

Chapter 8

8-11. $TA = A \cdot B + B \cdot C$ or $A \cdot B + A' \cdot C$

$$TB = C$$

$$TC = A' + B'$$

The following are the next states for the unused states:

$$000 \rightarrow 001$$

$$001 \rightarrow 010 \text{ or } 110$$

$$111 \rightarrow 001$$

The circuit is self-correcting.

Present state			Next state			Flip-flop inputs		
A	B	C	A ⁺	B ⁺	C ⁺	TA	TB	TC
0	0	0	X	X	X	X	X	X
0	0	1	X	X	X	X	X	X
0	1	0	0	1	1	0	0	1
0	1	1	1	0	0	1	1	1
1	0	0	1	0	1	0	0	1
1	0	1	1	1	0	0	1	1
1	1	0	0	1	0	1	0	0
1	1	1	X	X	X	X	X	X

