Troubleshooting Charts

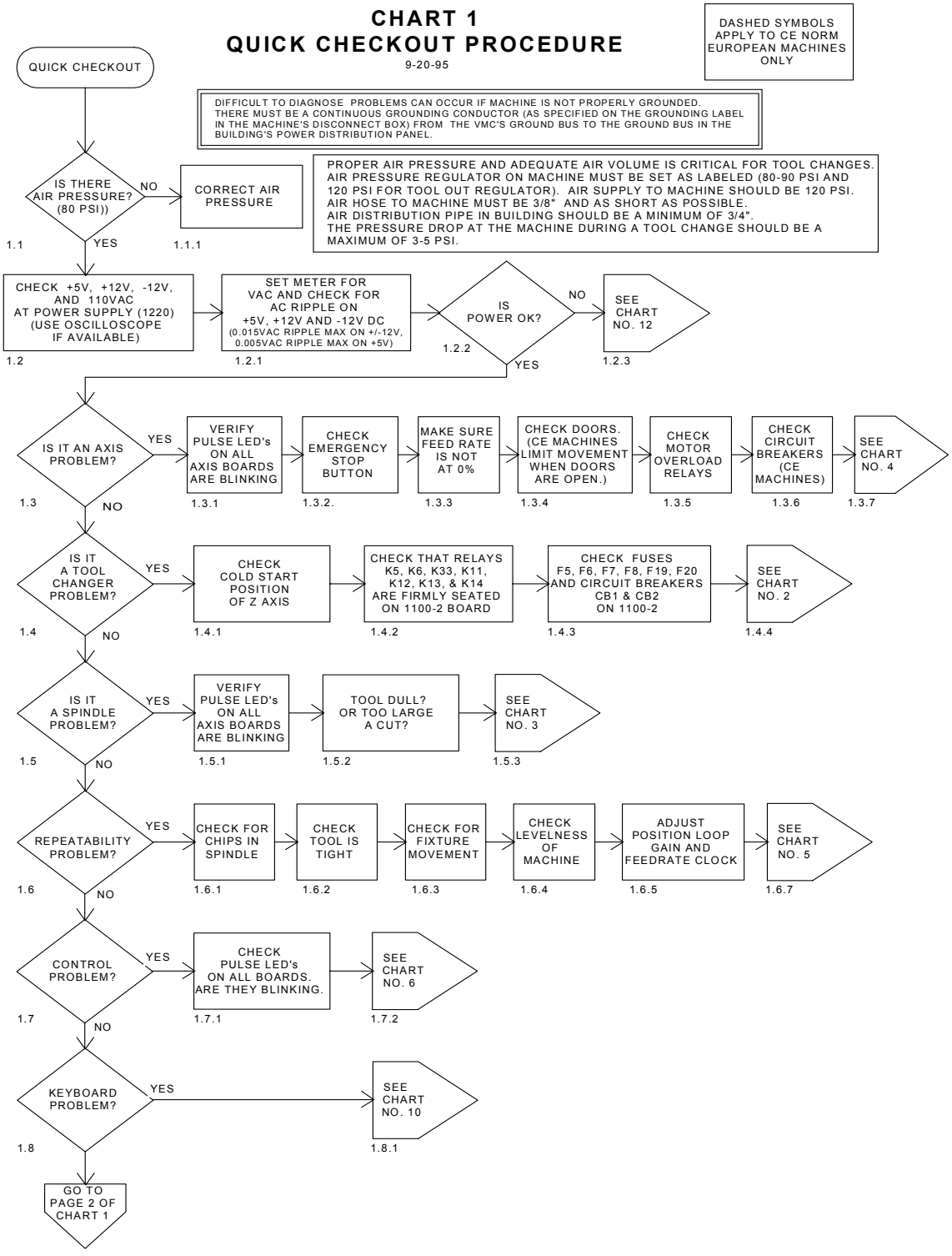


Figure 16-1 Quick Checkout Procedure

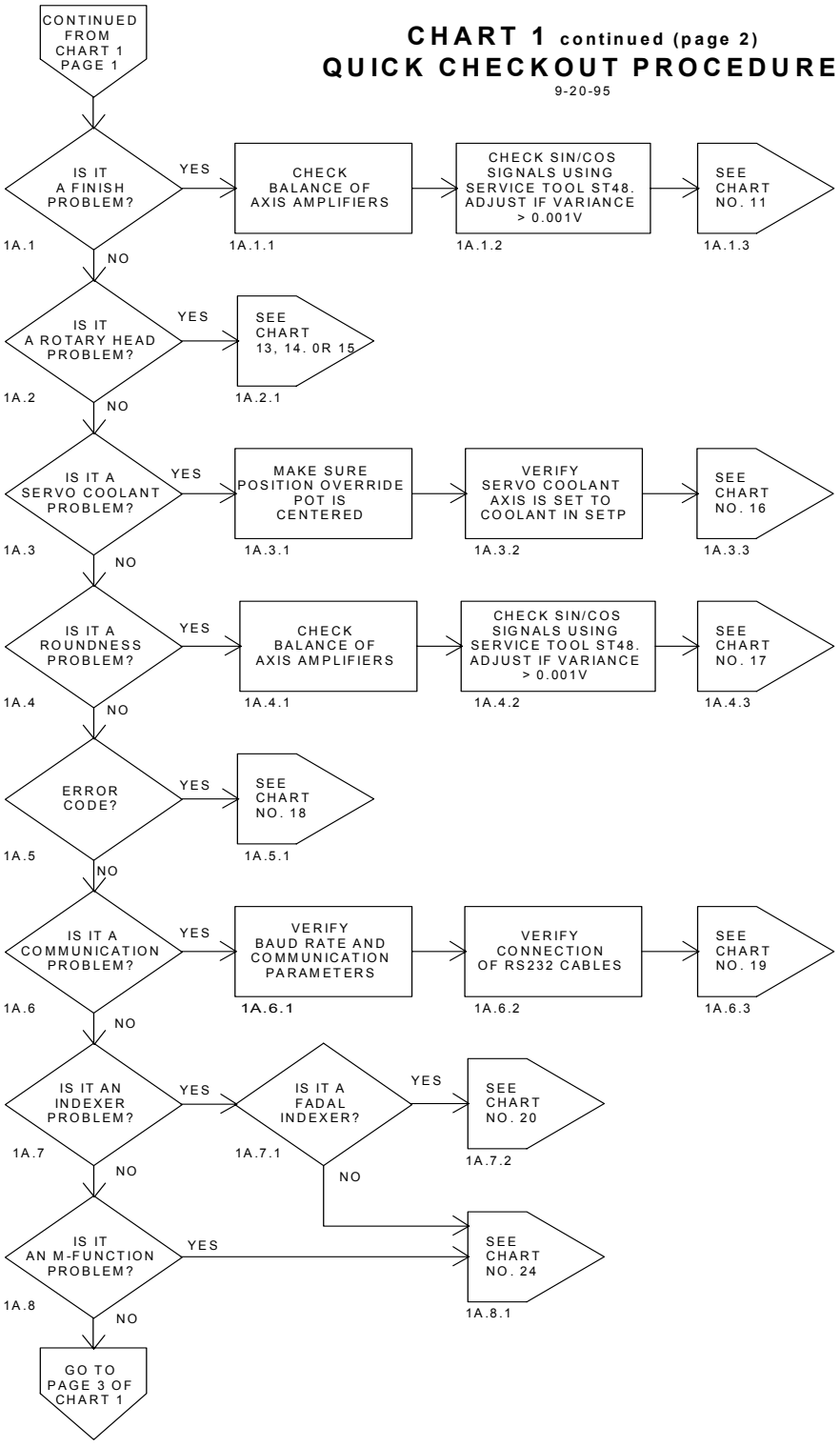


Figure 16-2 Quick Checkout Procedure (Continued)

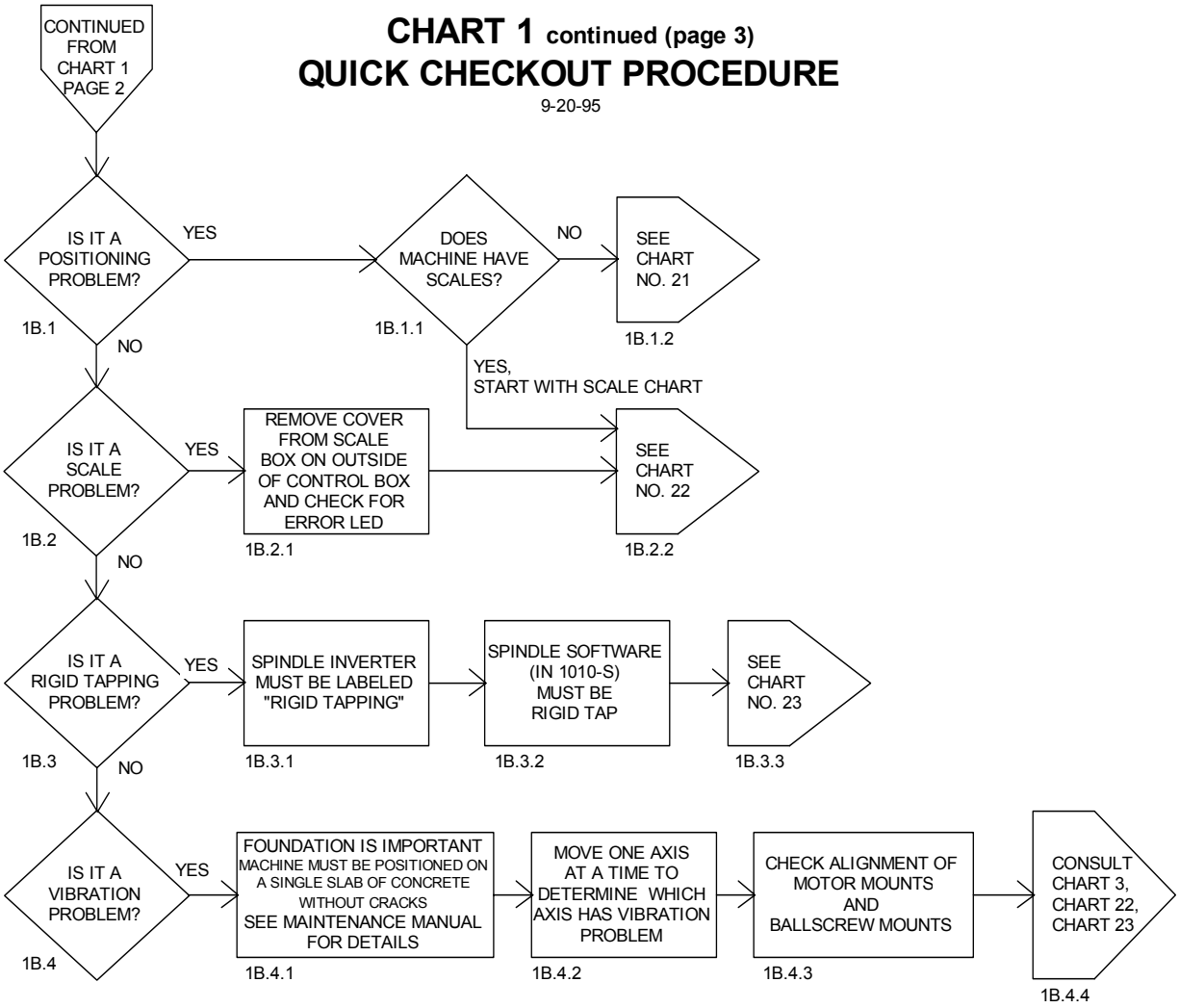


Figure 16-3 Quick Checkout Procedure (Continued)

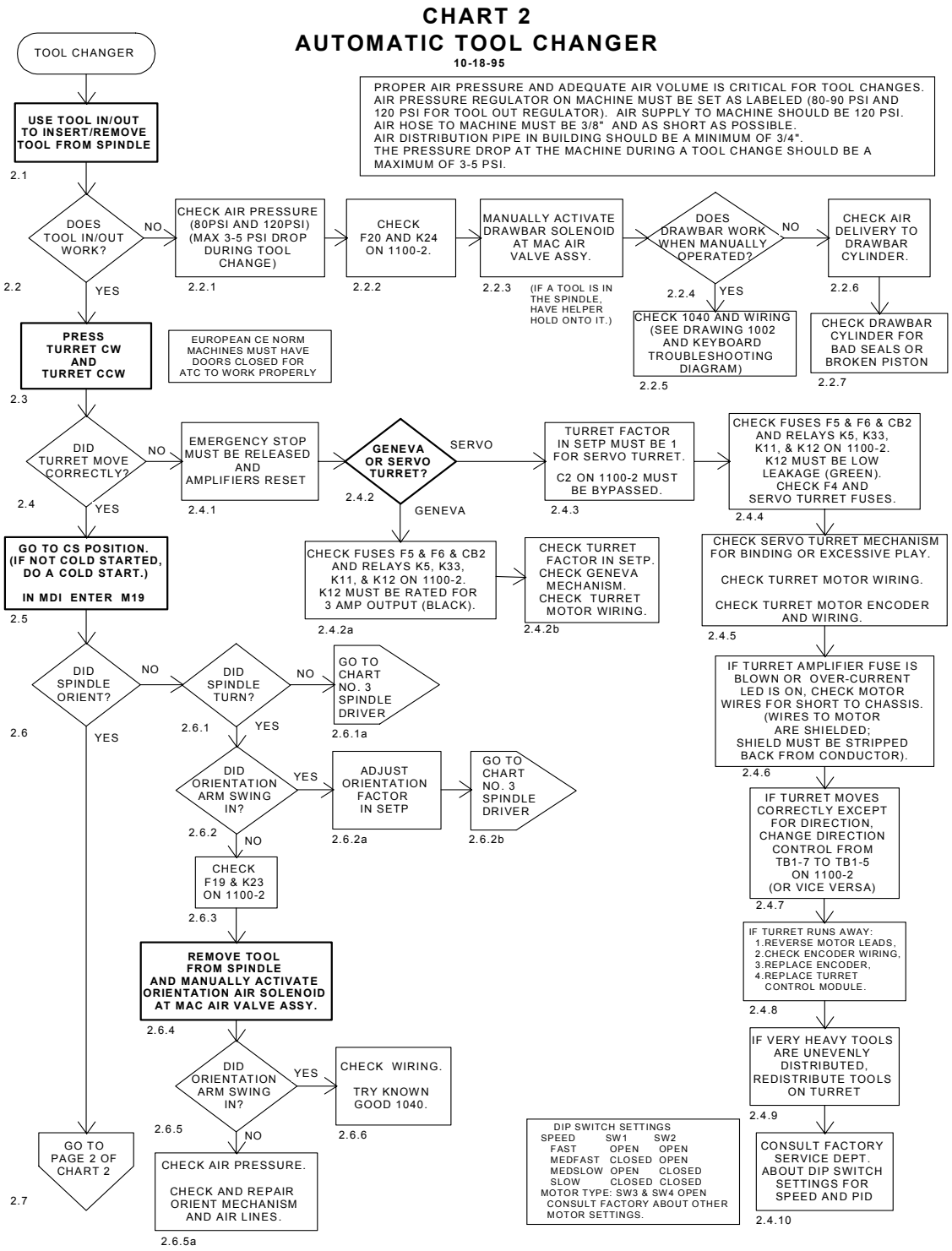


Figure 16-4 Automatic Tool Changer

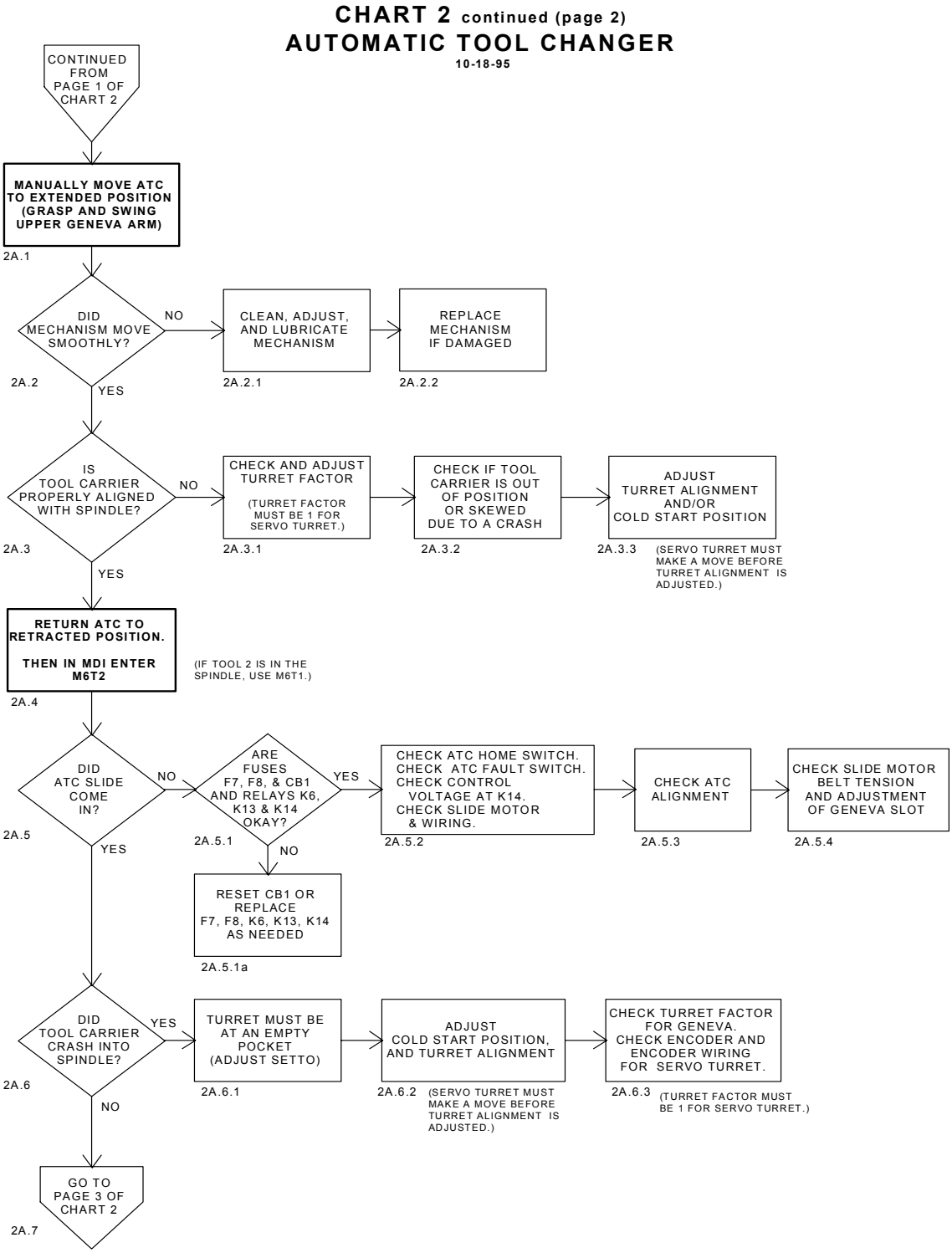


Figure 16-5 Automatic Tool Changer (Continued)

