

# JERSEY WHEELS SERVICE MANUAL

VERSION 0.1



## MANUFACTURED BY:

**Jennison Entertainment Technologies Corporation**

**822 South Nova Road • Daytona Beach, Florida 32114 • U.S.A.**

**Toll Free Number: 1-855-JET-GAME**

**Phone Number: 1-386-255-1599**

**Service Email: Service@JennisonGames.com**

**Fax Number: 1-386-255-1589**

**Information Email: Info@JennisonGames.com**

**For Additional Information or for an Electronic Copy of This Manual Visit Our Website**

**[www.JENNISONGAMES.com](http://www.JENNISONGAMES.com)**

# TABLE OF CONTENTS

Section	Page	Section	Page
Table of Contents	2	Troubleshooting Guide	31
Safety Notifications	3	TBD	32
Epilepsy Warning	4	TBD	33
Warnings, Cautions, & Notices	5	Warranty Information	34
FCC Compliance	7	Parts List	35
RoHS Compliance	8		
UL 22 Safety Standards & Certificate	9		
Cabinet Dimensions	10		
Electrical Requirements	11		
Installation Instructions	12		
Inspecting For Shipping Damage	13		
Opening The Box	13		
Inspecting Components	14		
Removing The Box From Skid	14		
Inspecting The Unit	15		
Removing The Game From Skid	16		
Installing The Lighted Marquee	16		
Locating The Cash Box	18		
Locating The I/O Board	19		
Selecting The Proper Voltage	19		
Turning The Power On	20		
Checking The LED Lights	21		
Inserting Tickets Into Dispenser	21		
Program Setup			
Game Settings & Program	22		
Dip Switch Settings	23		
New Jersey Software Settings	25		
Board Inputs	26		
Board Outputs	28		
SEG Display Jumper Settings	30		

**NOTE: SOME PAGES MAY BE INTENTIONALLY LEFT OUT OF THIS MANUAL. SOME VERSIONS OF THE MANUAL DO NOT INCLUDE A PARTS LIST. CONTACT SPT OR JET FOR CURRENT PARTS LIST IF NOT INCLUDED.**

## SAFETY NOTIFICATIONS

Through out the use of this manual, certain areas require special attention for the safety of the service personal. Please take note of the following notifications and be certain to read the information contained within. Failure to follow the given information could lead to personal injury or property damage. Follow all instructions contained within this manual and do not make any modifications to the game without first contacting Jennison Entertainment Technologies.

### **DANGER**

All danger messages are marked in RED boxes. Failure to adhere to these messages could result in personal injury or injury to others.

### **WARNING**

All warnings will be marked in ORANGE boxes. Failure to follow these warnings could lead to damage to the unit and or personal property.

### **CAUTION**

Caution messages are marked in YELLOW boxes. Failure to follow these caution messages could result in damaging the unit.

### **ATTENTION**

Attention boxes are in BLUE. These messages are provided in cases where service personal must follow directions provided by J.E.T.

### **NOTICE**

Notices are given in GREEN boxes. These messages are provided for the operator's convenience.

## EPILEPSY WARNING

### EPILEPSY DANGER

A very small percentage of people may experience a seizure when exposed to certain visual images, including flashing lights or patterns that may appear in video games. Even people who have no history of seizures or epilepsy may have an undiagnosed condition that can cause these "photosensitive epileptic seizures" while watching video games.

These seizures may have a variety of symptoms, including lightheadedness, altered vision, eye or face twitching, jerking or shaking of arms or legs, disorientation, confusion, or momentary loss of awareness. Seizures may also cause loss of consciousness or convulsions that can lead to injury from falling down or striking nearby objects.

Immediately stop playing and consult a doctor if you experience any of these symptoms. Parents should watch for or ask their children about the above symptoms - children and teenagers are more likely than adults to experience these seizures.

The risk of photosensitive epileptic seizures may be reduced by taking the following precautions:

**Play in a well-lit room**

**Do not play when you are drowsy or fatigued**

**If you or any of your relatives have a history of seizures or epilepsy, consult a doctor before playing.**

## JERSEY WHEELS CAUTIONS & NOTICES

### **DANGER**

DO NOT perform repairs or maintenance on the game with the power ON. Always turn the power OFF and unplug the unit from the wall before servicing.

### **DANGER**

DO NOT remove the game from its shipping pallet or skid without first reading the entire installation guide in this manual!

## JERSEY WHEELS CAUTIONS & NOTICES

### WARNING

Make sure that the 115/230 VAC selector switch is properly selected on all power supplies for the correct line voltage at the installation site.

### WARNING

This unit is suitable for INDOOR use only. The game should not be placed in damp environments or in areas within close proximity to the ocean.

### WARNING

If the power cord is damaged - replace it with a new one. DO NOT attempt to use a damaged or repaired power cord.

