

RCSL: 51-VB726

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TEST
OF
INTERRUPT SYSTEM
FOR THE
RC 4000 COMPUTER

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NOTATION:

SMI Activate the Single Micro Instruction pushbutton on
the Technical Control Panel.

SI Activate the Single Instruction pushbutton on the
Technical Control Panel.

MCC Activate the MAR COMPUTER CONTROLLED pushbutton.

X:= Y Set X equal to Y.

X = Y If the test is correct X should be equal to Y.

X:= -1 Set X equal to all ones.

INTRODUCTION:

This paper describes a testprocedure for the Interrupt Unit (ITR) of RC 4000. The test is not including the following micro orders:

IM(1:23):= SB(1:23)
BUS(0:23):= IM
ITRenable:= FR(5)

The testprocedures for these micro orders are described in RCSL: 51-VB702.

The testprocedure requires that the connectors 1021 and 1061 (or 1062) are interconnected by a cable, type 27.

The Interrupt System is tested in 3 separate sections, and the operator must not diverge from the test schedule inside a section.

BUS(0:23):= IR, IR:= 1, and IR:= IR^,SB (ITR001-006,011,012)

SB:= -1; MAR:= x12y13; SMI; comment IR = 0;
AR:= -1; MAR:= x3y14; SMI; AR(0:23) = 0;
MAR:= x31y31; SMI; IR(0) = 1;
AR(0):= 1; MAR:= x6y10; SMI; IR(1) = 1;
SC(11:12):= b10; MAR:= x16y22; SMI; IR(2) = 1;
SB:= -1; MAR:= x0y2; SMI; IR(3:23) = -1;
AR(0:23):= 0; MAR:= x3y14; SMI; AR(0:23) = -1;
SB:= 0; MAR:= x12y13; SMI; IR = -1;
SB:= -1; SMI; IR = 0;

ITR Request (ITR 007)

SB:= -1; MAR:= x12y13; SMI; comment IR = 0;
MAR:= x12y12; SMI; comment IM = -1; ITR Request = 0. Testpoint 211A;
MAR:= x31y31; SMI; comment IR(0) = 1; ITR Request = 1. Testpoint 211A;
AR(0:1):= b01; MAR:= x6y10; SMI; comment IR(1) = 1;
SC(11:12):= b10; MAR:= x16y22; SMI; comment IR(2) = 1;
SB:= -1; MAR:= x0y2; SMI; comment IR(3:23) = 1;
SB:= 0; MAR:= x12y12; SMI; comment IM(1:23) = 0;
SB:= 1; MAR:= x12y13; SMI; comment IR(0) = 0; ITR Request = 0. Testpoint 211A;

BUS(0:23):= 18ext0conITRno(18:22)con0, and IR(ITRno):= 0 (ITR 008-009)

SB:= -1; MAR:= x12y12; SMI; comment IM = -1;
MAR:= x31y31; SMI; comment IR(0) = 1;
AR(0:1):= b01; MAR:= x6y10; SMI; comment IR(1) = 1;
SC(11:12):= b10; MAR:= x16y22; SMI; comment IR(2) = 1;
SB:= -1; MAR:= x0y2; SMI; comment IR(3:23) = -1;
FR(5):= 1; MAR:= x16y4; SMI; comment ITRenable = 1. Testpoint 189E;
MAR:= x9y27;
SMI; SB(0:23) = 18ext0con000000; IR(0) = 0; IR(1:23) = -1;
SMI; SB(0:23) = 18ext0con000010; IR(0:1) = 0; IR(2:23) = -1;
SMI; SB(0:23) = 18ext0con000100; IR(0:2) = 0; IR(3:23) = -1;
...
SMI; SB(0:23) = 18ext0con101100; IR(0:22) = 0; IR(23) = 1;
SMI; SB(0:23) = 18ext0con101110; IR(0:23) = 0;