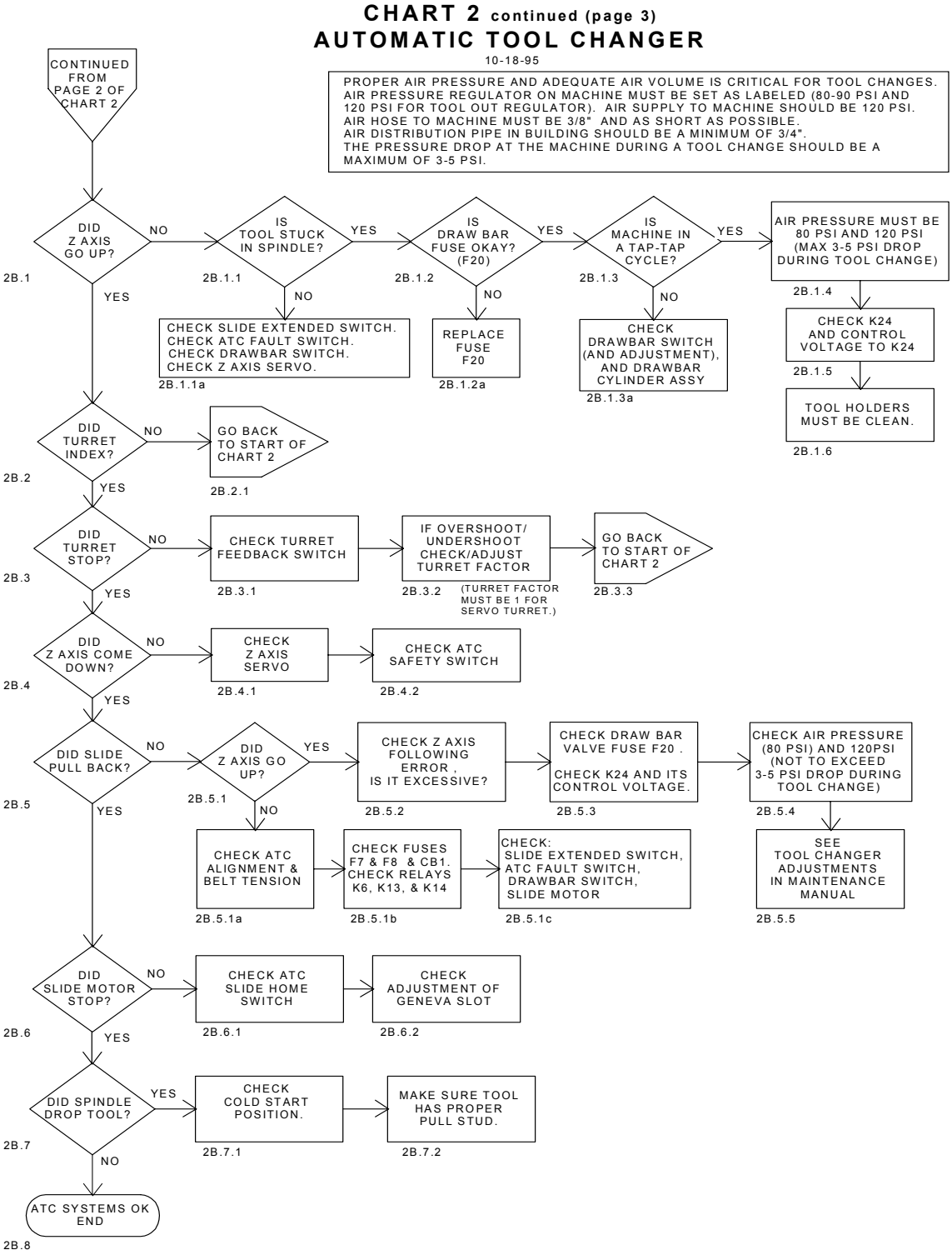


Figure 16-6 Automatic Tool Changer (Continued)

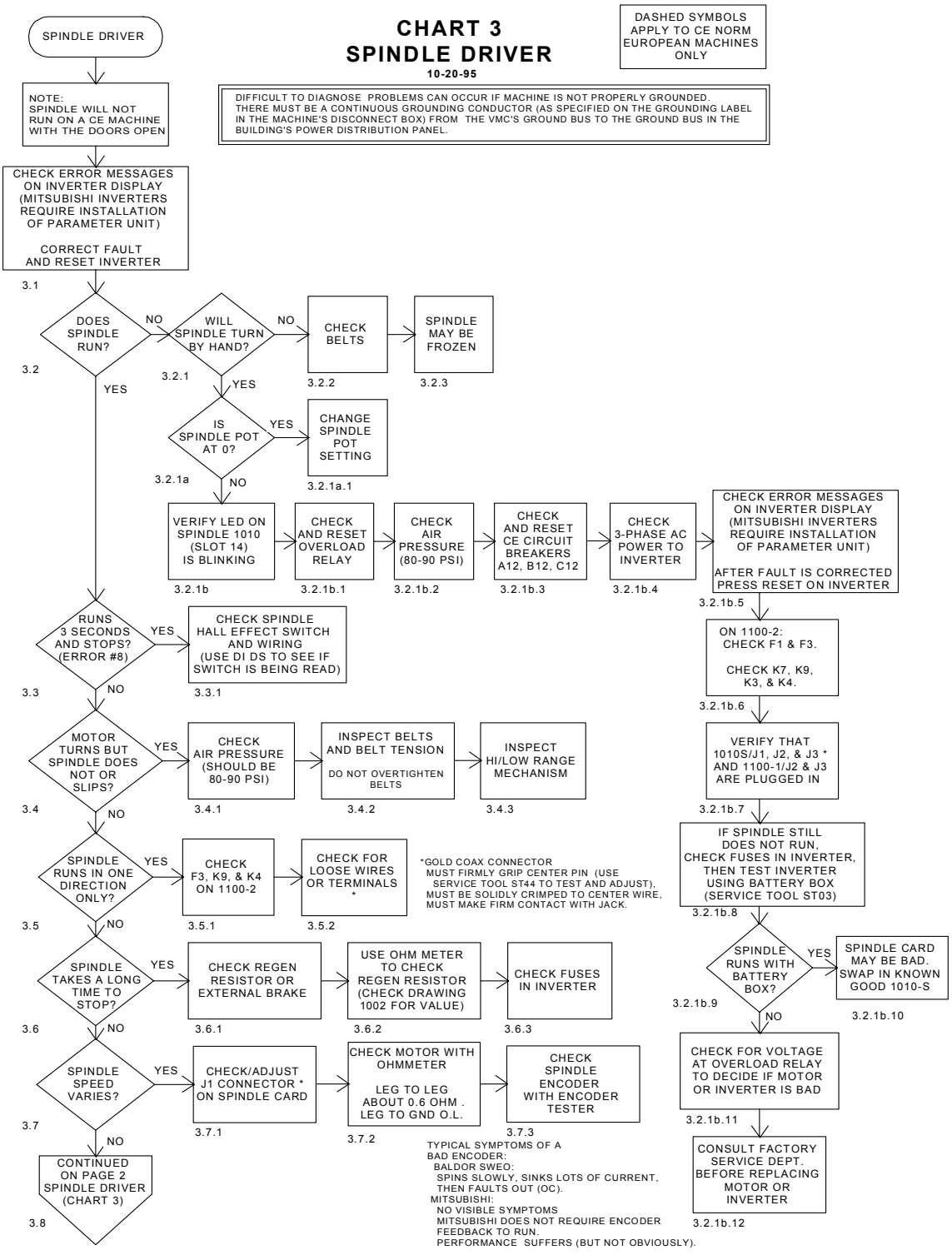


Figure 16-7 Spindle Driver

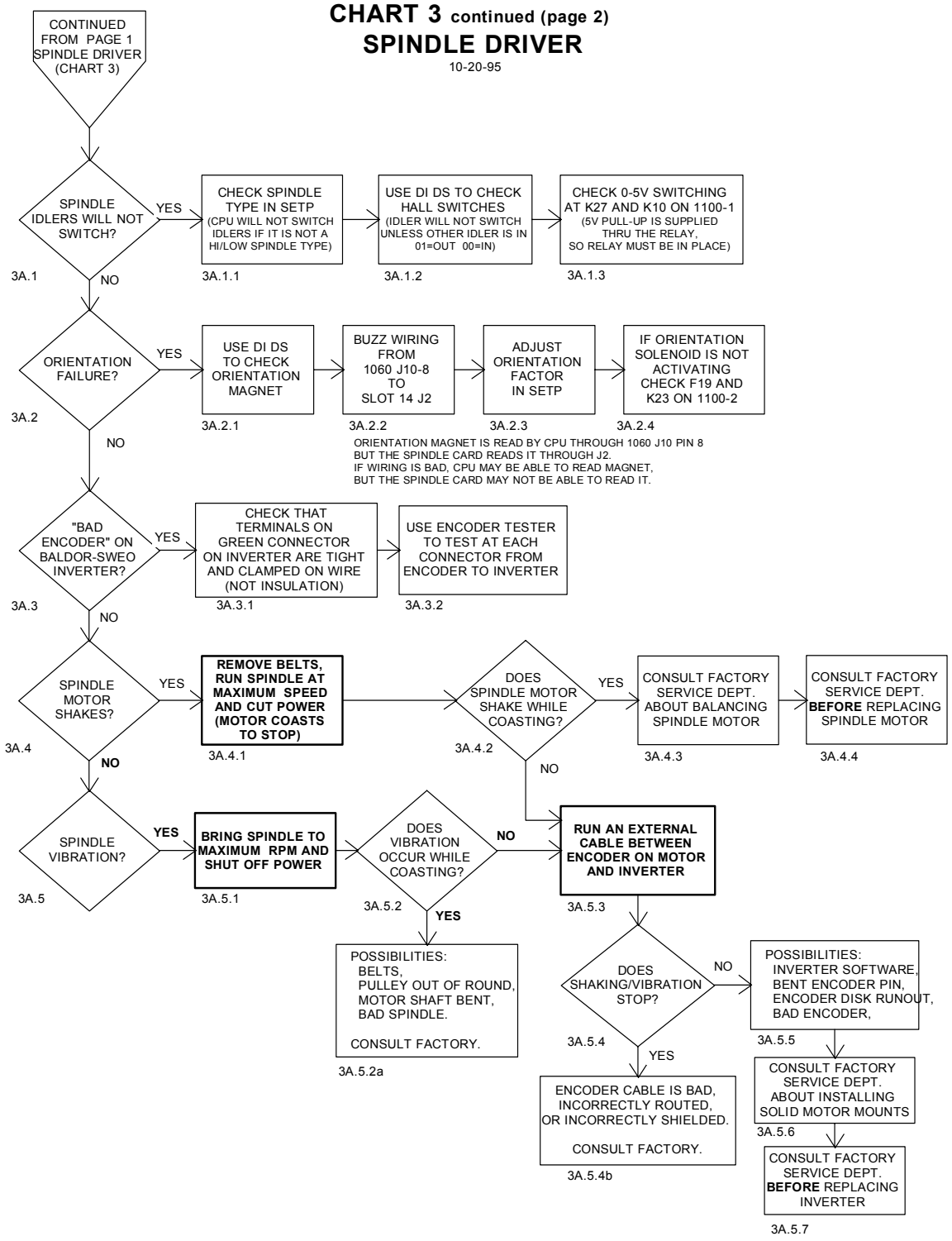


Figure 16-8 Spindle Driver (Continued)

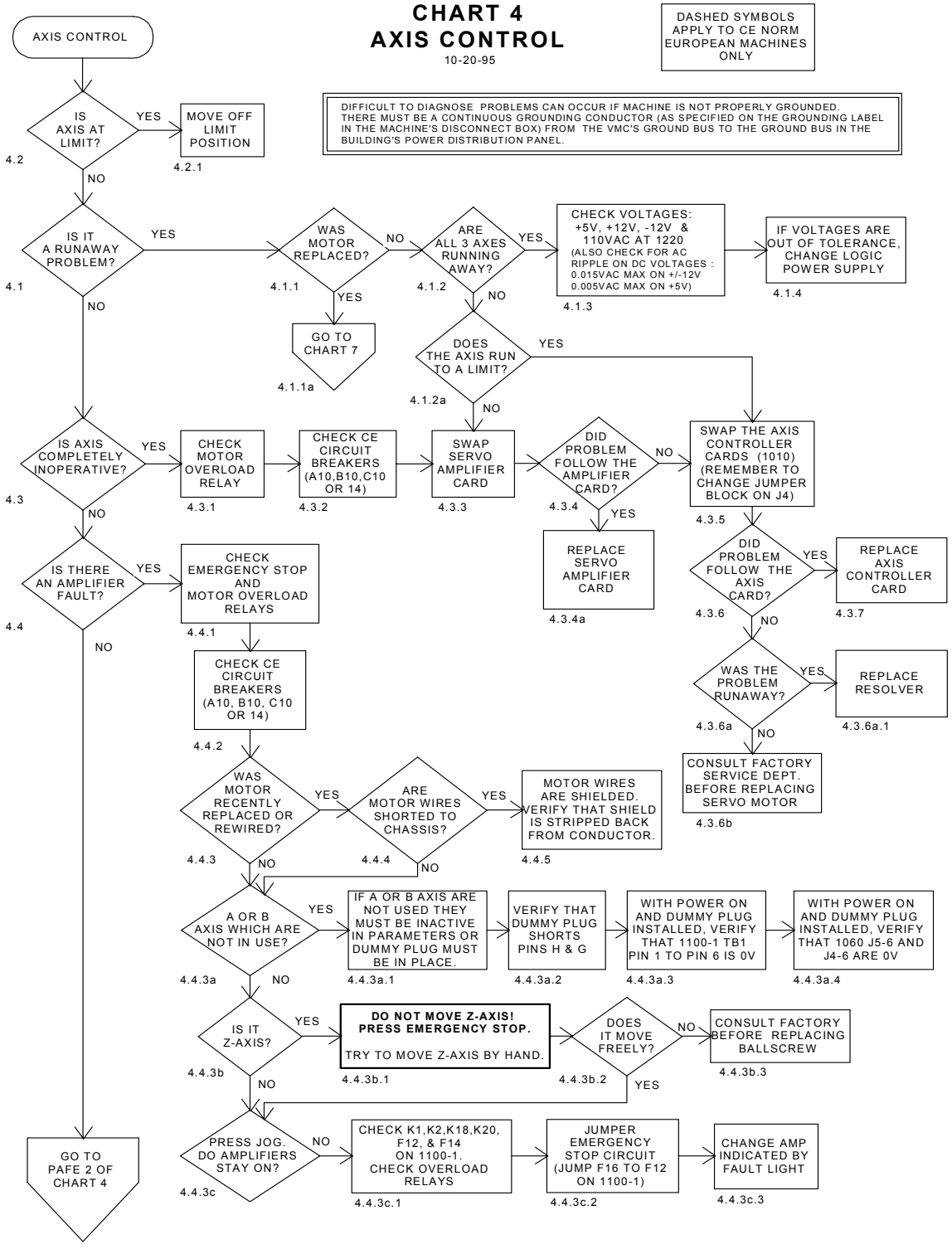


Figure 16-9 Axis Control

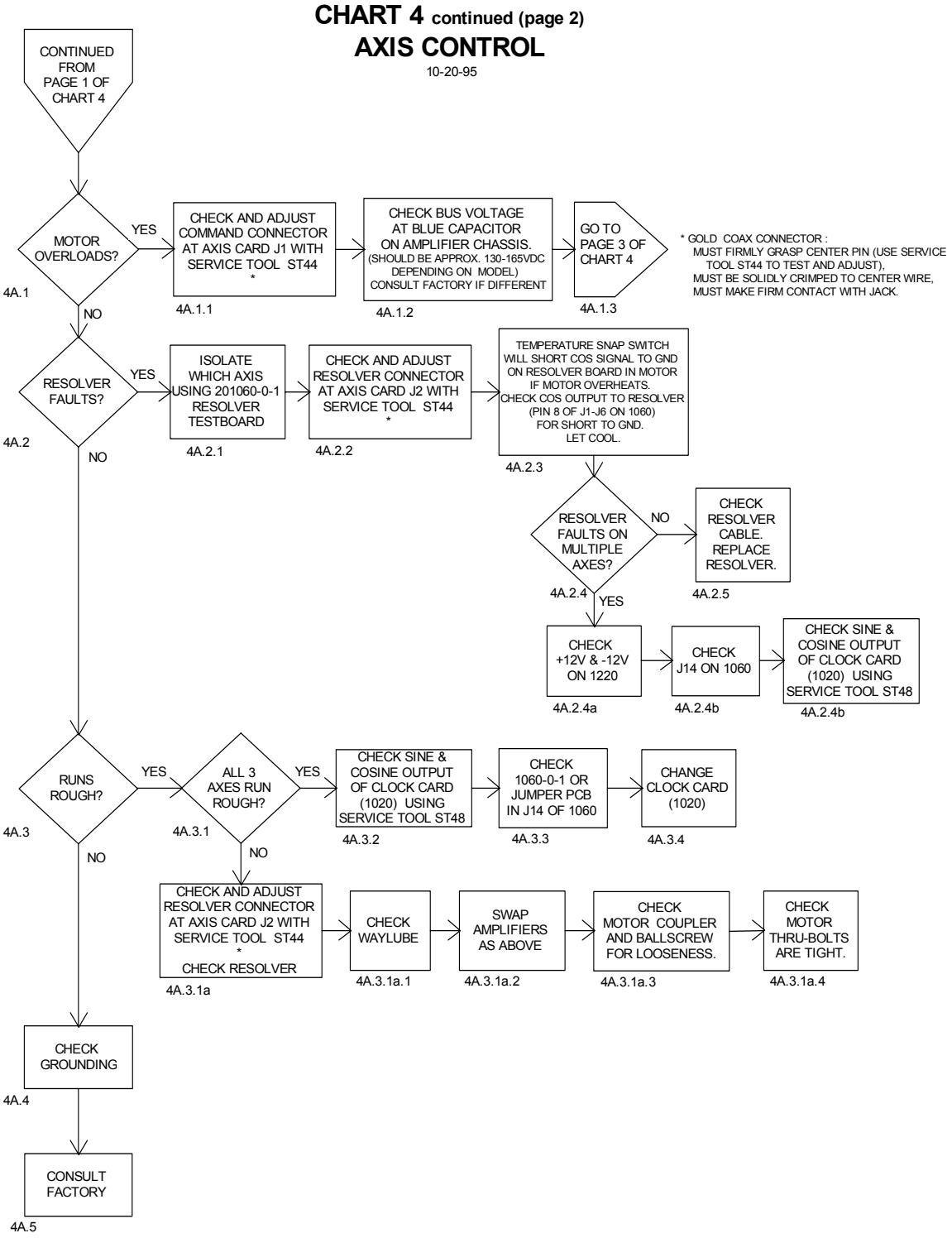


Figure 16-10 Axis Control (Continued)

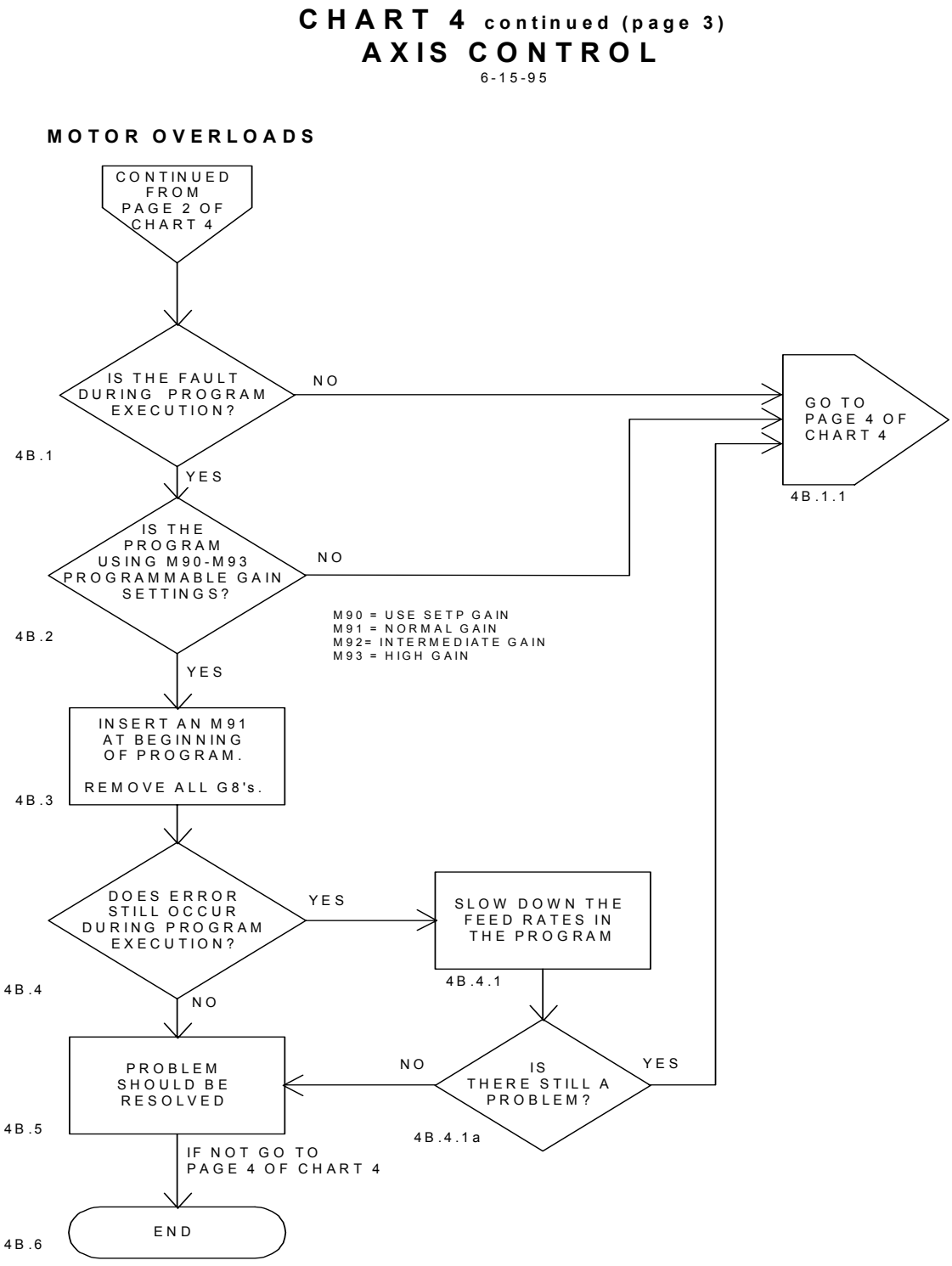


Figure 16-11 Axis Control (Continued)

