



INSTRUCTIONS

GEK-86693

AUXILIARY RELAY/CHECKBACK

19D427620G3

GENERAL  ELECTRIC



DESCRIPTION

The Auxiliary Relay 19D427620G3 is used in conjunction with the CS26/27B Check Back equipment. It provides three mercury-wetted relays with separate inputs and outputs. Three LED indicators show which relay is energized.

OPERATION

Refer to schematic diagram 19C335562. An input signal applied to the Input of relay #1 or to Input #1 of relay #2 will switch the associated input amplifier ON. This switches on the relay driver Q1 or Q2, energizing K1 or K2. An input to Input #2 of relay #2 will override an Input #1 of relay #2 and lock the relay #2 input amplifier in the OFF position.

Relay K3 is energized directly by application of 125 VDC (Jumper "A" in 1-2 position) or 48 VDC (Jumper "A" in 2-3 position) to relay #3 Input #1 (+) and Input #2 (-).

Nominal Operating Characteristics

1. Input level
 - a. Relay #1 input, Relay #2 Input #1 +10 VDC = ON
 - b. Relay #2 input #2 +10 VDC = OFF
 - c. Relay #3
 - 125 VDC Jumper A 1-2
 - 48 VDC Jumper A 2-3
2. Output contacts: 100 VA
3. Relay Operate Time: 2 milliseconds

PARTS LIST

<u>Symbol</u>	<u>GE Part No.</u>	<u>Description</u>
- - - - -CAPACITORS- - - - -		
C1 & C2	5496267P12	Tantalum; 150 uf +20%, 15 VDCW
C5 through C10	5490825P4	Ceramic; 6000 pF +10%, 2000 VDCW.
- - - - -DIODES- - - - -		
D1 through D3	19A134354P1	Optoelectronic; red, diffused; sim Hew. Packard 5082-4655.
D5, D6, D9	19A115250P1	Silicon, fast recovery; sim 1N645 or 1N914.
D7	4037822P1	Silicon Rectifier; sim 1N5060

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 the General Electric Company.

To the extent required the products described herein meet applicable ANSI, IEEE and NEMA standards; but no such assurance is given with respect to local codes and ordinances because they vary greatly.

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- - - - -RELAYS- - - - -

K1 through K3 19B209439P1 Reed, mercury-wetted; 48 VDC, 1.75 W; coil, 6100 ohms +10%; pull-in, 20.1 VDC max. drop-out, 3.15 VDC min; 1 form C contact; sim C.P.Clare, HGSR51211V01.

- - - - -TRANSISTORS- - - - -

Q1, Q2 19A115300P2 Silicon, NPN; sim 2N3053.

