The State machine diagram was created by referring to the following paper,

Yacoub, S.M. and Ammar, H.H., 1998, August. A pattern language of statecharts. In *Proc. Fifth Annual Conf. on the Pattern Languages of Program (PLoP’98)* (pp. 98-29).

1) The circles indicate states. The arrows indicate "event/action" pairs.

2) 'Coin/ThankYou' marked on the loop for Unlocked state:

When the turnstile has moved from the Locked state to the Unlocked state after accumulating the required amount of coins, and now if there is a coin event in the unlocked state the turnstile will not check the amount of the coin but would continue to be in the unlocked state and show a "thank you" message.

3) When the Turnstile moves from the Locked state to the Broken state following a partial accumulation, the amount would be flushed and when the Turnstile is fixed, it would start from the Locked state with amount=0.

4) 'Failed/OutofOrder & Locked' marked on the arrow from Unlocked State to Broken State:

The turnstile would move to the locked state once fixed from the Broken State.