405-TYPE DATA SYSTEM AND INTERFACE CIRCUIT FOR MESSAGE REGISTER REMOTING—MAINTENANCE

1. GENERAL

1.01 This section describes the maintenance procedures to be followed for data sets 405A and B when used with the SD-1C451-01 interface circuit. In this section, the SD-1C451-01 interface circuit will be referred to as interface circuit.

1.02 Data sets 405A or B and the interface circuit require no routine maintenance after installation tests have been made.

1.03 Care should be exercised when handling and transporting the data sets and interface circuit. If possible, use the original cartons to store, transport, or ship these units.

1.04 If maintenance spares are stocked, verify that they are checked and ready for immediate installation. When replacing a data set, ensure that the proper options are installed in the replacement.

2. MAINTENANCE PROCEDURES

2.01 Since there is no routine maintenance required for data sets 405A or B and the interface circuit, maintenance of the 405 data system is limited to detection and replacement of defective units. Data set 405A or B and the interface circuit suspected of trouble should be tested as described in Section 312-809-501. Section 312-809-501 also provides a complete list of test equipment required to detect a defective unit.

3. TROUBLESHOOTING PROCEDURES

3.01 Troubleshooting the 405 data system should be in accordance with the following flowcharts. The flowcharts are recommended procedures to follow when investigating system trouble. The information blocks in the flowcharts are numbered to provide easy reference. The diamond represents a decision to be made, while the circles provide a means of referring to another numbered information block in the flowchart.

3.02 The flowcharts are intended for use at both transmitting and receiving ends and require coordination between the Telco employees at each end.

3.03 When a solid alarm is given at data sets 405A and B, data set 405A only, or data set 405B only, refer to Fig. 1 for troubleshooting information.

3.04 If one or all of the receive message registers are nonoperational and no alarm is indicated, refer to Fig. 2 for troubleshooting information.

3.05 When a high rate of alarm ($\geq$ 2/hr) is given at data sets 405A and B, data set 405A only, or data set 405B only, refer to Fig. 3 for troubleshooting information.

3.06 If an abnormally high ***error rate*** exists on the receive message registers ***without*** a high rate of alarm at data set 405A and B, refer to Fig. 4 for troubleshooting information.

4. REFERENCES

4.01 The following documents pertain to data set 405-type and interface circuit SD-1C451-01.

- CD- & SD-1D203-01 Data Set 405A-Type
- CD- & SD-1D204-01 Data Set 405B-Type
- CD- & SD-1C451-01 Interface Circuit for Use Between 405-Type Data Sets and Message Registers

SECTION	TITLE
252-140-101	Interface Circuit for Use Between 405-Type Data Sets and Message Registers in Remote Register

