

Technical Tips

Cranes With Main Logic Board W9803D

Listed below are service tips to help you troubleshoot and resolve common problems.

PROBLEM: Not Taking Coins or Bills

SOLUTION: Check connector J-8; the IC is a 74HC244 in position U-22.

PROBLEM: Meters Not Working (Coin in/Prizes out)

SOLUTION: Check connector J-7; the IC is ULN2003 in position U-23.

PROBLEM: Gantry Switches Not Working

SOLUTION: Check connector J-4; the IC is a 74LS244 in position U20.

PROBLEM: Claw Not Closing

SOLUTION: Check connector J-4; the IC is a LM723 located in position U-43.

PROBLEM: Claw Constantly Closed

SOLUTION: Check connector J-4; the transistor is a 2SC5200 located on the large heat sink in position Q3.

PROBLEM: No VR Adjustment Controls

SOLUTION: Check connector J-5; check transistors at locations Q-36 and Q-37. Both transistors are B649. The receiving IC is located in position U-43. The IC is a LM723. Check the resistor between IC U-36 and U-33. It is a 1K 1/4 Watt resistor.

PROBLEM: Up/Down Motor Not Working

SOLUTION: Check connector J-4 pins 3 and 16; follow to relay RL5 and RL6 (Small black or blue relays located on the edge of board.) The relays are 24VDC. Relay # is OMI-SS-224L.

PROBLEM: Left/Right Motor Not Working

SOLUTION: Check connector J-4 pins 2 and 15; follow to relay RL7 and RL8. Relays are 24VDC. Relay # is SCLB-W-DPDT-C.

PROBLEM: Front/Back Motor Not Working

SOLUTION: Check connector J-4 pins 1 and 14; follow to relay RL9 and RL10. Relays are 24VDC. Relay # is SCLB-W-DPDT-C.

PROBLEM: Prize Not Detected

SOLUTION: Check connector J-10; the IC is a 74LS244 in position U21.

PROBLEM: No Display

SOLUTION: Check connector J-2; the IC output ICs are located in positions U-25 and U-36. Both ICs are ULN2003.

PROBLEM: Joystick Not Working

SOLUTION: Check connector J-1; the IC is a 74LS244 in position U-21.

PROBLEM: Prize Drop Button Not Working

SOLUTION: Check connector J-1; the IC is a 74LS244 in position U-21.

Crane Error Codes

E0

CPU Error

E1

Gantry not connected or bad stop-up switch.

E3

Bad Claw stop-down switch.

E6

Flap door motor or control board problem. (Only applies to cranes with pushers.)

E7

Double Play candy claw not returning to gantry.

E8

Double Play candy claw not dropping.

E9

Accounting meter(s) malfunction.

EA

Gantry left/right switch malfunction.

EC

Gantry front/back switch malfunction.

EE

Main prize sensor problem.

EF

Double Play candy side sensor problem.