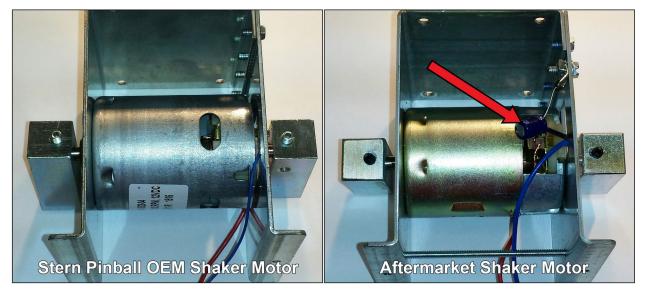


## CAUTION

Use of anything else other than an authorized Stern Pinball OEM shaker motor assembly on a SPIKE equipped game could damage the game's cabinet node board and will void your game's warranty.



## Symptom:

The game will not start after installing an aftermarket shaker motor assembly. The game's start button, coin switches, Plumb Bob tilt and coin door G/I lamps do not work.

## Problem:

Aftermarket shaker motors have a 100Uf -50V capacitor between the motor's blue wire and the shaker motor frame. The capacitor causes excessive currents to flow as a result of pulse width modulation (PWD) used to control the speed of the motor. This excessive current exceeds design parameters causing damaging failures of the cabinet Node board.