- - - - -RESISTORS- - - - -

R1, R2 19A701250P1 Metal film; 10 ohms \pm 1%, 1/4 W

R3, R5 3R77P203J Composition; 20 K ohms \pm 5%, 1/2 W

R4, R6 19A700113P87 Composition; 10 K ohms \pm 5%, 1/2 W

R14 19A700112P87 Composition; 10 K ohms \pm 5%, 1 W

R15 3R77P182J Composition; 1800 K ohms \pm 5%, 1/2 W

R17, R19, R20,
R22 19A700113P111 Composition: 100 K ohms \pm 5%, 1/2 W

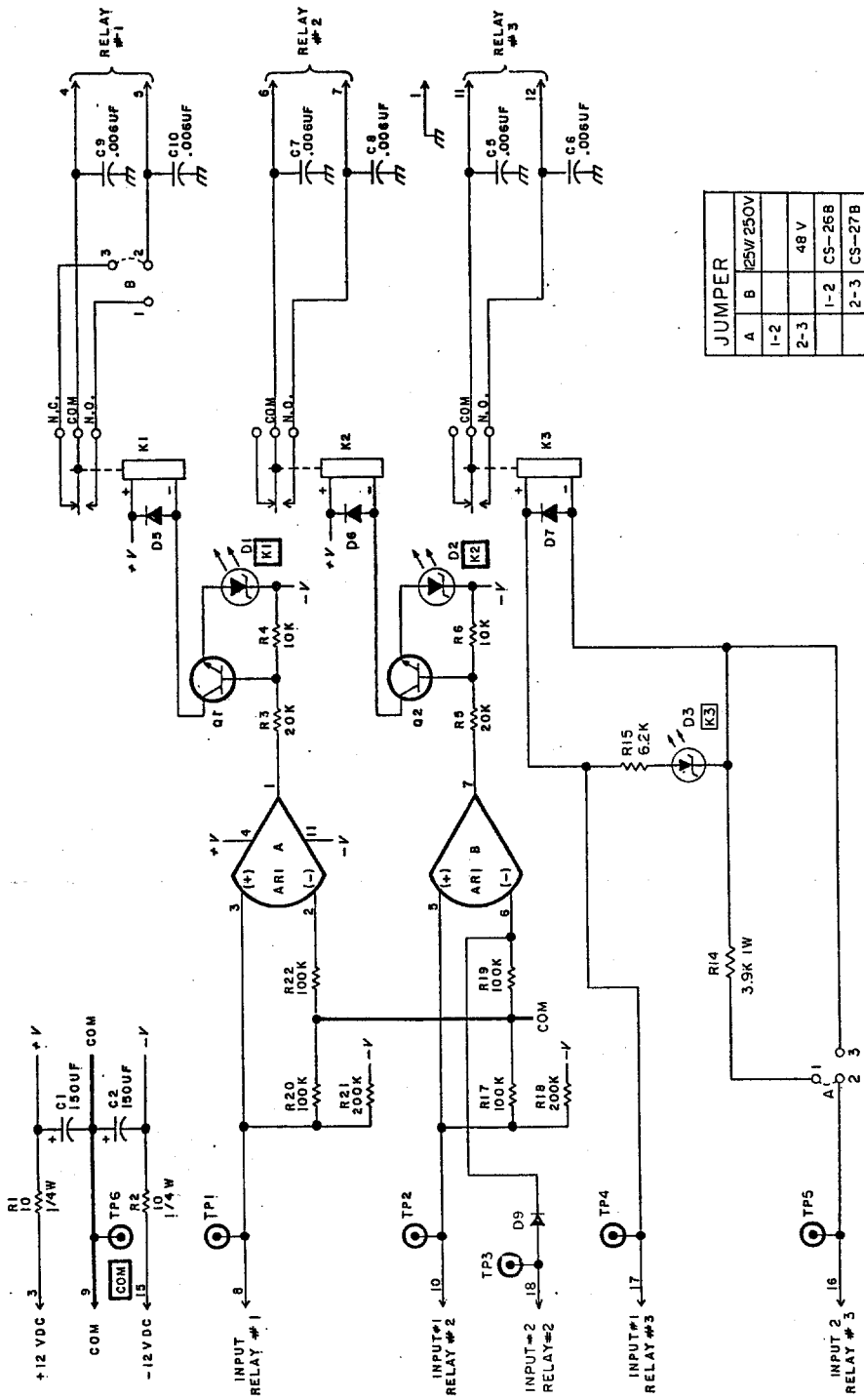
R18, R21 3R77P204J Composition; 200 K ohms \pm 5%, 1/2 W

- - - - -TEST POINTS- - - - -

TP1 through TP6 19B211379P1 Spring; GE Specialty Control Dept., Waynesboro, VA #44B412208

- - - - -INTEGRATED CIRCUIT- - - - -

AR1 19A134511P1 Quad Operational Amplifier, linear; sim NSCLM224J, Motorola MLM224L



NOTES:

ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICOFARADS (EQUAL TO MICROFARADS) UNLESS FOLLOWED BY UF= MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH= MILLIHENRYS OR H=HENRYS.

