

SYSTEMS ENGINEERING LABORATORIES PROGRAM LIBRARY

SOFTWARE DESCRIPTION

CATALOG NO. 303005B

DOCUMENTATION REV\*                     

DATE June 15, 1970

PROGRAM TITLE: 810A/B Load/Store/Register Change Test  
(LSRCT)

PURPOSE: LSRCT uses each of the load, store and register  
change instructions except the LCS and CSB  
instruction. The data used is a counter, so all  
bit combinations are used. Errors are indicat-  
ed by a type-out, as are successful cycles.

CONFIGURATION: Basic SYSTEMS 810A/B Computer

SOFTWARE ENVIRONMENT: Stand-Alone

PROGRAM LANGUAGE: SYSTEMS 810A/B Assembly Language

SIZE: 2000<sub>8</sub> - 2710<sub>8</sub>

TIMING: Approx. 2.5MS/Cycle

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### REASON FOR CHANGE:

Changes were made to allow this program to run with the KeyTran System and output all messages to the selectric typewriter by setting sense switch 13.

### USE:

Start at location 2000<sub>g</sub>, the program will run until manually halted.

When running under the KeyTran System the diagnostic number for this program is six (6). The program will automatically be started at location 2000<sub>g</sub> and will continuously run until the Index key is depressed on the selectric typewriter at which time control will be returned to the KeyTran Diagnostic Loader.

If a halt occurs, consult the listing or halt log using the P-Counter location to find the instruction that failed.

### Sense Switchs Settings:

SSW 0 up - The cycle count will not be typed.

SSW 1 up - Errors are ignored.

SSW 2 up - No error type-out will occur, the machine will halt. The A-Accumulator will contain the error location and locations 2603<sub>g</sub>, 2604<sub>g</sub> and 2576<sub>g</sub> will contain the A&B Accumulators and the counter respectively.

SSW 13 up - Indicates program being run with the KeyTran System and that all output will be via the selectric typewriter.

### Type-Out Formats:

Successful Cycles - NNNN

NNNN = The number of cycles completed without error.

Machine Error Preceeding Loc XXXXX

AAAAAA BBBBBB CCCCCC

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XXXXXX = The location plus one form which an SPB occurred following an error condition.

AAAAAA = The contents of the A-Accumulator.

BBBBBB = The contents of the B-Accumulator.

CCCCCC = The contents of the counter.

HALT LOG:

<u>P-Counter</u>	<u>Instruction In Error</u>
2041	CLA
2045, 2047	LBA, TBA
2052, 2054	IAB
2057, 2061	LAA
2065, 2067	TAB, STB
2072, 2074	STA