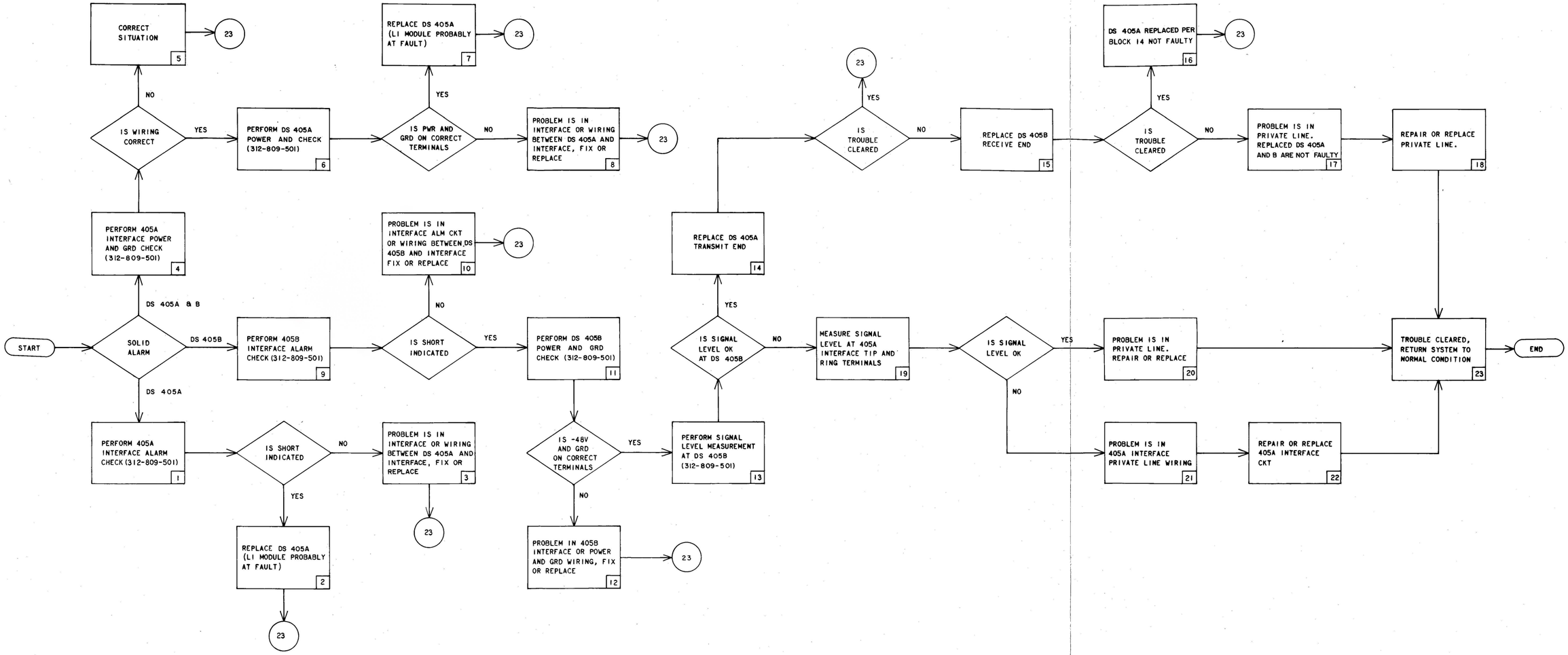


Fig. 1—Troubleshooting Flowchart-Solid Alarm Indication at Data Sets 405A and/or B