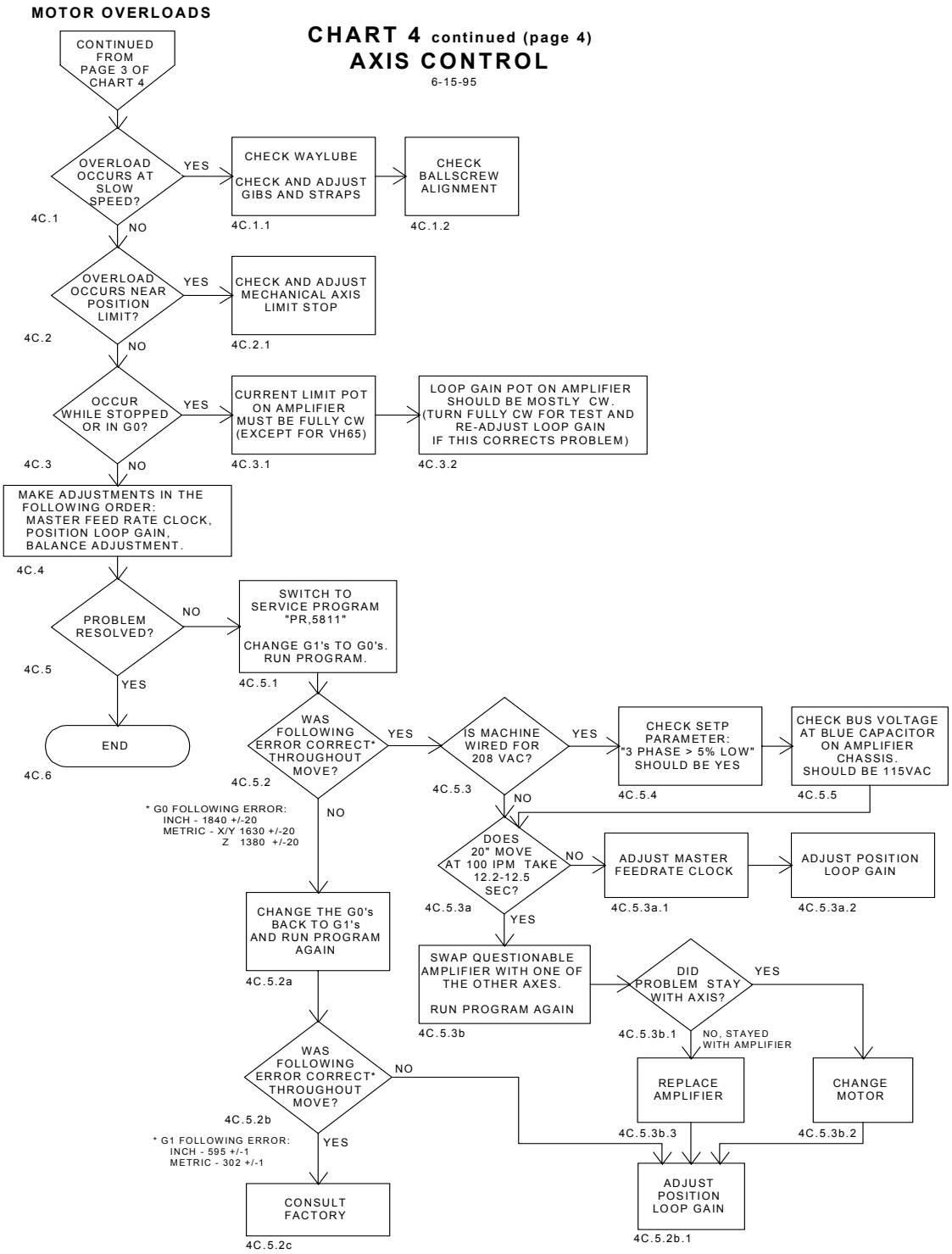


Figure 16-12 Axis Control (Continued)

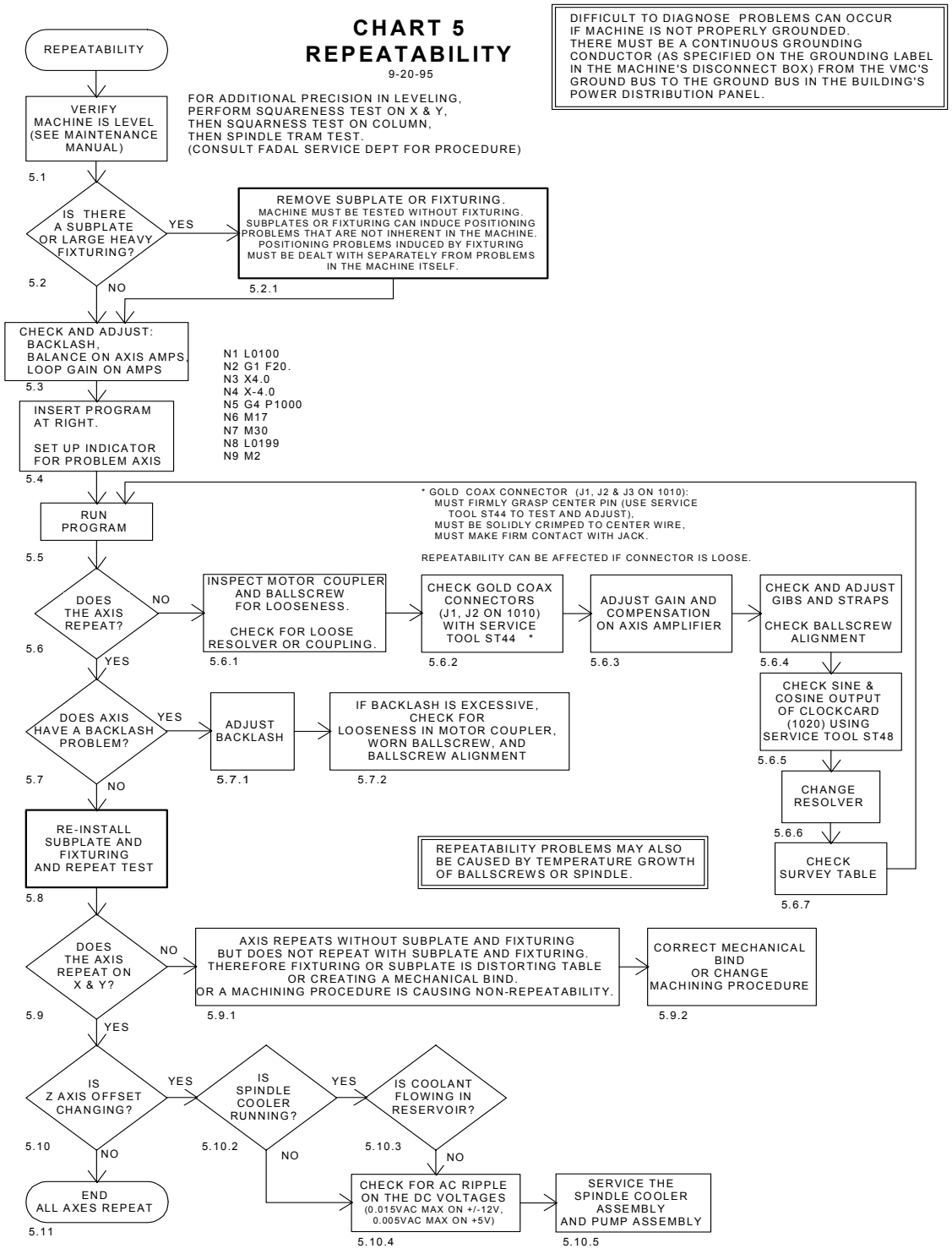


Figure 16-13 Repeatability

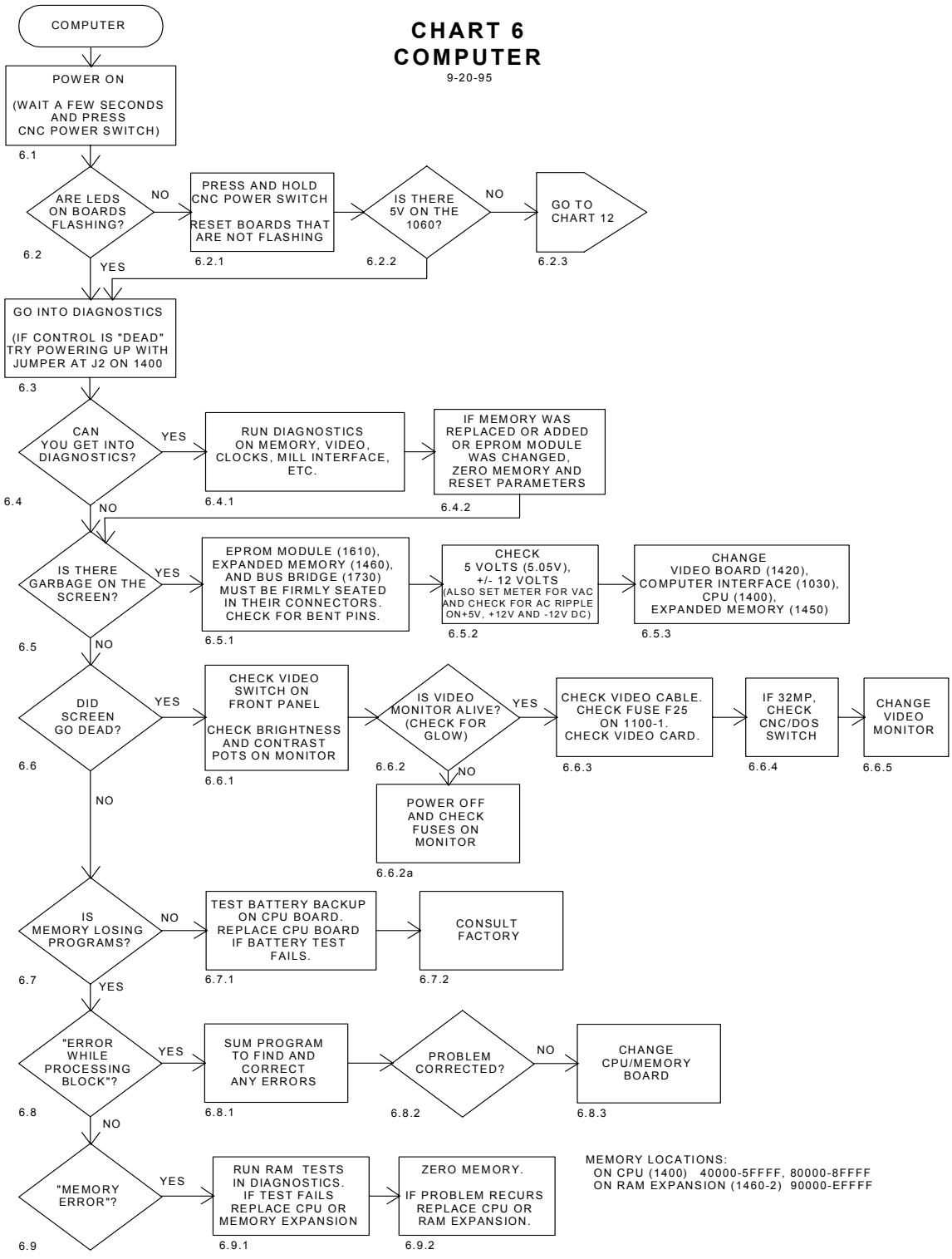


Figure 16-14 Computer

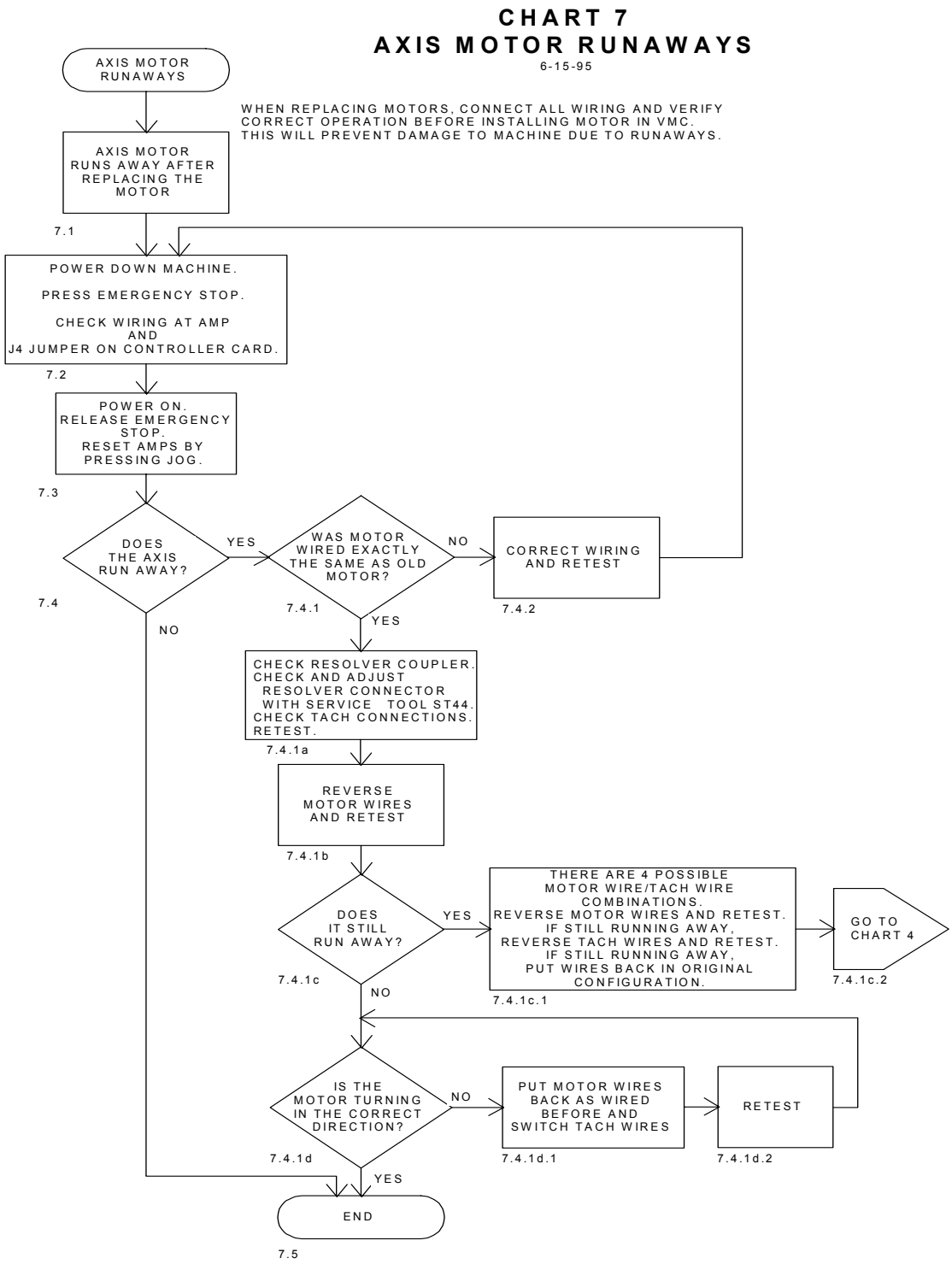


Figure 16-15 Axis Motor Runways

Table 1: Baldor SWEO Spindle Drive Error Messages

DESCRIPTION	ALARM DISPLAY
This fault occurs when the main bus supply voltage has gone too low, even momentarily.	DCLO
This fault occurs when the main bus supply voltage has gone too high, even momentarily.	DCHI
These faults are usually the result of an excessive load on the drive output. The fault condition can be permanent, occurring when the drive is enabled, or intermittent, occurring randomly during normal operation.	PH-1 PH-2 PH-3
Motor is over temperature.	OH E
Baldor SWEO drive is over temperature.	OH C
Overspeed on the motor has been detected.	OSP
The Baldor SWEO power supply has momentarily experienced a reduction of the +/- 15 volts below allowable levels.	15DC
Spindle motor has overloaded.	OL
Spindle motor is not properly connected, to torque.	I LO
Drive cannot follow the speed command within the error band setting.	F. ERR
Parameters need to be reloaded.	PAR
Power has been interrupted.	UP
EPROMs have faulted.	PROG

Table 2: Z200/Z300 Spindle Drive Error Messages

DESCRIPTION	ALARM DISPLAY
Inverter output current exceeded the overcurrent limit during acceleration.	EOC1
Inverter output current exceeded the overcurrent limit during constant speed operation.	EOC2
Inverter output current exceeded the overcurrent limit during deceleration.	E0C3
Braking regenerative power from motor exceeded the regenerative overvoltage limit.	EOVT
Electronic thermal relay in the inverter was activated (current is below 150% of preset current).	ETHM
Electronic thermal relay in the inverter was activated (current is over 150% of preset current).	ETHT
Instantaneous power failure protective function was activated.	EIPF
Temperature of transistor heatsink exceeded the specified limit.	EFIN
Brake transistor fault detection.	E BE

Table 2: Z200/Z300 Spindle Drive Error Messages

DESCRIPTION	ALARM DISPLAY
Stall preventative function was activated during constant speed operation and stopped the motor.	EOLT
Memory in the inverter is corrupted.	E PE
Inverter input voltage fell below the specified limit.	EUVT
Overcurrent due to earth fault on the inverter output side.	E GF
Externally installed thermal relay activated (overheat).	EOHT
Built-in optional unit connection failure during operation	EOPT

