**This Diagnostic chip activates all the outputs and displays the state of all the**

**switches on the machine (inputs). The game chip provides a built-in diagnostic for checking the decoders located between the reels just above the electronics).**

1. Remove the game chip and install the diagnostic chip. Important The little notch on one end of the chip is an orientation notch. If either chip is installed or the power applied with the chip in backwards, it will destroy the chip! All the chips on the board are aligned to the same direction.

2. Turn on the power.

A. First indication on panel meter is - - - , board started

B. Next indication on panel meter is -00, board completed initialization

C. Next indication on panel meter is 111 (begin of diagnostics)

To step through the diagnostics, press top switch. To skip to the next diagnostic, press and release the ‘hopper fill switch’ (center recessed switch)

Diagnostics 0: (use the “hopper reset” switch to step through this diagnostic)

Display=111, 1 coin light lit, Insert Coin Light lit

Display=222, 2nd coin light lit, Tilt Light lit

Display=333, 3rd coin Light lit, Coin Deflector Coil Activated (diverts coins from

base to hopper).

Display=444, 4th coin light lit, Coin Lockout Coil Activated (located behind the

coin mechanism) with the lever pulled in by the coil, coins are allowed to drop through.

Display=555, 5th coin light lit, Handle Release Coil Activated (this should drop the

arm which allows the handle to be pulled). Pull the handle so you can check the stop solenoids in the later diagnostic!

Display=666, 6th coin light lit, Coin-in Meter activated. Note: This meter is only for

use when it is necessary to monitor the number of coins dropped into the machine.

Display=777, Tilt-Tower-Light lit (it normally has a blinking style bulb). Coin

Accepted Light lit

Display=888, 1 coin light lit, Insert coin light lit.

Display=999, 1-2 coin lights lit, Tilt light lit (tilt light on door)

Display=ooo (lower zeroes), 1-2-3 coin lights lit, Coin Deflector coil activated

Display=ooo (upper zeroes), 1-2-3-4 coin lights lit, Coin Lockout coil activated

Display= - - - (upper dashes), 1-2-3-4-5 coin lights lit, Handle Release Coil Activate

Display= - - - (Mid dashes), 1-2-3-4-5-6 coin lights lit, Coin-in meter activated

Display= - - - (bottom dashes), no coin lights, no coils

Display= -blank-, Tilt-Tower Light, no coils

Note: At the next step (hopper reset) the **Diagnostic 0** auto runs through all the

steps: Press and release the ‘hopper fill’ switch to select the next diagnostic (1)

**Diagnostic -1-** =Hopper Run

Press the hopper reset button to run the hopper.

**Diagnostic -2-** = Jackpot Bell

Note on stop solenoids. Each reel should have a similar ‘sound’. Meaning the

stopping action should be very much the same. You can pickup the sound of a

sticky mechanism if you listen carefully!

**Diagnostic -3-** = Solenoid 1, Locks in Reel 1

Press the hopper reset button to pulse the reel1 solenoid.

**Diagnostic -4-** = Solenoid 2, Locks in Reel 2

Press the hopper reset button to pulse the reel 2solenoid.

**Diagnostic -5-** = Solenoid 3, Locks in Reel 3

Press the hopper reset button to pulse the reel 3solenoid.

**Diagnostic -6-** = Solenoid 4, Locks in Reel 4 (only applicable to 4 reel machines)

Press the hopper reset button to pulse the reel 4solenoid.

**Switch Input Diagnostics (Normal is 1, changes to 0 on switch activation)**

**Diagnostic -7-** (changes to -71 or -70 after 1/2 second)

Activate the **coin in switch** (just below the coin mechanism) the -70 or -71 should

alternate with the activation of the switch. If no change on the display, the ILQ-74

chip is bad.

**Diagnostic -8-** (changes to -80 or -81 after 1/2 second)

Activate the **hopper coin out switch**. The display should alternate with the

activation of the switch. If no change on the display, the ILQ-74 chip is bad.

**Diagnostic -9-** (changes to -90 or -91 after 1/2 second)

Activate the **Jackpot Reset Switch** on the side of the machine. The display should

alternate with the activation of the switch. Note: This switch is necessary if the

machine does not pay out all of the “Jackpot”. It is used to ‘reset after jackpot’. If

this signal is the wrong state, the game will not play.

**Diagnostic -o-** (lower zero), changes to -o0 or -o1 after 1/2 second.

Activate the **rotor spin switch** by pulling the handle to launch the reels. As you

slowly pull the handle, the last digit should change from 0 to 1 back to 0 (reels

launched). Note: The rotor spin switch is located on the left side of the reel

mechanism and has its own little cable that plugs into the back of the electronics

chassis.