

A U T O N E T I C S
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INDUSTRIAL PRODUCTS
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RECOMP TECHNICAL BULLETIN NO. 17

TITLE: RESTRICTIONS ON ROUTINES WHICH ARE TO BE RELOCATABLE

PURPOSE: To suggest precautions to be taken when writing relocatable subroutines.

EFFECTIVE DATE: November 1, 1960

CONTENTS: It has occurred in the past that routines which have been written and have been made relocatable have proved to be inoperative when relocated to some locations. This was due to the fact that the precautions that should have been taken when relocating the routine were not observed. The following precautions are therefore suggested.

When a routine uses instructions which refer to more than one word in the operand, such as copy or floating point instructions, care should be taken that the address of a floating point operand should be even and the address of a block of 8 words to be copied to or from the high-speed loops should have a zero as its lowest order octal digit.

If, for example, a routine uses CTL 00330 as an instruction, and the routine is relocated to XX40, it will not work because the instruction now says CTL XX730 and will copy words XX73, 74, 75, 76, 77, 00, 01 and 02 instead of XX73-77, (XX + 1) 00-02. (Of course the original version copied words 0033-0042 correctly). A simple rule to follow is:

Avoid writing instructions such that, if they are relocated legitimately, the end of a channel falls between any two words of any operand.

REFERENCES: RECOMP II Operating Manual

INFORMATION TO: All Concerned

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