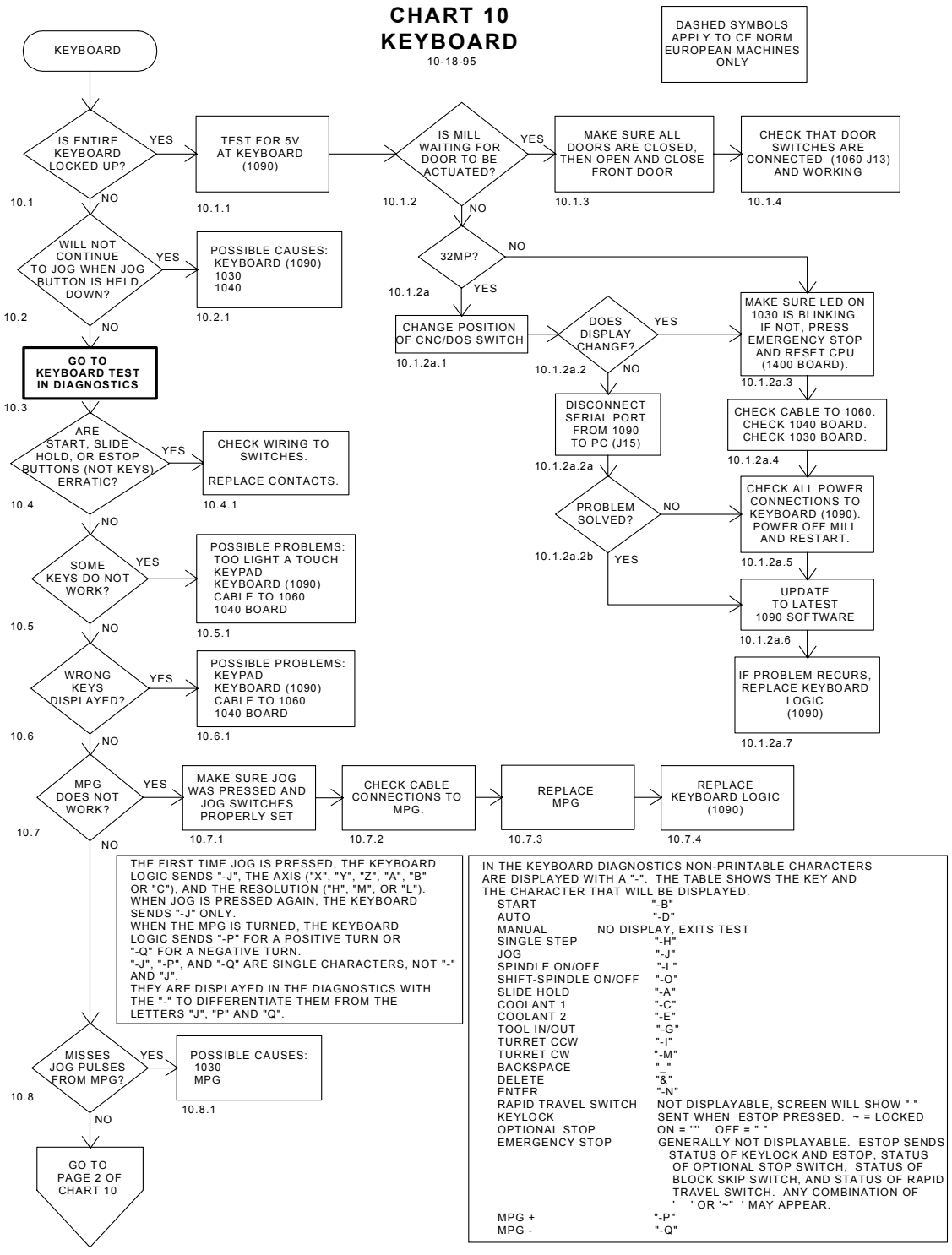


Figure 16-16 Keyboard

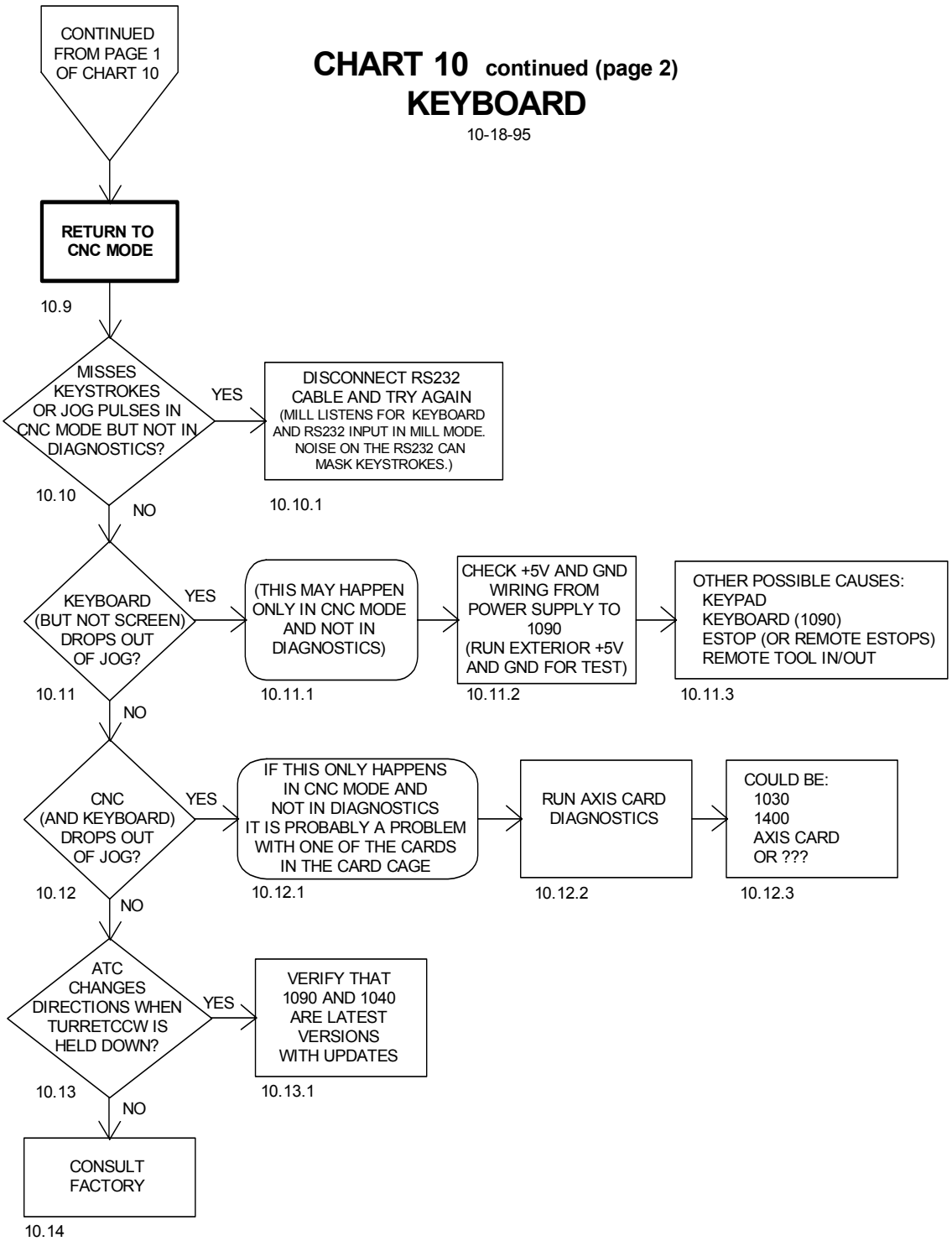


Figure 16-17 Keyboard (Continued)

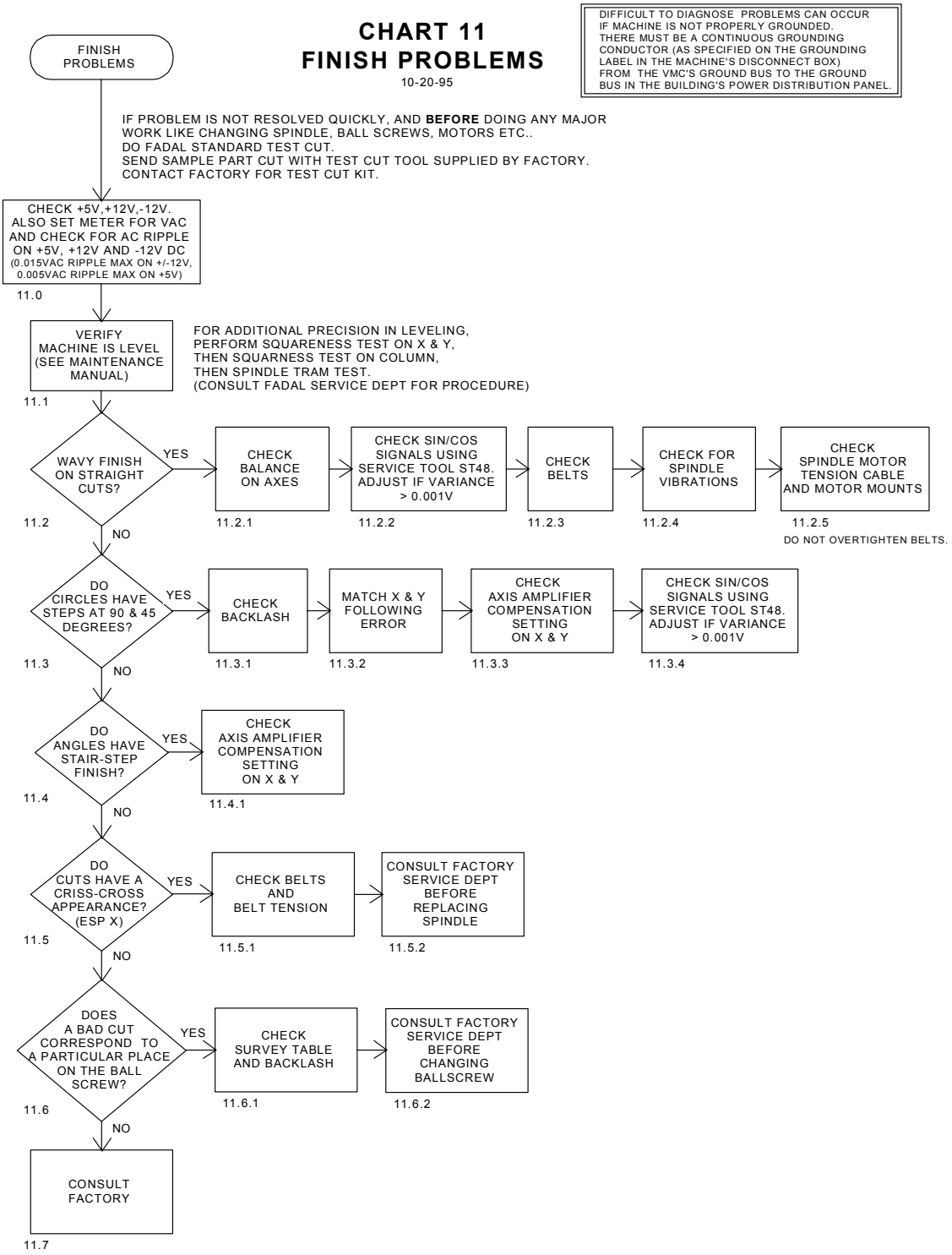


Figure 16-18 Finish Problems

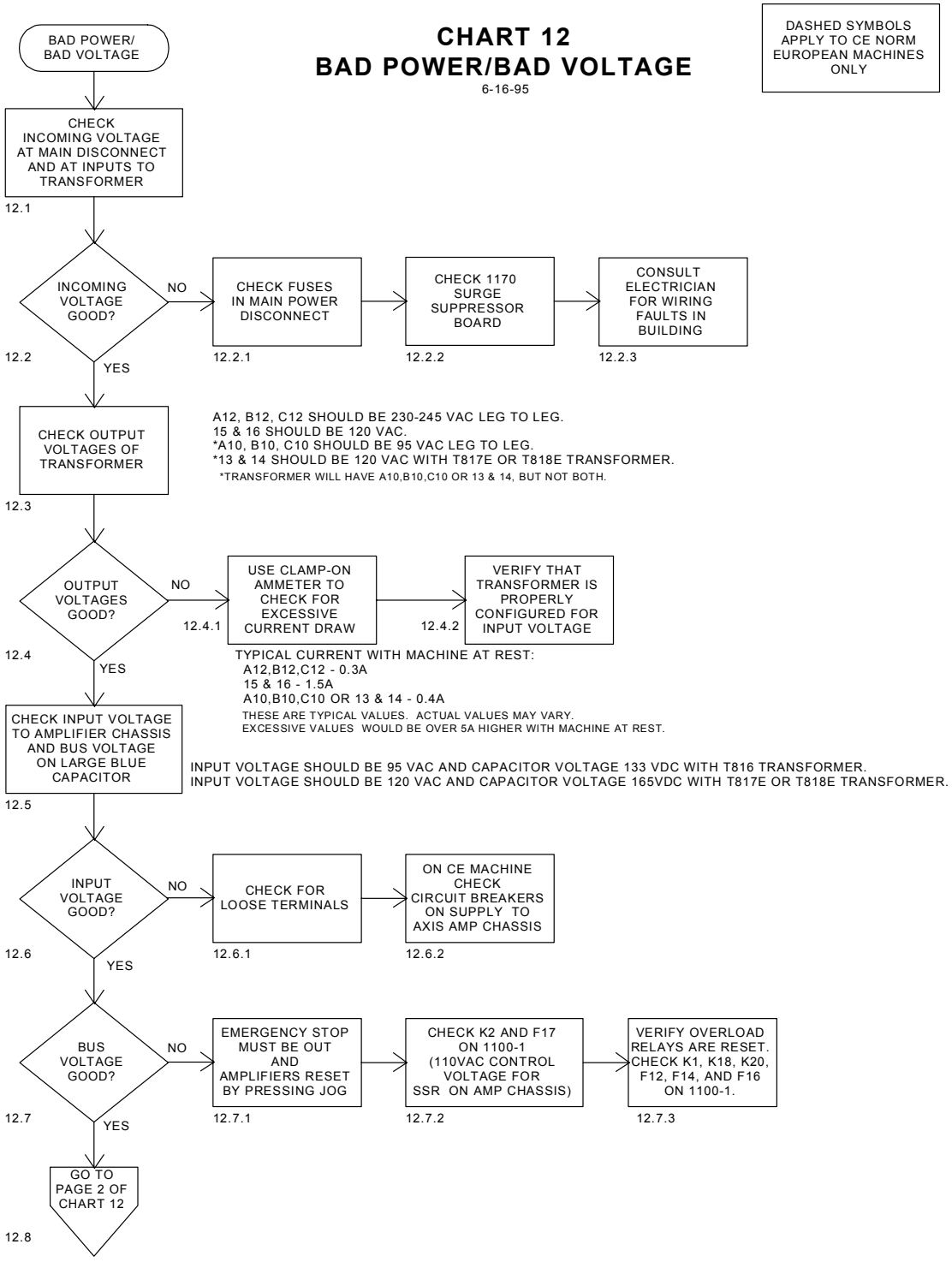


Figure 16-19 Bad Power/Bad Voltage

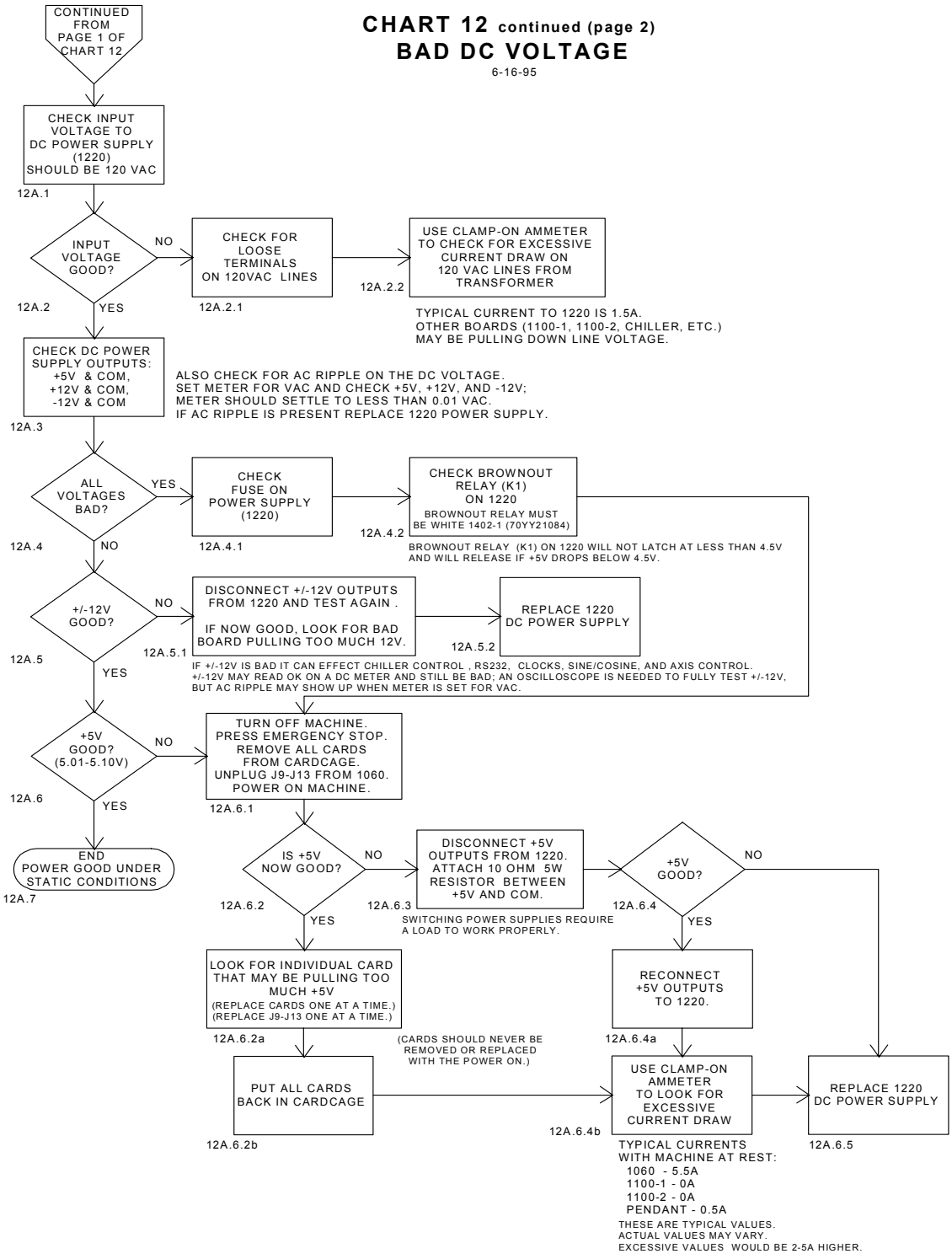


Figure 16-20 Bad DC Voltage (Continued)

