Table 4.1 ERROR CODE DEFINITIONS

Code	Applicable Mode			Significance	Cause	Corrective Action
	Run	Prog	Load			
E1	X	X	X	Incorrect Operation	Operator attempted to perform illegal operation such as changing program in RUN mode.	Examine operation. Depress CLR. Reinitiate proper function.
E2	X			Fault in Program structure.	CPU Has detected error in program when placed into RUN Mode. Example: Input module reference used as coil.	Go to Program mode. Depress CLR. Address of faulty logic will be shown. Depress NXT to display content.
E3	X			Stack Capacity Exceeded.	More than eight status levels attempted to be stored in push-down stack.	Go to Program mode. Depress CLR. Programmer will display location of first 9th STR error. Examine logic and reprogram as necessary.
E5	X			Duplicate Coil Reference.	Coil (output, internal, timer, or counter) used as an OUT more than once.	Go to Program mode. Depress CLR. Programmer will display location of second coil of pair using same reference. Enter another coil reference.
E6	X			Incomplete Master Control	More MCR references than MCS in program.	Go to Program mode. Depress CLR. Programmer will display first unmatched MCR. Correct program by deleting MCR or adding MCS.
E7	X			Incomplete Counter or Shift Register.	All control lines not provided to one or more Counters and/or Shift Registers.	Go to Program mode. Depress CLR. Programmer will display errant function. Add required reset, clock or clear lines.
E8		X		Missing Numerical Value	No preset entered for timer or counters, or shift register stage reference.	Depress CLR. Programmer will display errant time, counter, or shift register. Add required value.
E9	X			Incomplete Logic	Relay ladder line not connected to coil; relay contact(s) left incomplete or hanging.	Go to Program Mode. Depress CLR. Programmer will display first unfinished logic element. Add logic to tie this element into stored logic, or delete element(s) to remove incomplete logic.

Table 4.1 ERROR CODE DEFINITIONS (CONTINUED)

Code	Applicable Mode			Significance	Cause	Corrective Action
	Run	Prog	Load			
E11		X		Memory Full	Operator attempting to add logic to CPU already at limit.	Depress CLR. Restructure program so that logic limits will not be exceeded.
E13		X		Maximum number of High Speed Counter preset points exceeded.	Operator attempted to enter more than 20 High Speed Counter preset points.	In Program mode depress CLR. Examine logic and reprogram as necessary.
E21	X	X		Parity Failure.	CPU has detected a fault in the parity structure of its internal memory.	Go to Load Mode. Depress CLR. Reload memory from previously recorded tape or clear entire memory and reload manually. If BATT light not ON and fault can not be cleared, replace CPU module.
E25			X	Faulty Comparison	External device such as tape cassette has content that does not agree with CPU memory.	Depress CLR. Verify correct program number or tape. If correct, either rerecord tape or reload CPU.
E28			X	Weak Record Signal	Playback Signal level, such as from tape recorder, is below acceptable level.	Adjust volume level on tape recorder or other peripheral device. If ON steady for extended period of time, restart function to obtain reliable operation.
E30		X		Communications lost between PC and expansion rack. CPU stops, outputs turn off.	Cable connection broken between PC and expansion rack or power loss in expansion rack.	Check cable, I/O expansion module and expansion rack power. Fix problem. Cycle system power off and on or attach programmer and switch From RUN to PRG to RUN.
E31	X			Framing error between PC and expansion rack. CPU stops, outputs turn off.	Communications lost or interrupted between PC and expansion rack.	Check cable, I/O expansion module and expansion rack power. Fix problem. Cycle system power off and on or attach programmer and switch From RUN to PRG to RUN.

Table 4.1 ERROR CODE DEFINITIONS (CONTINUED)

Code	Applicable Mode			Significance	Cause	Corrective Action
	Run	Prog	Load			
E32	X			Parity error between PC and expansion rack. CPU stops, outputs turn off.	Communications interrupted between PC and expansion rack.	Check cable, I/O expansion module and expansion rack power. Fix problem. Cycle system power off and on or attach programmer and switch From RUN to PRG to RUN.
E33	X			Expander rack does not respond to CPU's I/O configuration request during power-up sequence.	Expansion rack does not have power.	Cycle basic unit power off and on. Ensure that power is applied to expansion rack.
E99	X	X		Unsuccessful Search	Search function has reviewed all memory and has not located required function.	Depress CLR. To cause an additional search, re-enter function and restart.