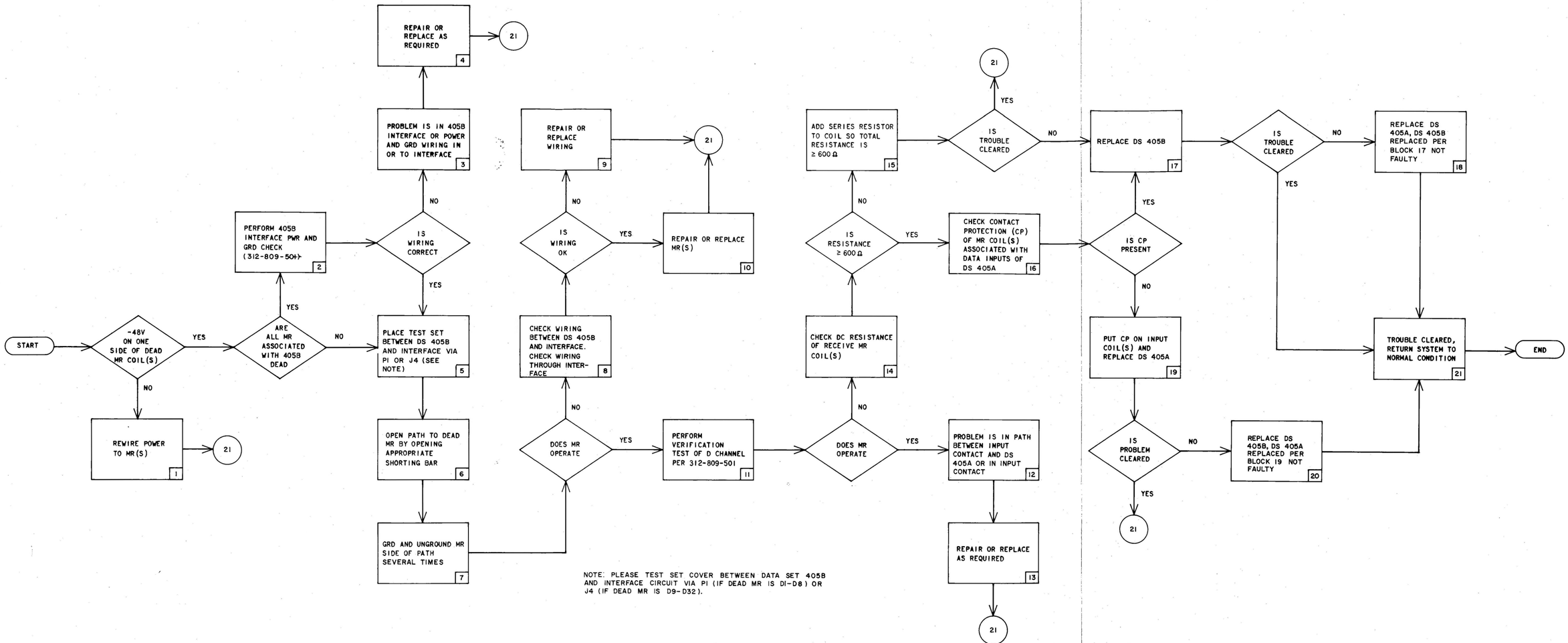


Fig. 2—Troubleshooting Flowchart-Receive Message Register(s) at Data Set 405B Not Operating and No Alarm Is Indicated