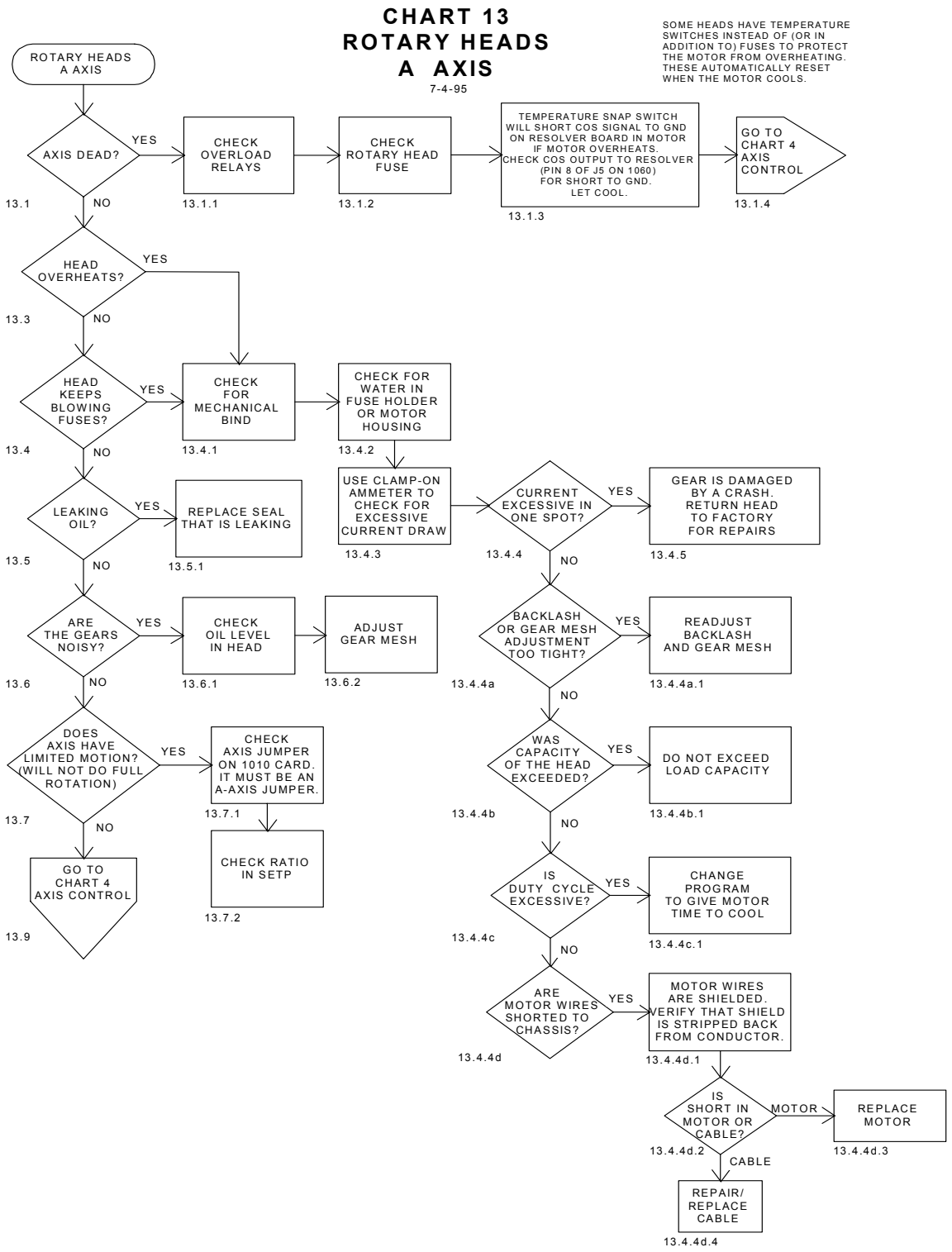


Figure 16-21 Rotary Heads A Axis

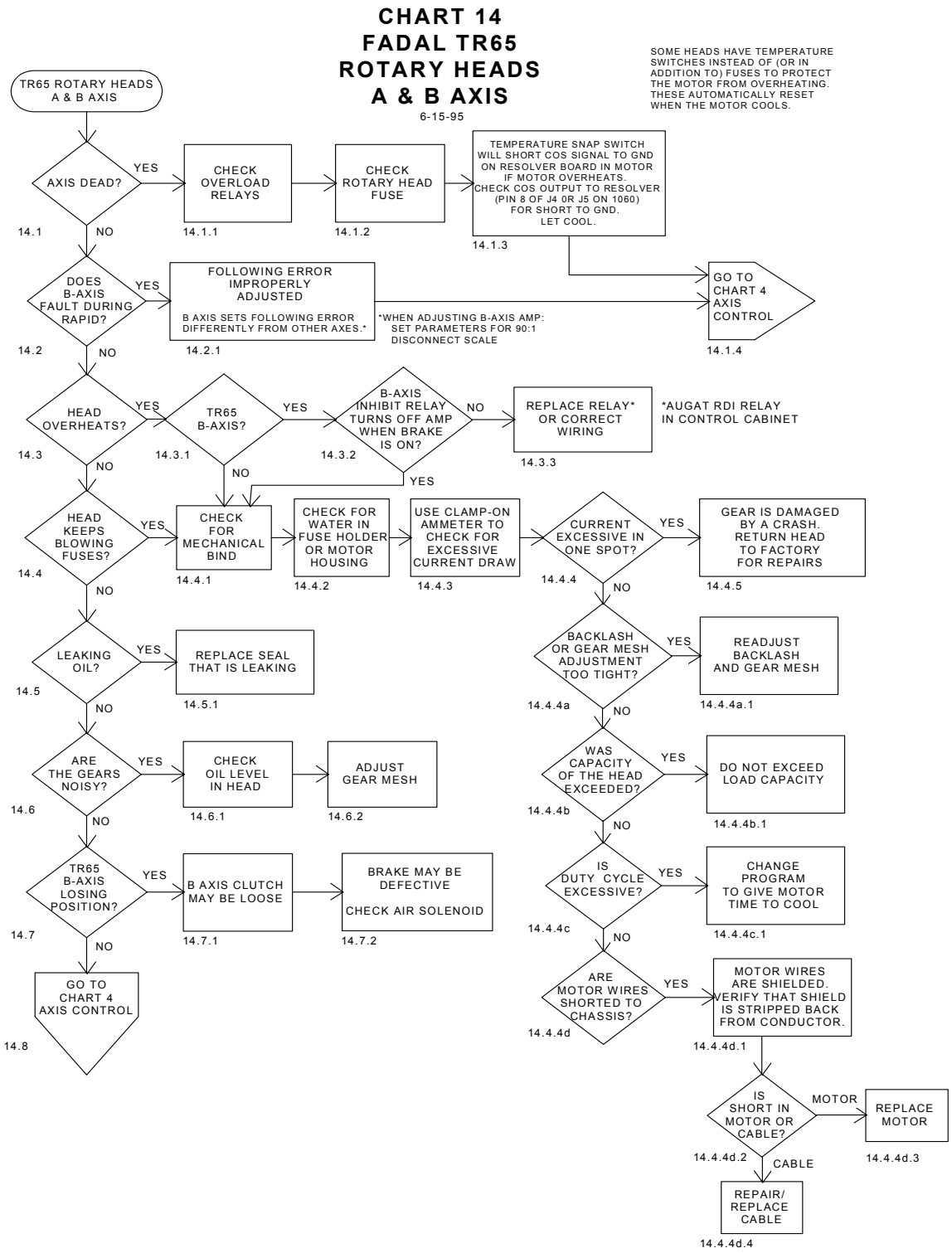


Figure 16-22 TR65 Rotary Heads A & B Axes

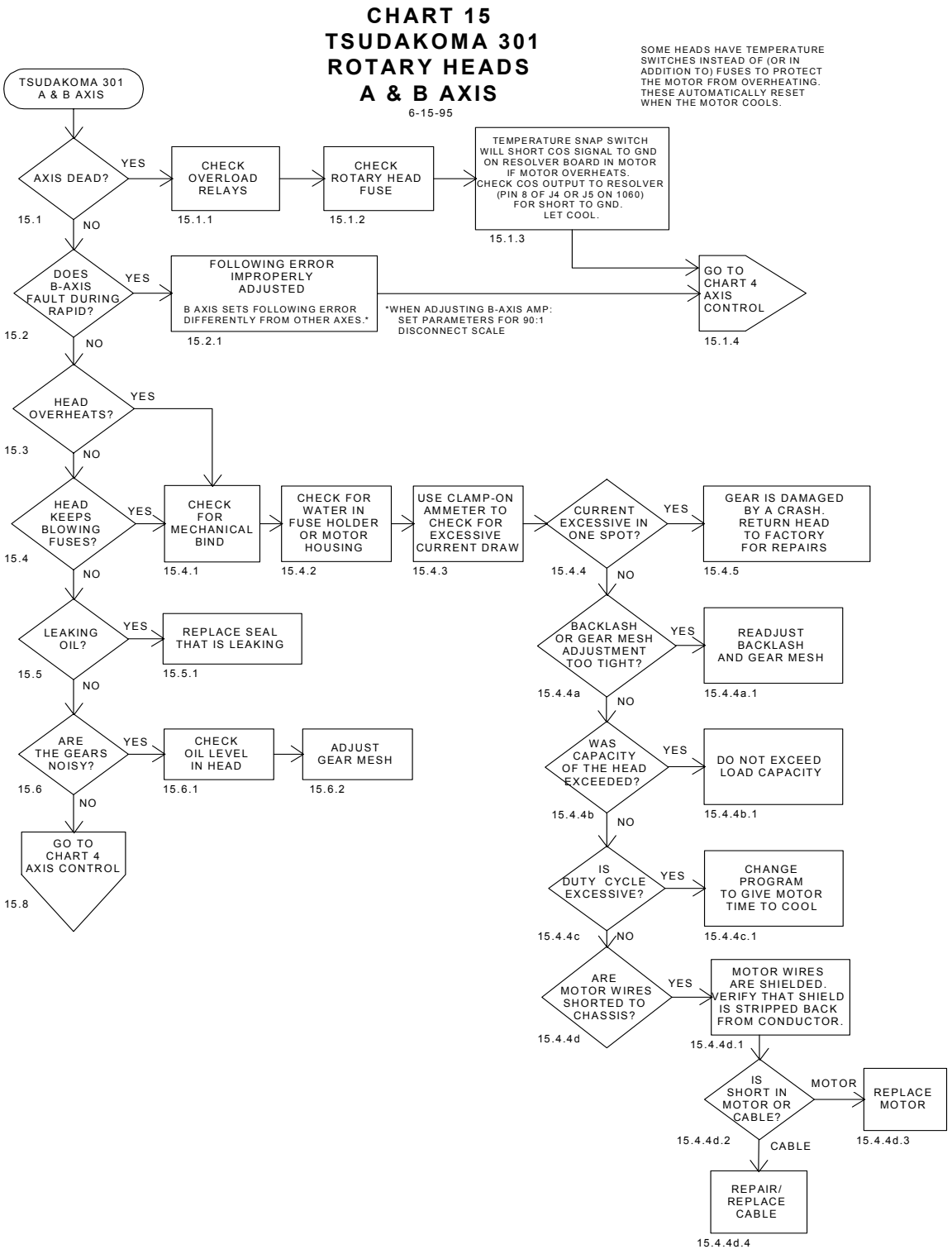


Figure 16-23 Tsudakoma 301RotaryHeads A & B Axes

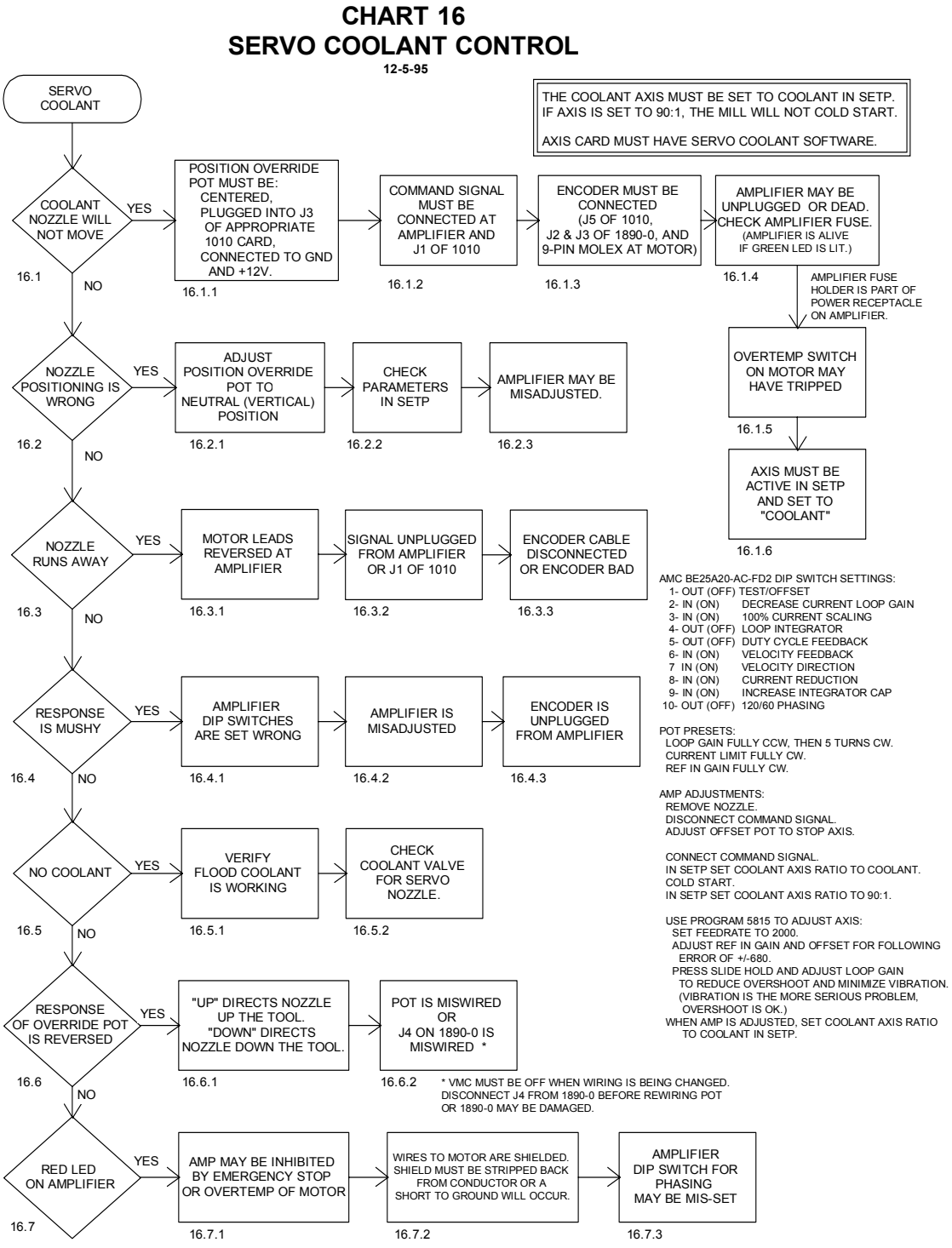


Figure 16-24 Servo Coolant Control

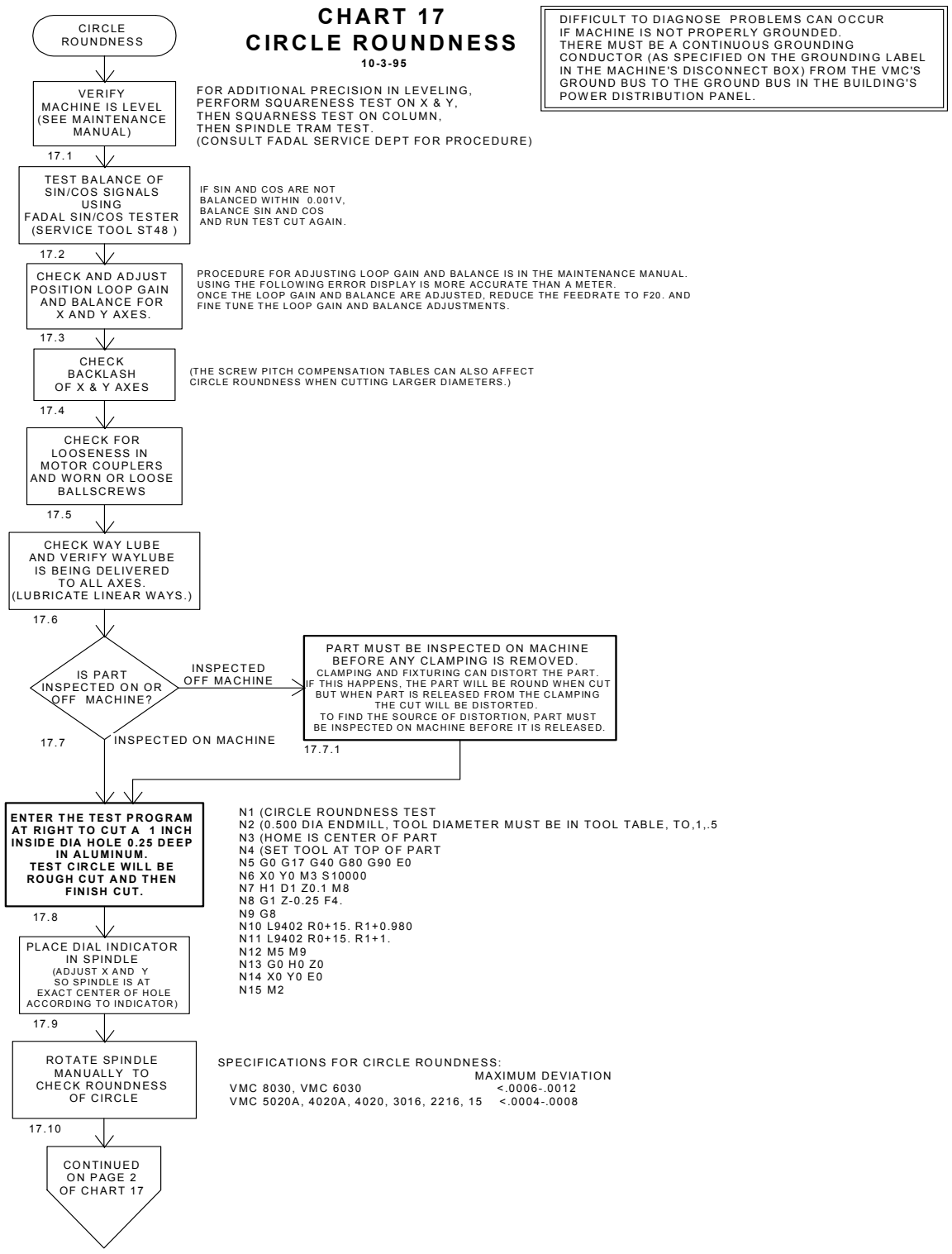


Figure 16-25 Circle Roundness

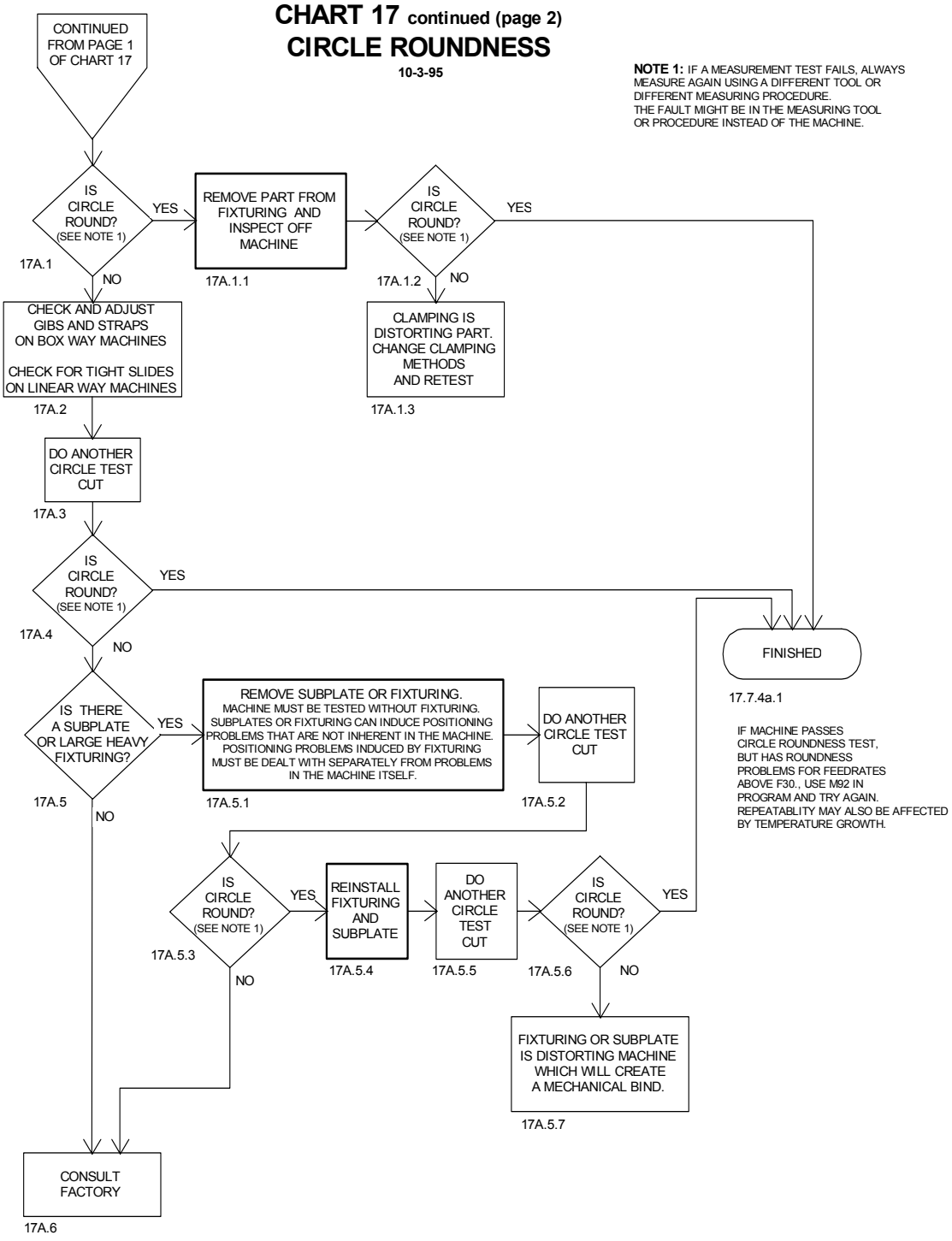


Figure 16-26 Circle Roundness (Continued)

