



## Service Bulletin #22

To: Service Manager  
From: Data East Pinball Service Department  
Date: December 7, 1989  
Subject: Intermittent and repeated failure of Q54 on ABC  
Monday Night Football CPU boards.

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Symptom: Q54 fails several times for no apparent reason. The wiring of the switches associated with Q54 including flipper end of stroke switches indicate no cabling shorts.

Problem: The outhole kicker has a short between one of the coil wire lugs and the coil stop bracket. This causes 32VDC to be shorted to the outhole kicker assembly which, through its metal frame, will put 32VDC on the switch matrix. Once on the switch matrix it will get into the CPU and blow Q54.

- Solution:
- 1) Remove the bottom arch. (The bottom arch is the metal frame at the bottom of the playfield that the instruction cards go into.)
  - 2) Inspect the coil stop. There should be a piece of electrical tape insulating the coil stop from the coil wire lugs.
  - 3) If there is no tape, add a piece that will cover the side of the coil stop closest to the coil wire lugs to prevent the short from ever occurring.

If further assistance is required, please call Pete or Arnie at 1-800-KICKERS (1-800-542-5377).

*PJ Arnie*

Pete and Arnie  
Field Service Department  
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