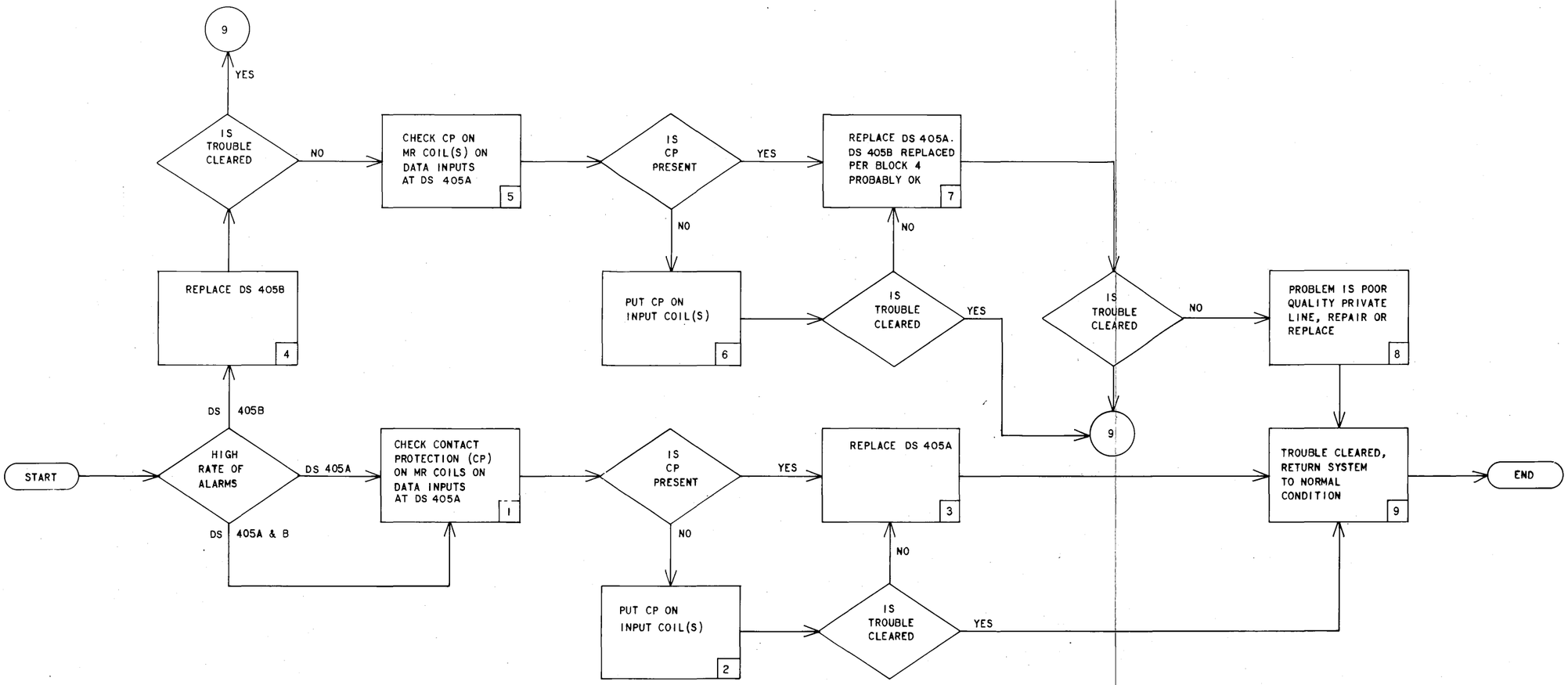
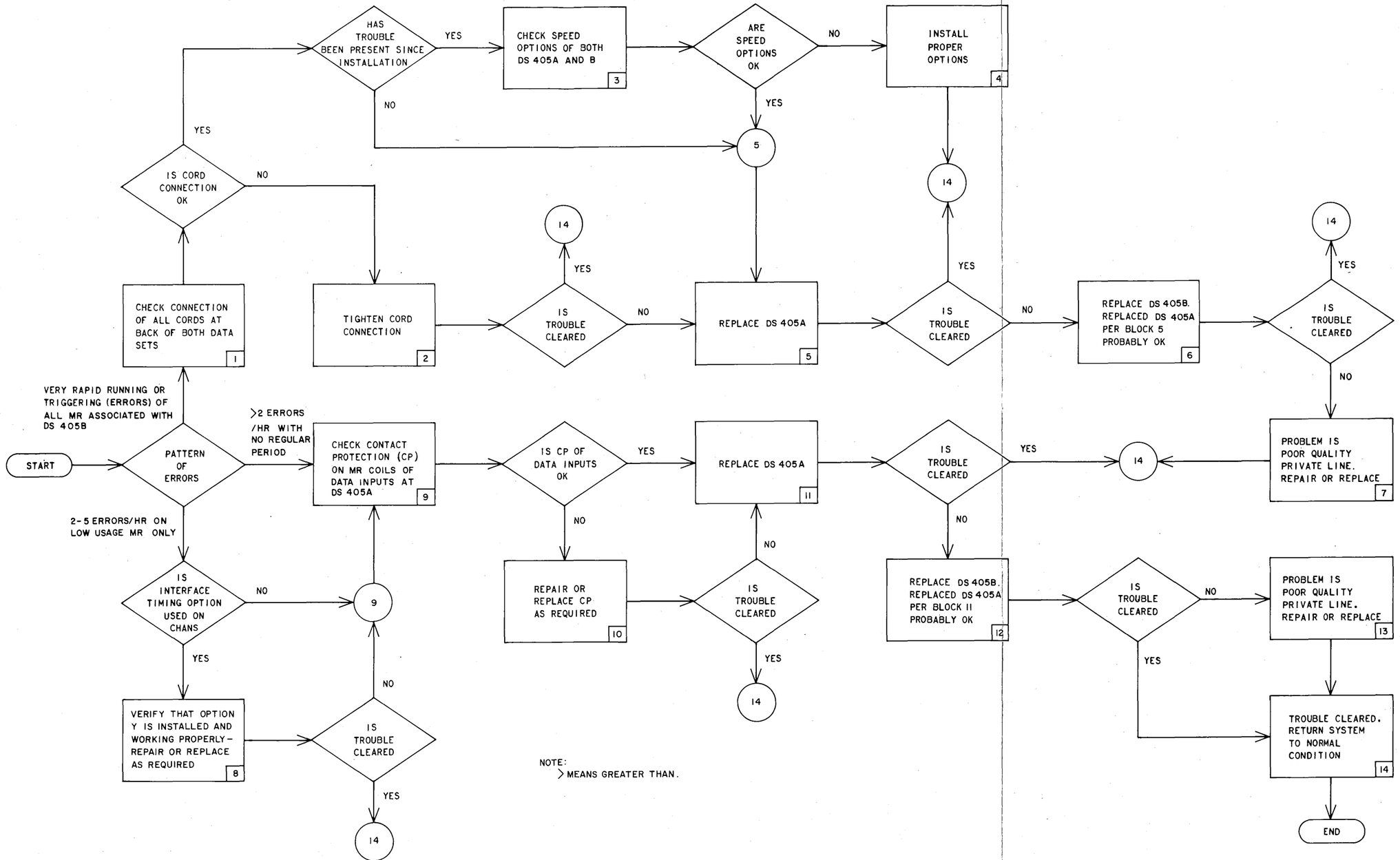


Fig. 3—Troubleshooting Flowchart-High Rate of Alarm But Not Steady at Data Sets 405A and/or B



NOTE:
> MEANS GREATER THAN.

Fig 4—Troubleshooting Flowchart-Abnormally High Error Rate on Receive Message Registers and No High Rate of Alarms at Data Sets 405A or B