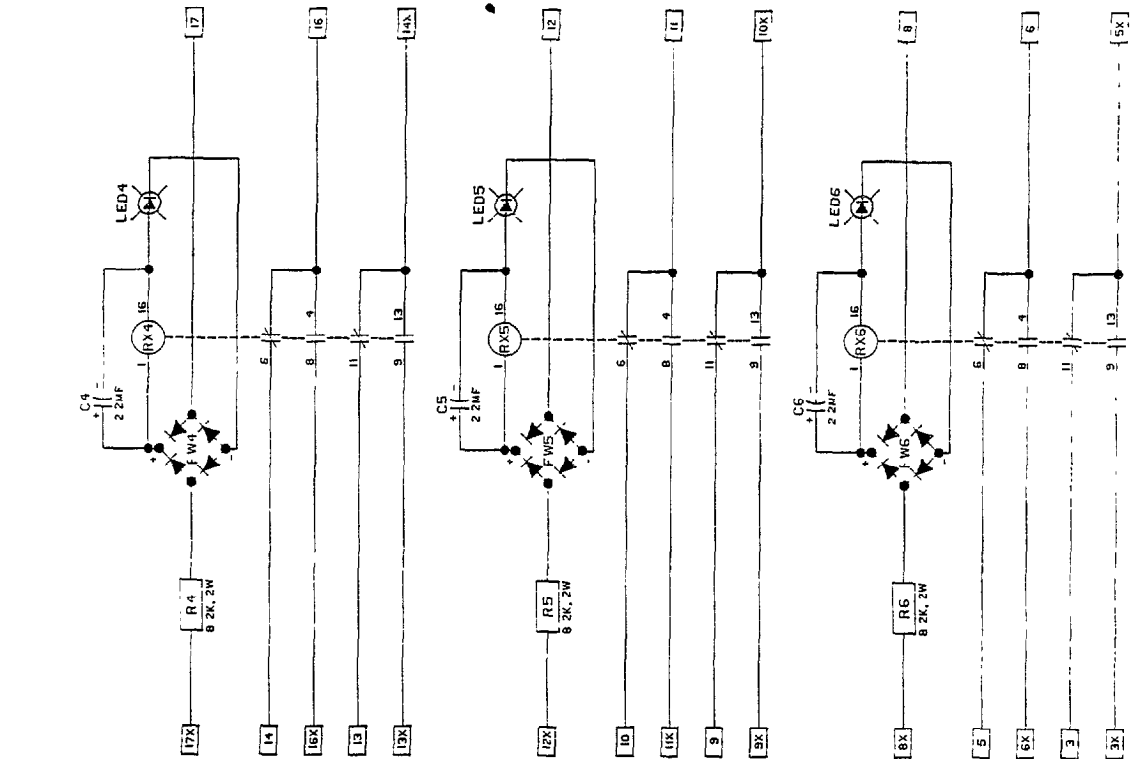


TABLE I

CARD CAT. LOG. NO.	QTY. OF RELAYS	RELAY NOMENCLATURE	TAB CONNECTION
193A553AAG03	3	RX1, RX2, RX3	SEE SCHEMATIC ABOVE
193A553AAG06	6	RX1, RX2, RX3, RX4, RX5, RX6	SEE SCHEMATIC ABOVE FOR TABS ASSOCIATED WITH EACH RELAY NOMENCLATURE



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