AUX RELAY
19D427620 G3,G103

Schematic Diagram 19C335562 Rev. 0

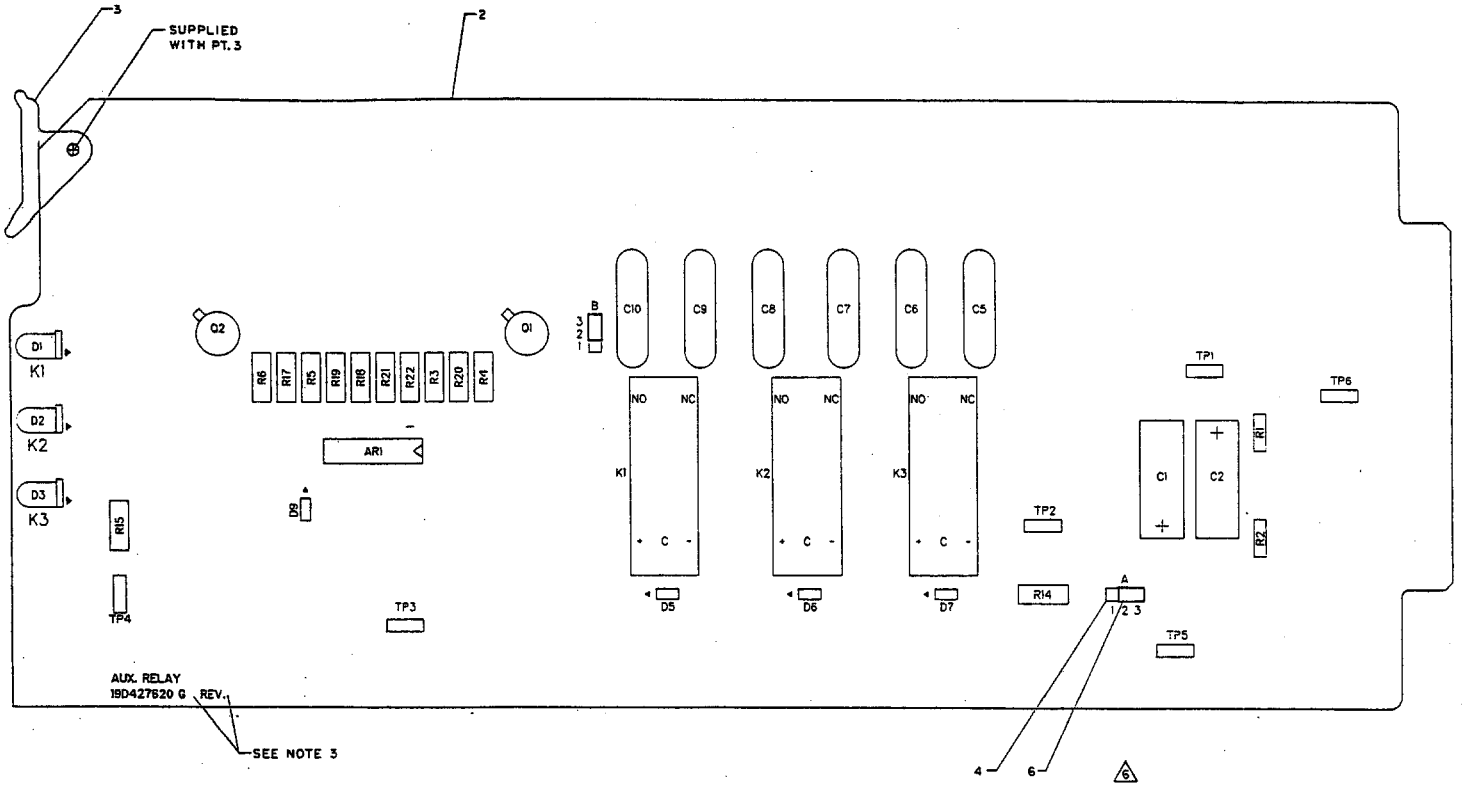


FIGURE 3.103
P18H-HP4

- ① NOTES:
1. SOLDER ALL ELECTRICAL CONNECTIONS.
 2. COMPONENT LEADS TO PROTRUDE .09 MAX. BELOW SOLDER SIDE OF BOARD.
 3. MARK GROUP NUMBER AND REV. LTR. PER 19A115740P1, -125 HIGH. (SEE REV. LTR. INDEX A7141044).
 4. THE FOLLOWING COMPONENTS MAY BE ADVERSLEY AFFECTED BY FREON CLEANING: NONE
 5. ASM. INSULATOR, ITEM 7, UNDER THE FOLLOWING: Q1 THRU Q4.
- △ INDICATES FRONT OF COMPONENT AUTO-INSERTION MACHINE.