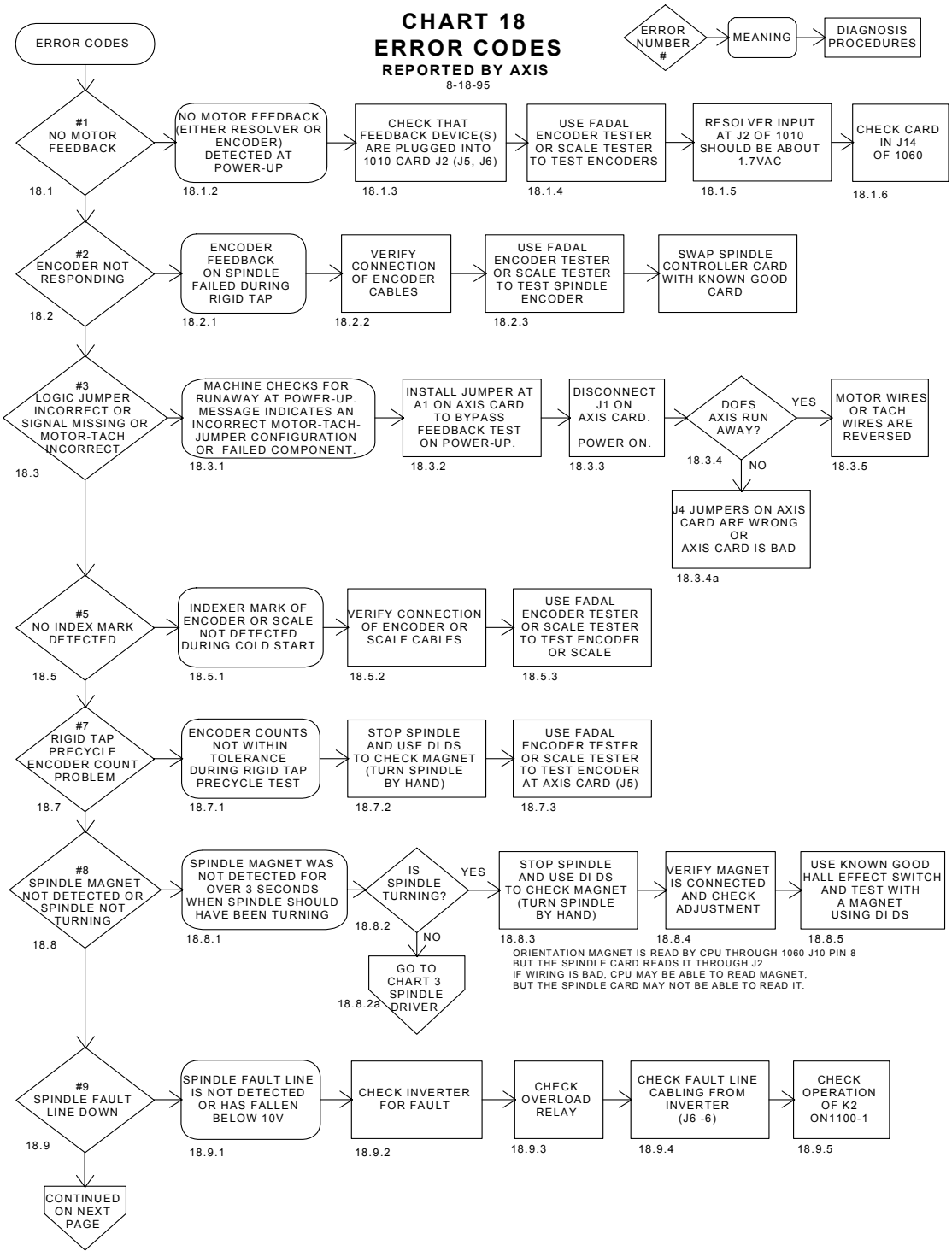


Figure 16-27 Error Codes

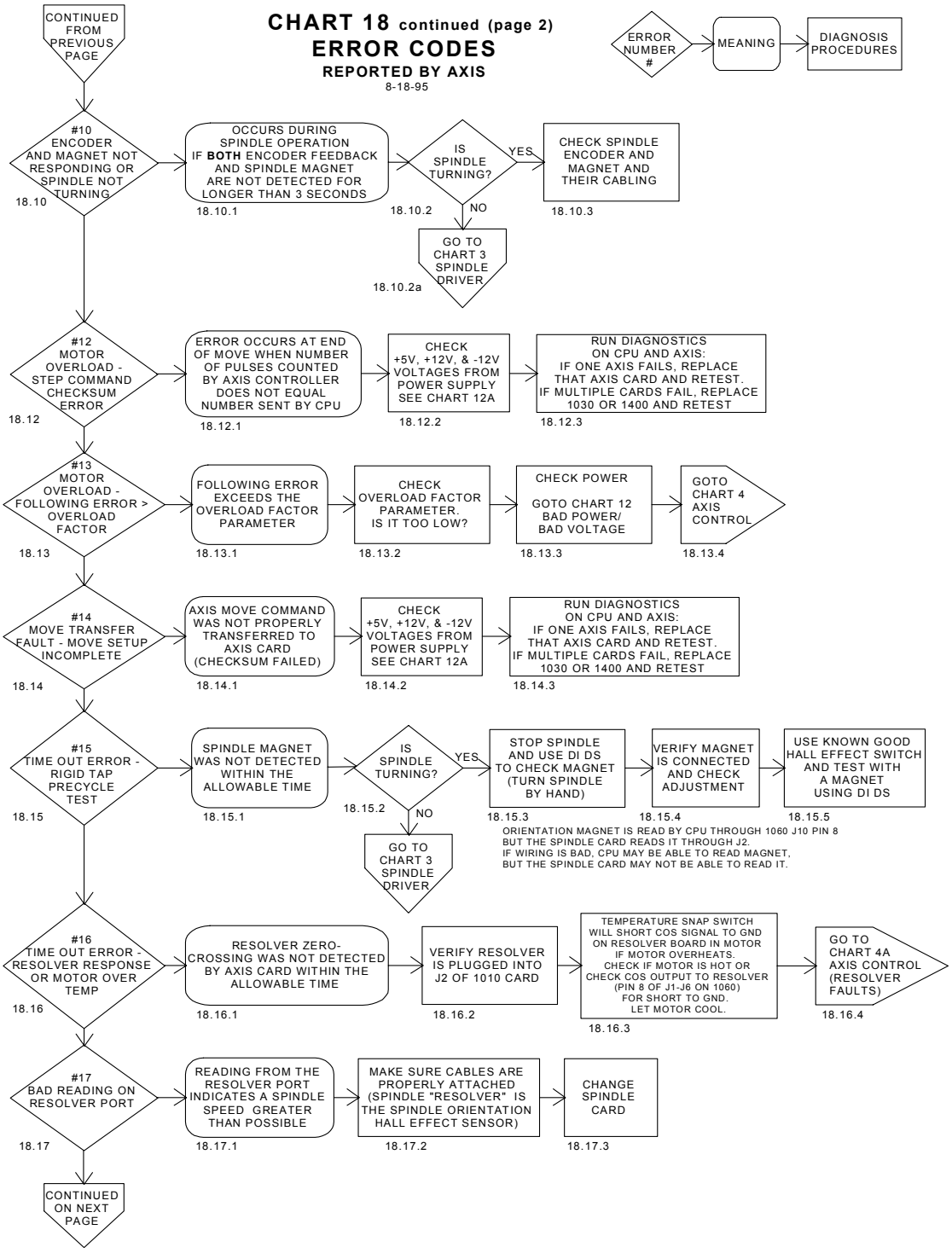


Figure 16-28 Error Codes (Continued)

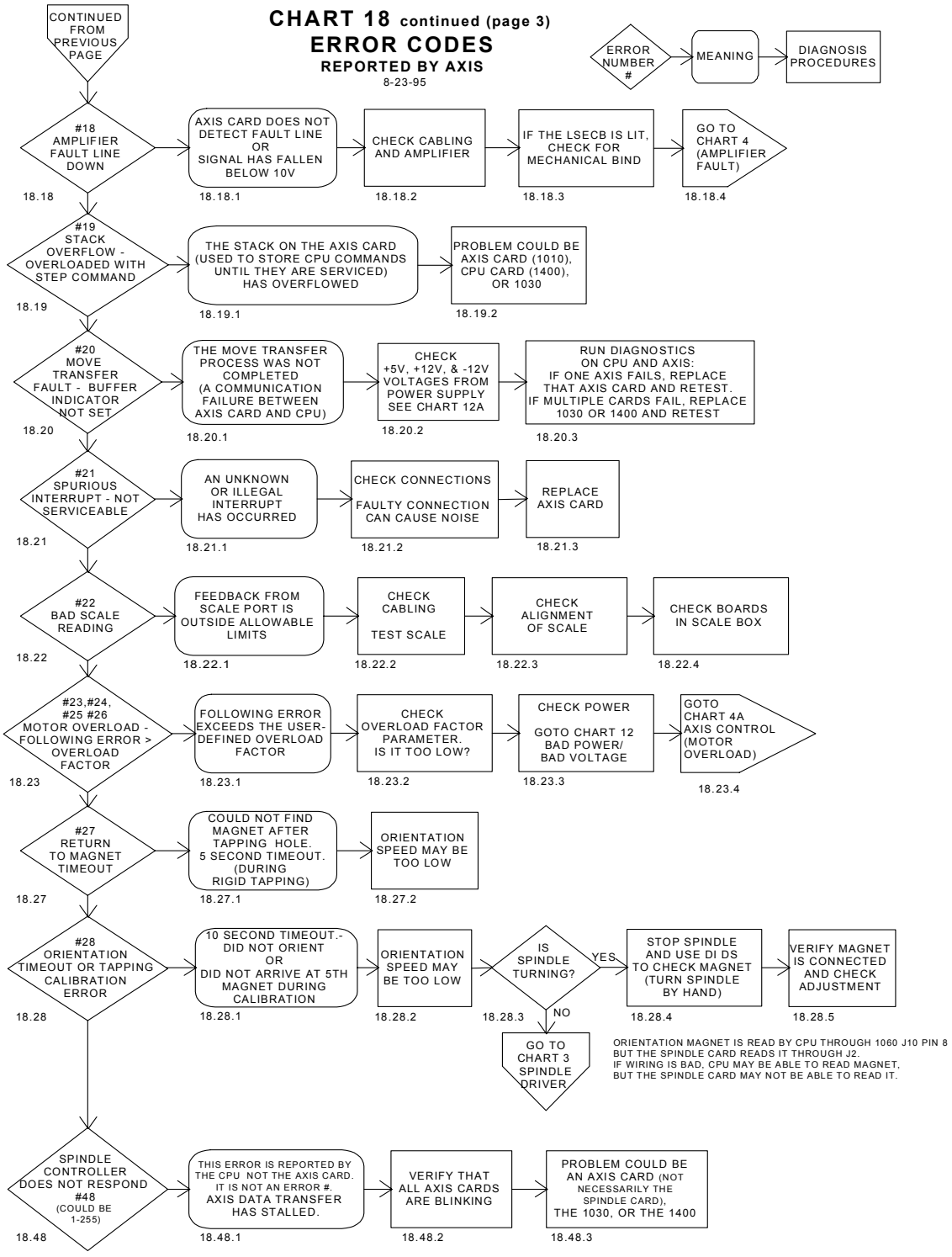


Figure 16-29 Error Codes

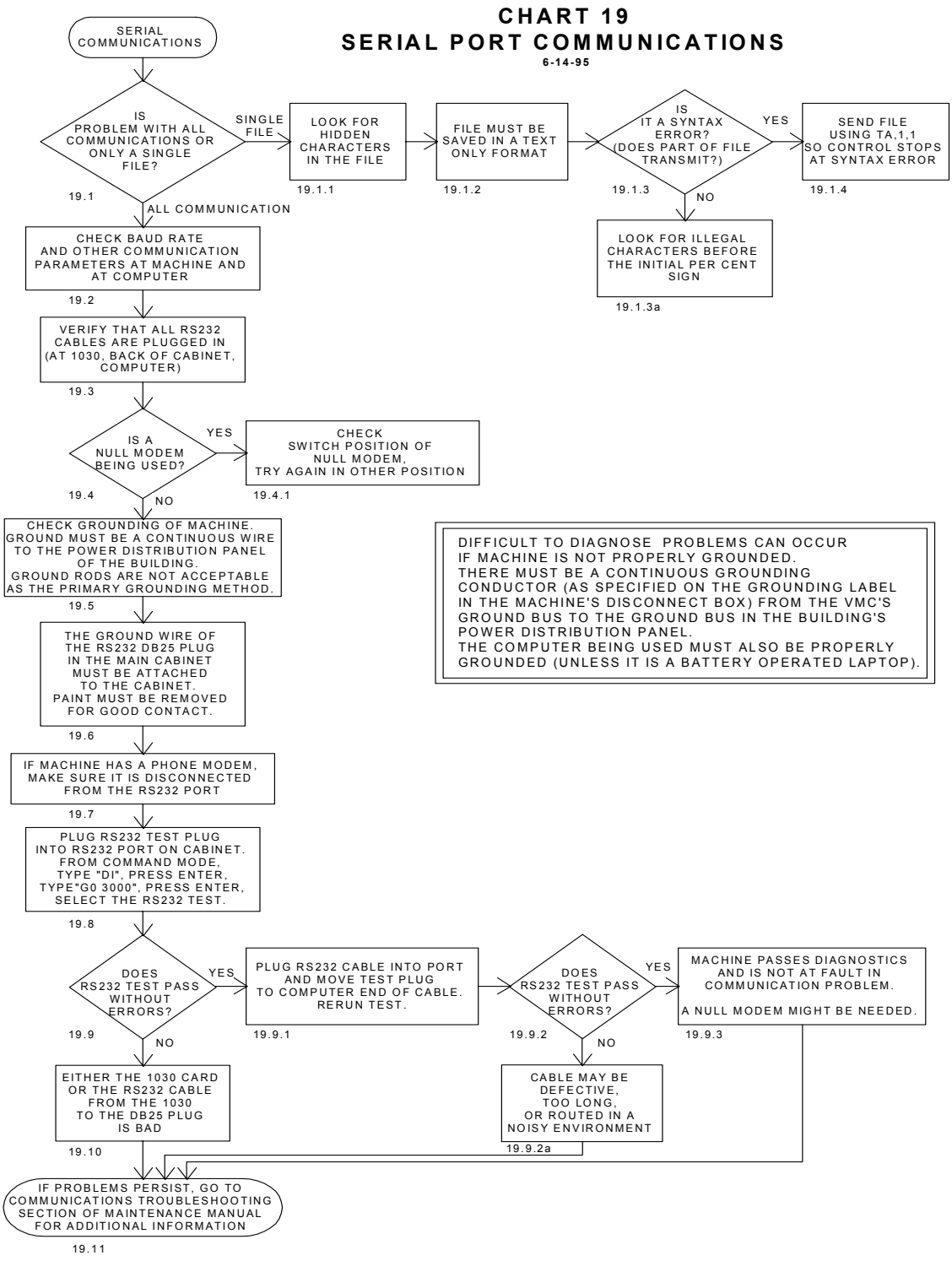


Figure 16-30 Serial Port Communications

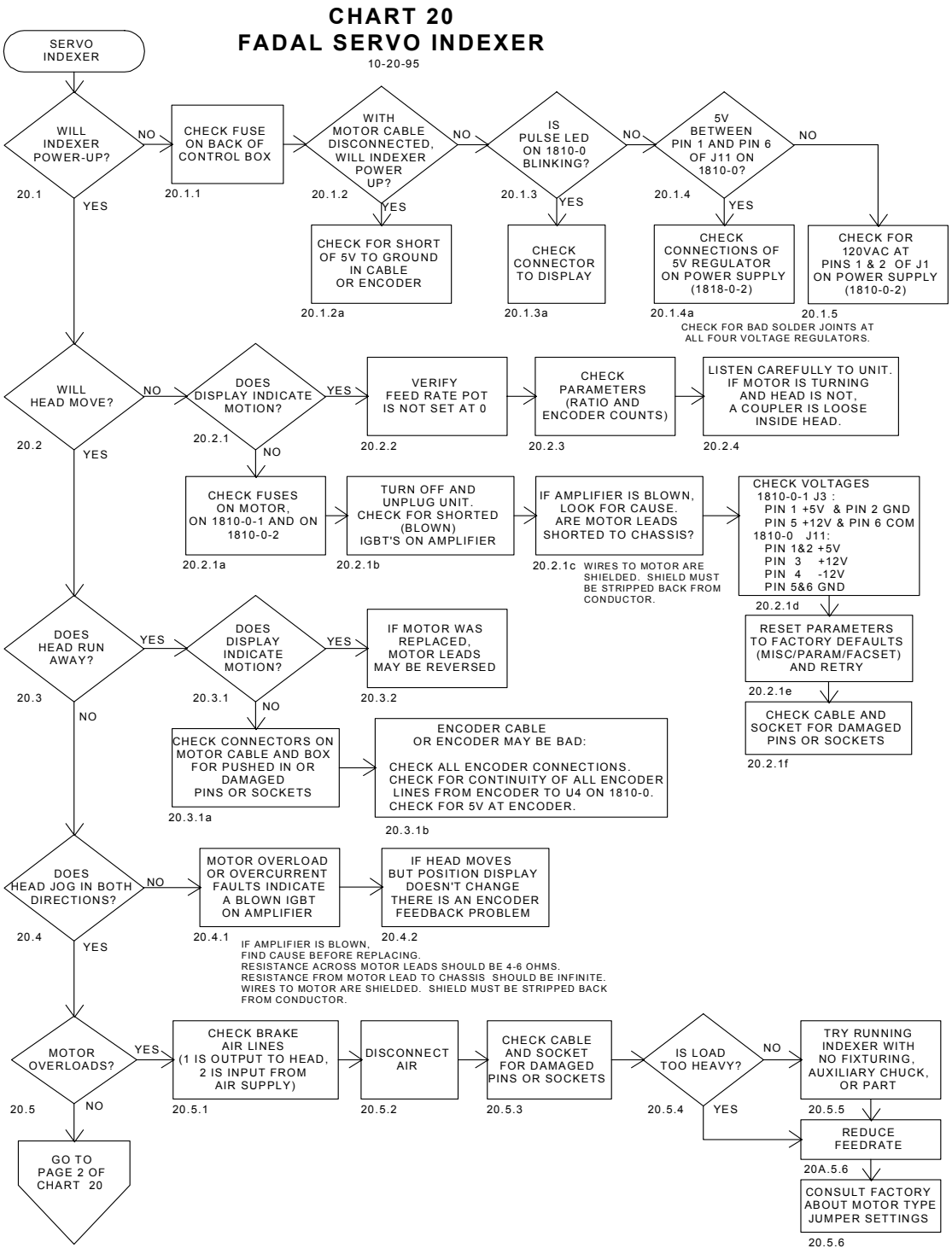


Figure 16-31 Servo Indexer

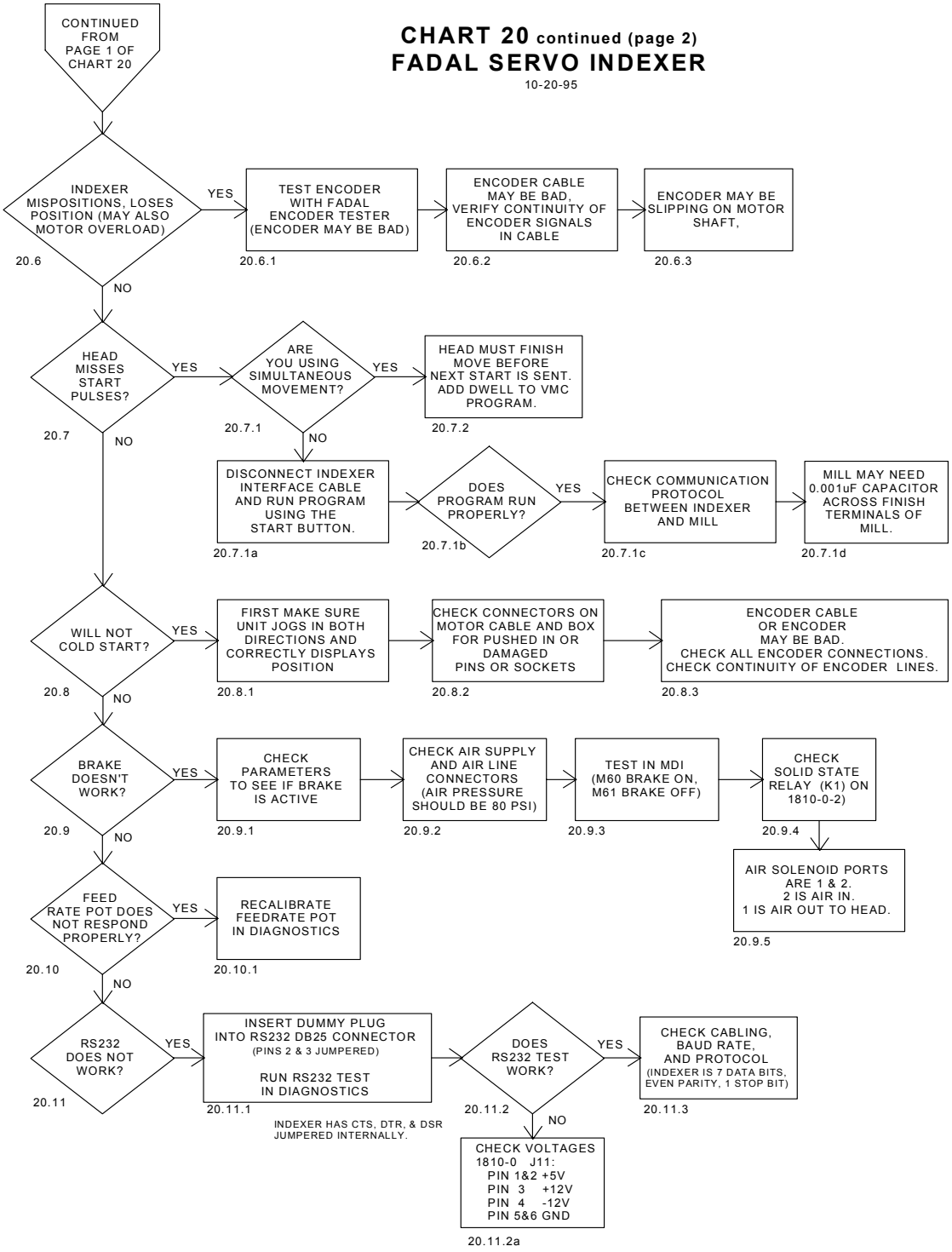


Figure 16-32 Servo Indexer (Continued)