### WARNING

Always plug the game into a grounded circuit and verify the total voltage draw on the circuit does not exceed its capacity.

### CAUTION

Use appropriate care when servicing the game and ensure that all removed components are away from facility guests and children.

### CAUTION

Only qualified service personal should service JERSEY WHEELS. Contact J.E.T. first with any questions before replacing any part.

## FCC COMPLIANCE

The Federal Communications Commission requires that all amusement machine devices used in commercial applications comply with guidelines for the amount of interference the internal components produce. JERSEY WHEELS complies with this requirement and the following statement is posted on all units.



This equipment has been tested and found to comply with the limits for a Class "A" digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

### **Canadian Emissions Statement**

(According to Industry Canada Notice ICES-003, Issue 4)

This Class "A" digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe "A" respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.



## RoHS COMPLIANCE

The RoHS Directive stands for "the restriction of the use of certain hazardous substances in electrical and electronic equipment". This Directive bans the placing on the European Union market, new electrical and electronic equipment containing more than agreed levels of lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) flame retardants.

Jennison Entertainment Technologies has taken steps to comply with this directive while sourcing the parts for all machines. If available to the industry, these certified components were used in the construction on JERSEY WHEELS.

As of January 2017, Jennison Entertainment Technologies has tested all components used in the manufacturing of JERSEY WHEELS. All components have been found to be within the standards set forth for RoHS compliance by the European Union. Test reports are available and will be provided upon request.

To verify that your machine has RoHS Compliant parts, look for the following logo on the information sticker on the back of all our units.



With our unique testing equipment, Jennison Entertainment Technologies can test components from ANY SUPPLIER from ANY COUNTRY where we source our parts. The tools we utilize allow us to spot check suppliers who have also self declared their components to be compliant ensuring you and your guests safety.





## GAME SETTINGS & PROGRAM

JERSEY WHEELS has been designed to include a software program where all game settings are easily managed through the use of a simple dip switch changes. Although the software is very simple to navigate, we highly recommend reading the following programming section to fully understand how to make changes to the software and how each change will affect the machine. Should you have any questions about changing the programming, or need to make a change outside the capability of the current software, please contact JET GAMES directly.

The chart below should be used to record any changes in the software and the reasons for the change. This will allow you to track which software version is installed or allow another technician to service the unit and quickly identify what has been changed since delivery.

SOFTWARE UPDATE RECORD		
DATE	SOFTWARE VERSION	REASON FOR CHANGE
INITIAL	20161105	SUPERCEDED - GAME PLAY - PLEASE UPDATE
1/3/2017	VERSION 1.1	GAME PLAY & PAYOUT ADDITION

# STATE OF NEW JERSEY APPROVED SOFTWARE

Under the rules and regulations governed by the State of New Jersey Legalized Games of Chance Control Commission, there are certain requirements for amusement and redemption games. A certain version of software has been designed to allow Jersey Wheels to be operated within the State of New Jersey. This version of the software complies with the following requirements:

- 1) Maximum allowable wager per player dose not exceed \$10.00 per game. In Jersey Wheels (VERSION 3.0) the game will not accept more than 4 coins on \$1.00 Play or 8 coins on \$2.00 Play.
- 2) Maximum allowable accumulation of inserted credits does not exceed \$10.00. In Jersey Wheels (VERSION 3.0) the game will not accept more than 4 coins on \$1.00 Play or 8 coins on \$2.00 Play.
- 3) Device must lockout after \$10.00 is inserted. Jersey Wheels will not accept more than \$2.00 maximum.
- 4) Device must lockout after maximum wager per game is inserted, unless a discount is offered. The coin mechanism in Jersey Wheels will not accept more than \$2.00.
- 5) Device must not escrow inserted credits for more than one game's play unless a discount is offered.
- 6) Device must award tickets, tokens or prizes immediately upon completion of the game, or offer player an option to collect or accumulate winnings.
- 7) Device must not possess a "Knock-Off" mechanism.
- 8) Device should possess meters for "Coin In" and "Token/Ticket Out"
- 9) Device must not award cash prizes - only tickets, vouchers or tokens which may be redeemed for prizes within the facility.
- 10) Device must not be capable of awarding a prize in excess of \$10,000.00.
- 11) Device must not incorporate a reflexive outcome determination or auto-percentageing
- 12) Device must retain tickets or tokens owed upon power interruption

The above requirements are published here for your information and obtained from Eclipse Compliance Testing in conjunction with the New Jersey Legalized Games of Chance Control Commission. In order to operate Jersey Wheels within the State of New Jersey - you must operate a version of the software which complies with the above requirements. **Call your local distributor to order this software before operating the game. The version of software which complies with these requirements can be found below.**