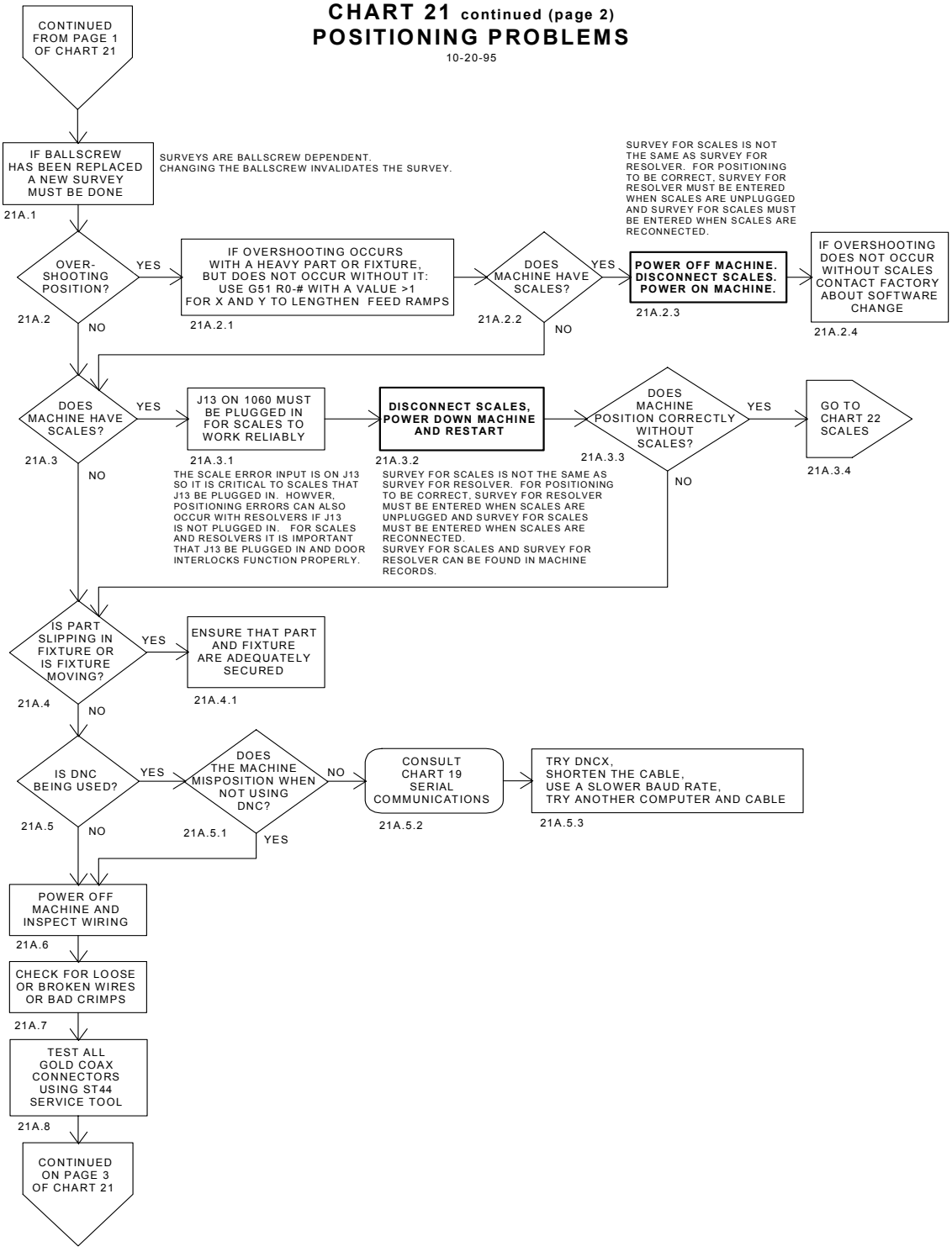


Figure 16-33 Positioning Problems

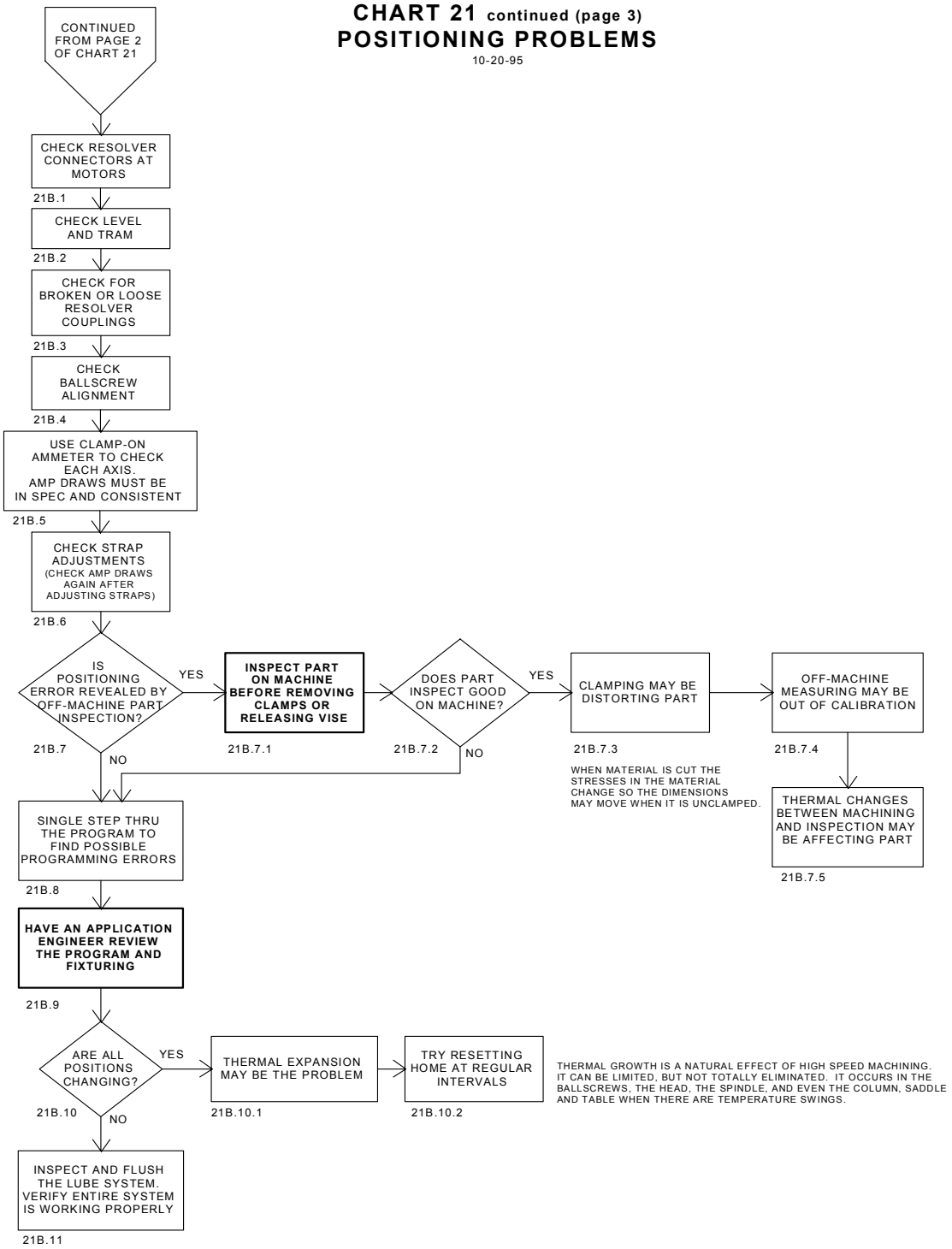


Figure 16-34 Positioning Problems

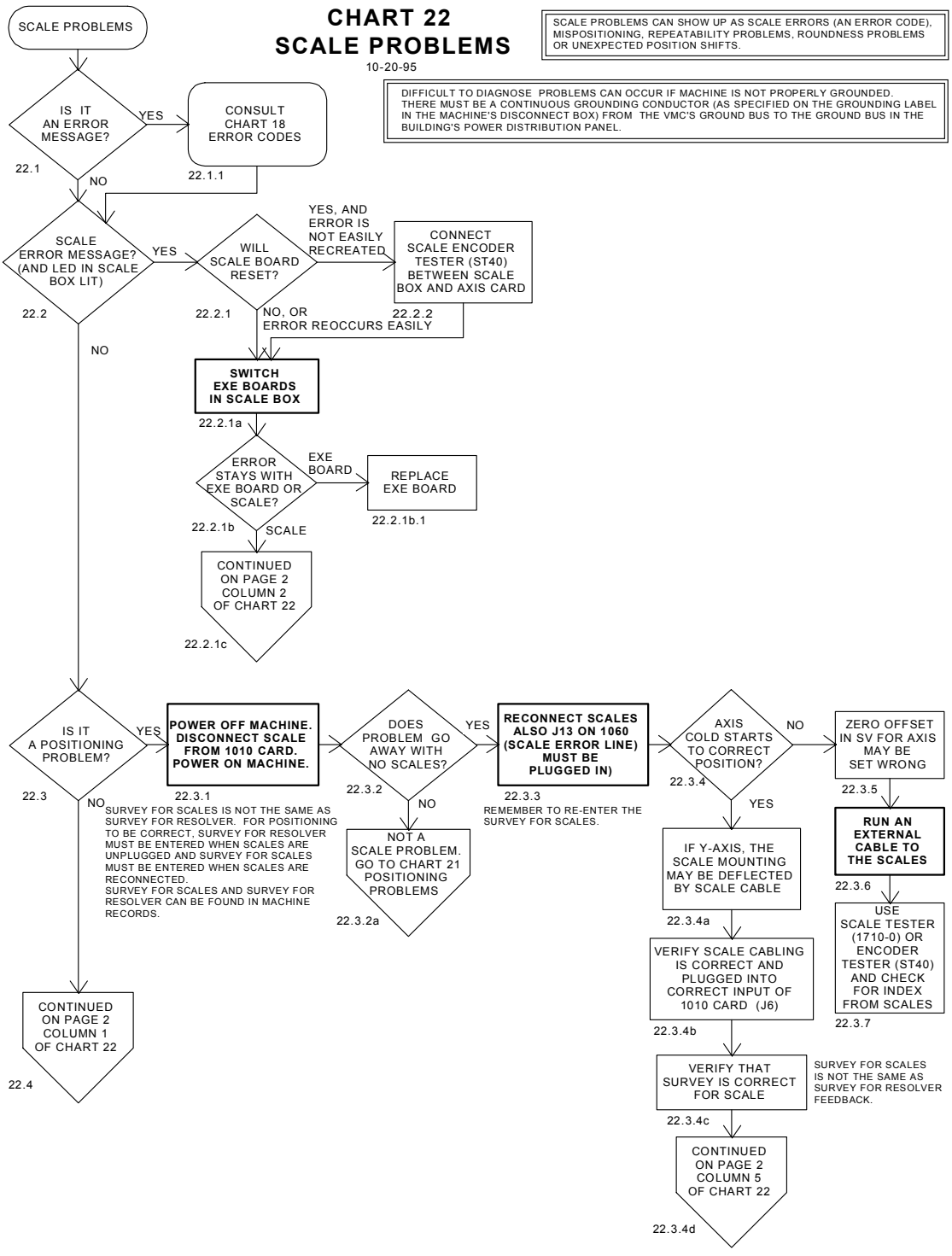


Figure 16-35 Scale Problems

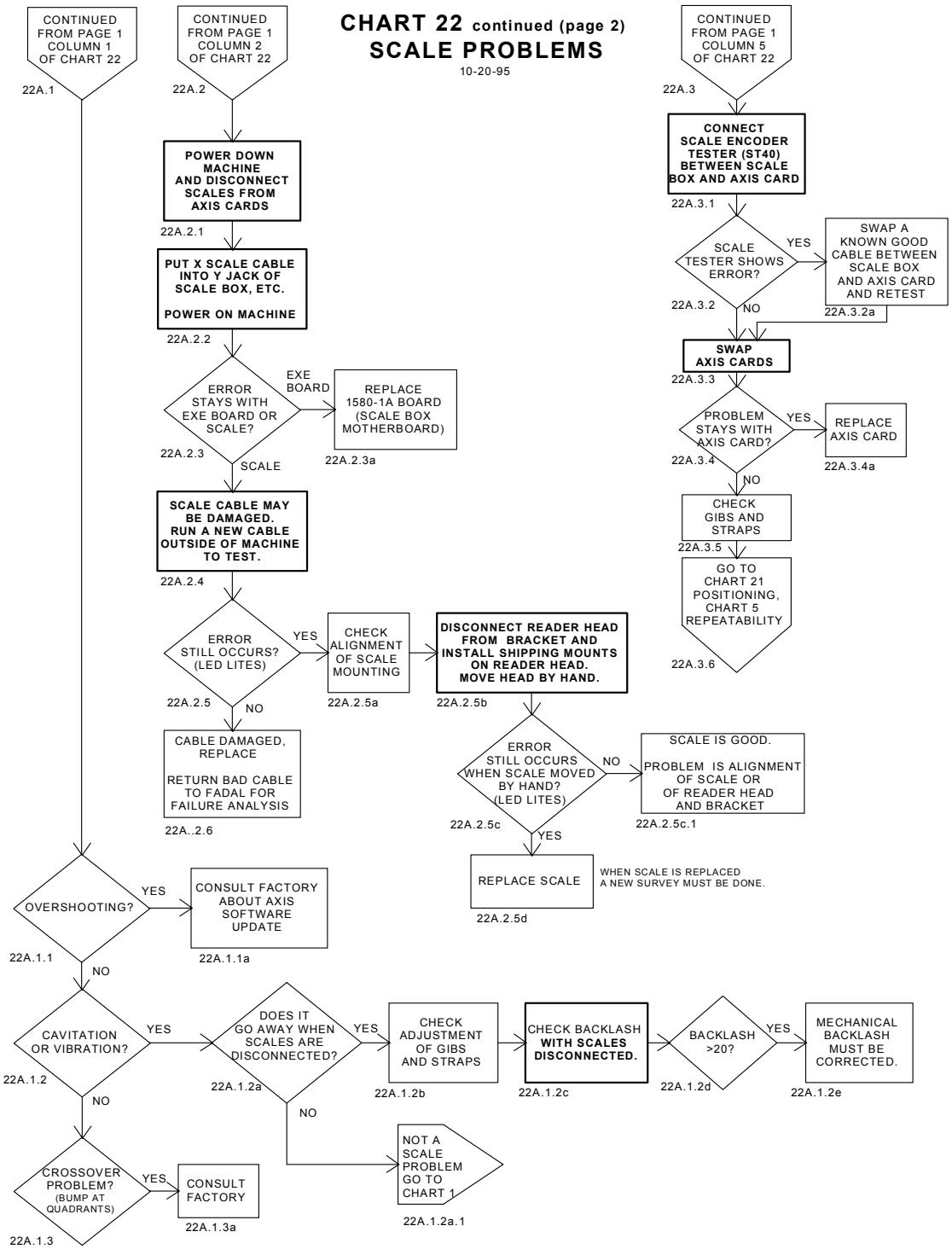


Figure 16-36 Scale Problems (Continued)

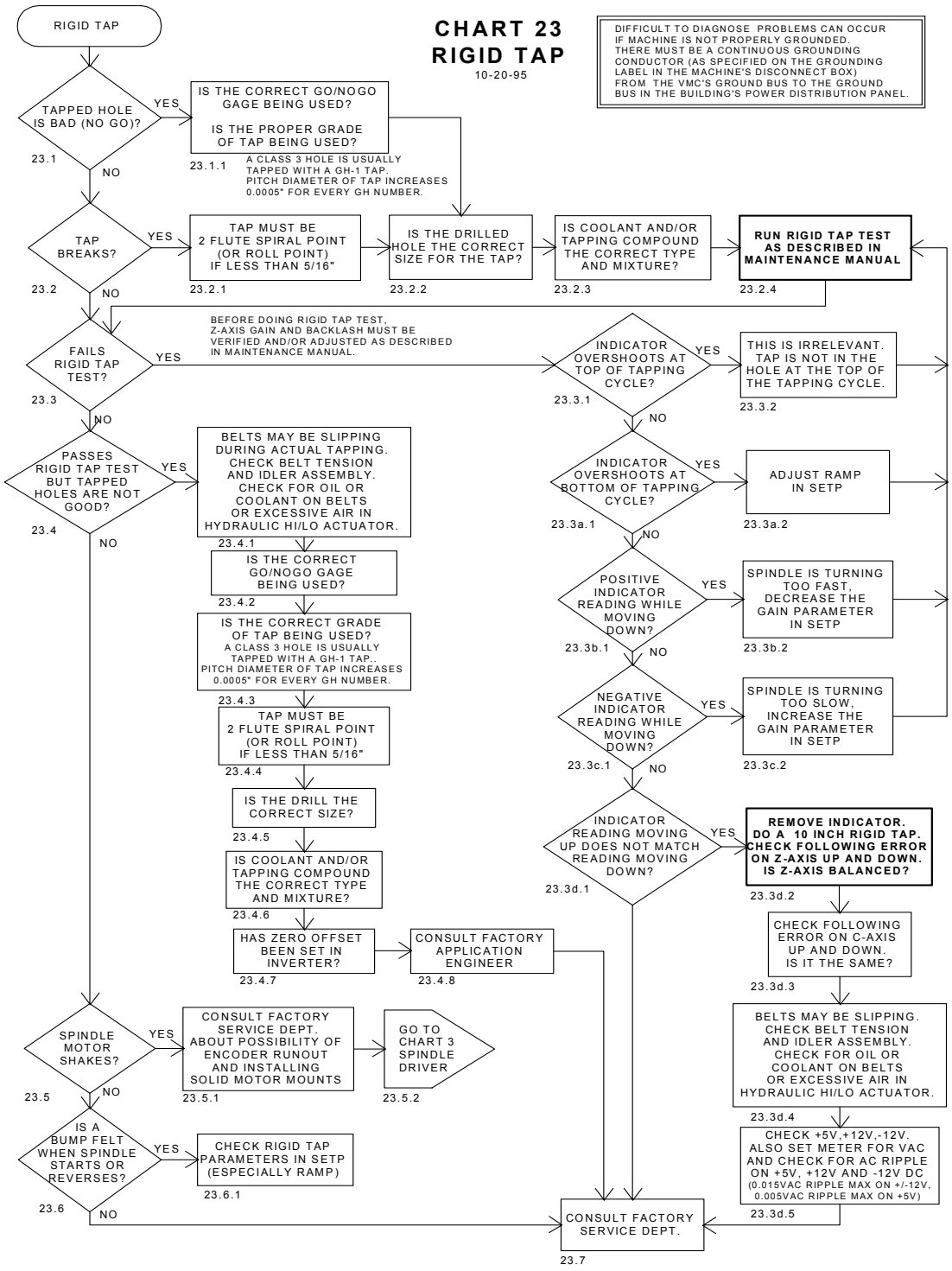


Figure 16-37 Rigid Tap

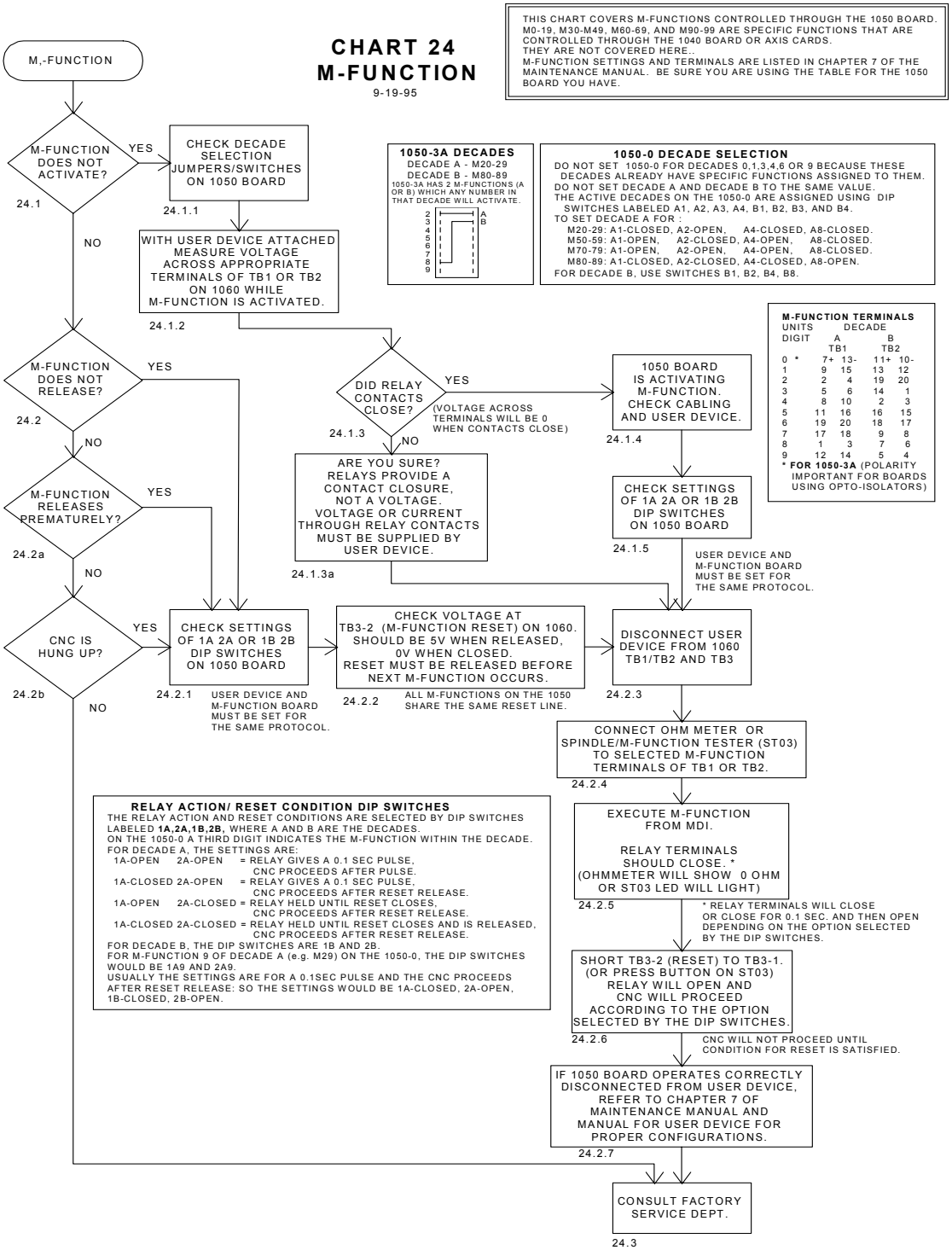


Figure 16-38 M-Function

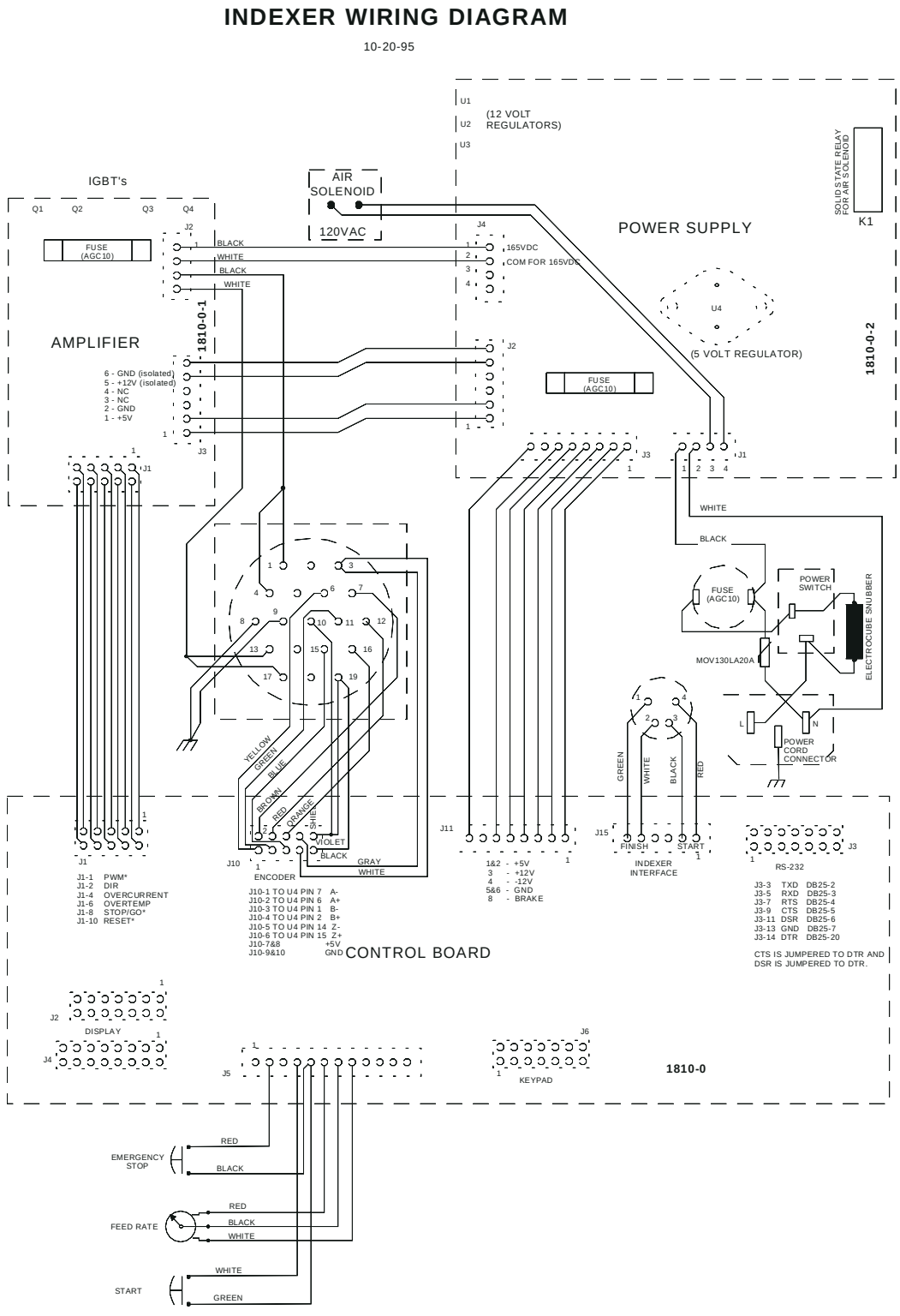
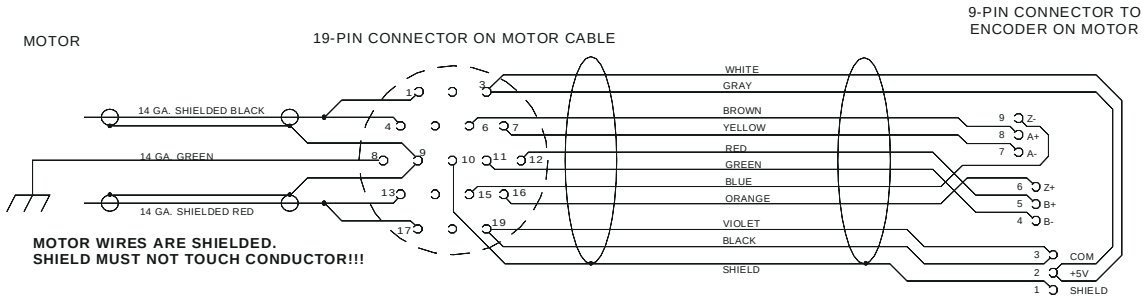
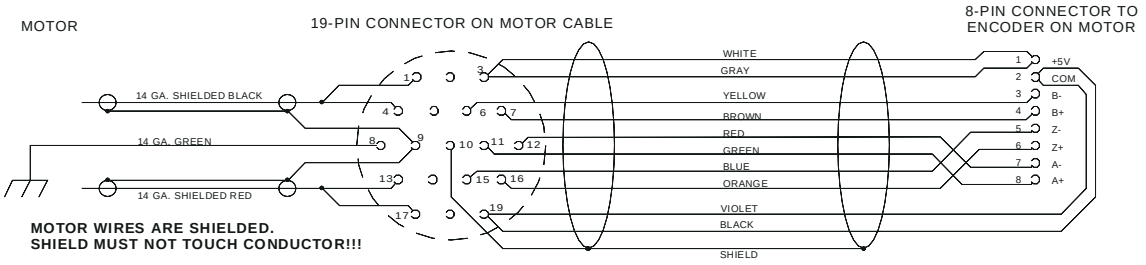


Figure 16-39 Indexer Wiring Diagram



MOTOR CABLE WIRING FOR VH-5C INDEXER

4-6-95



MOTOR CABLE WIRING FOR VH-65 INDEXER

4-6-95

BULKHEAD CONNECTOR WIRING FOR CLOCKWISE POSITIVE MOTION

6-20-95

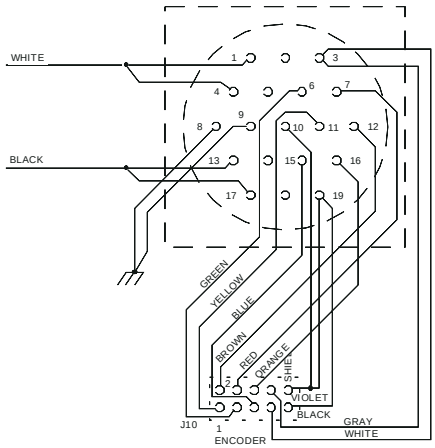


Figure 16-40 Motor Cable Wiring & Bulkhead Connector Wiring

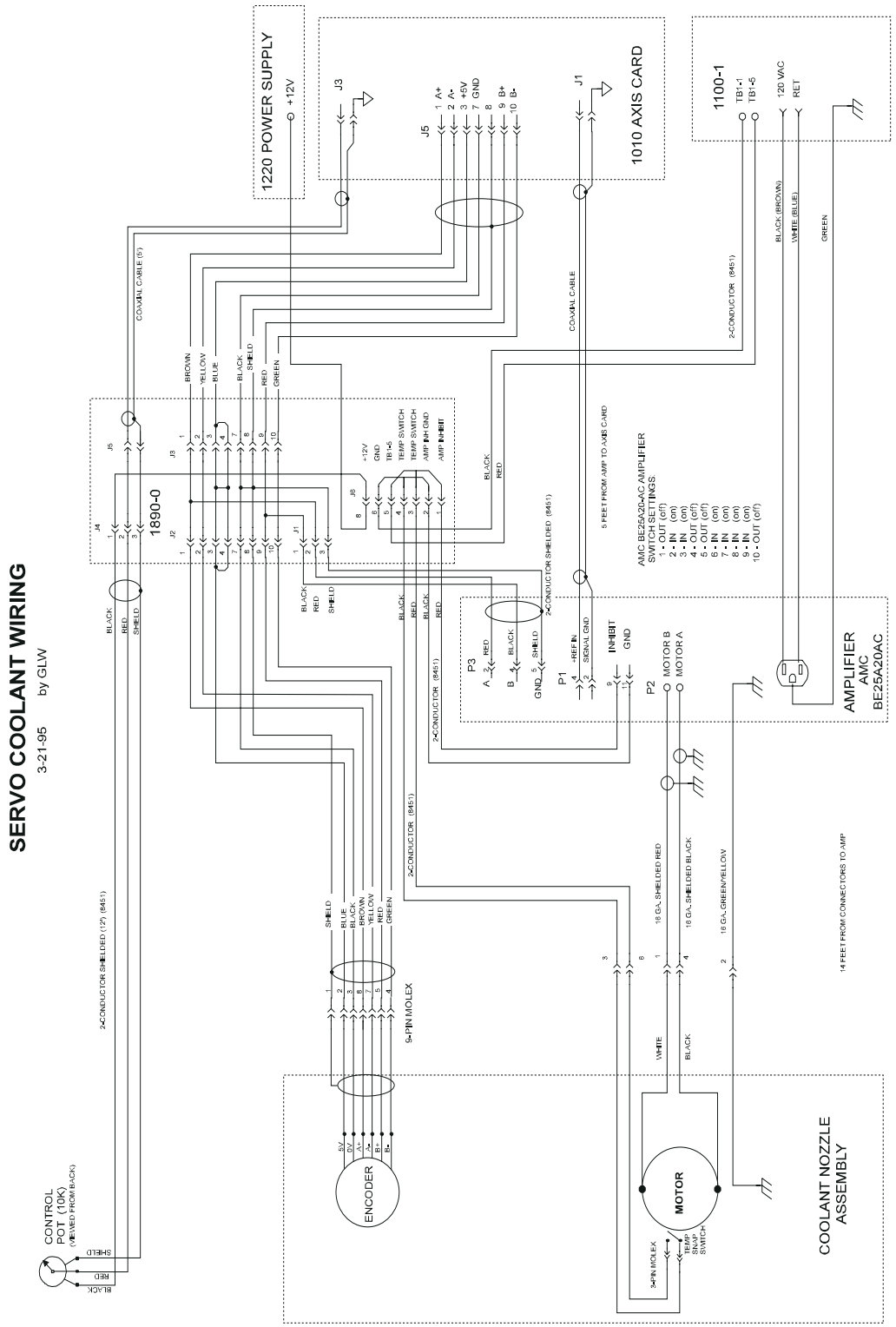


Figure 16-41 Servo Coolant Wiring

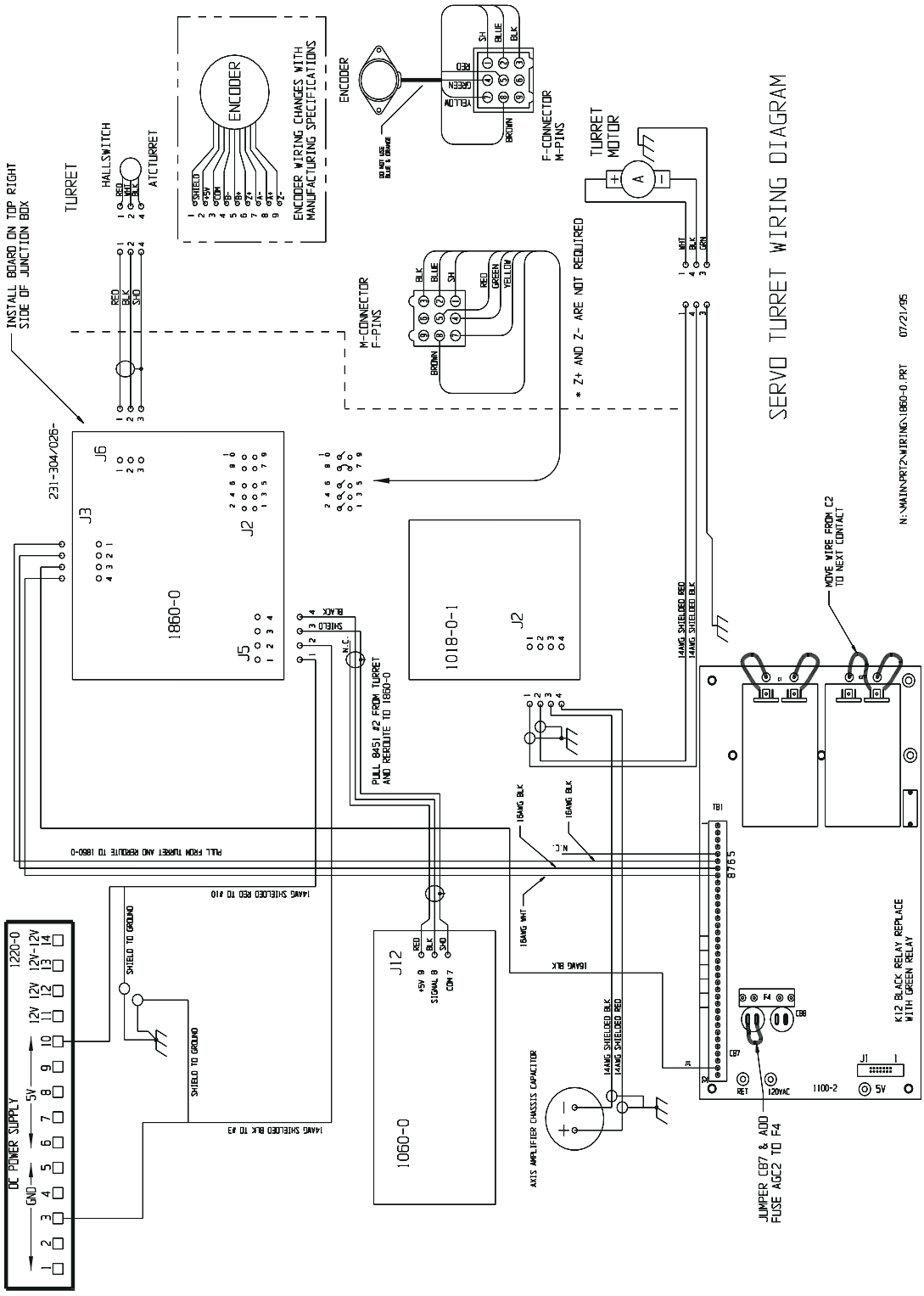


Figure 16-42 Servo Turret Wiring