## State of New Jersey Approved Software

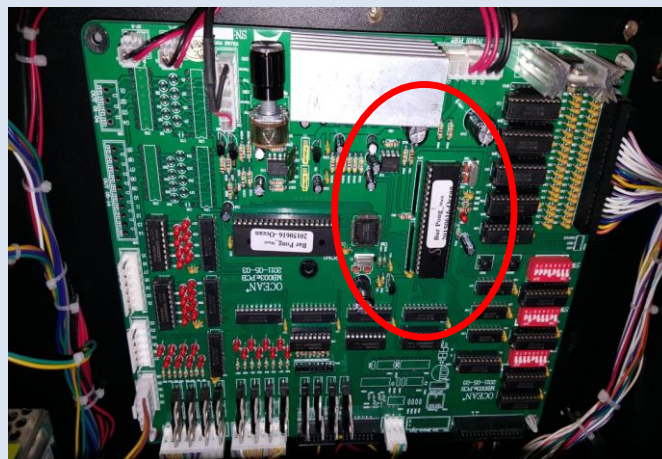
### Verifying the installed software version

To view the installed software version, locate the main IC chip on the I/O board and view the label printed onto the IC. In order to operate the game in the State of New Jersey - you must only use this version of software.

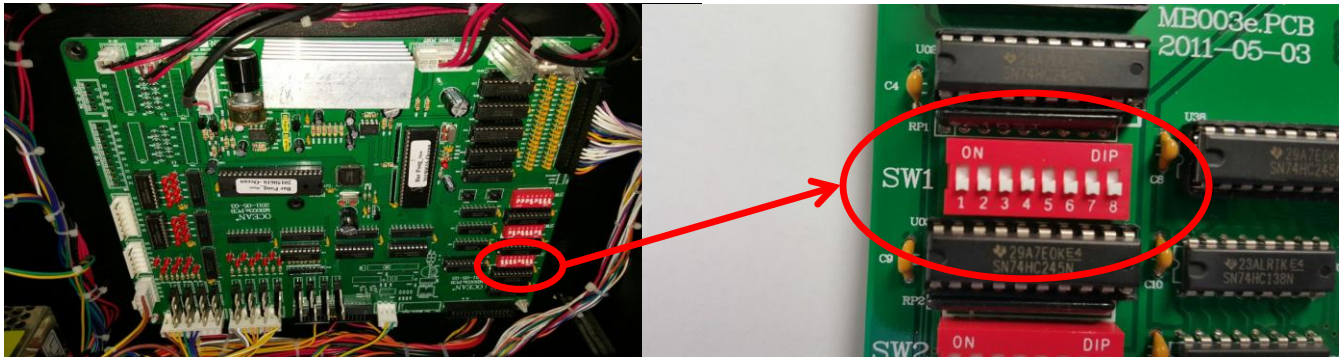
#### New Jersey Game Software Version

**VERSION 3.0**

The installed software version can be viewed at any time by viewing the label on the main IC.

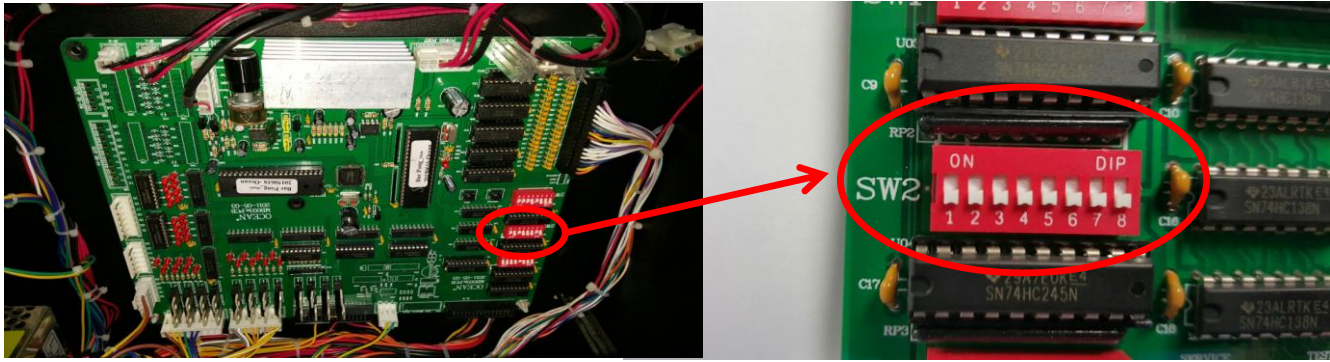


## GAME SETTINGS - DIP SWITCH SETTINGS (SWITCH # 1)



ITEM DESCRIPTION	CONTENT	SWITCH # 1							
		SW11	SW12	SW13	SW14	SW15	SW16	SW17	SW18
<b>Coins, Credits,Tokens Required</b> This setting is to adjust the number of coins or credits required to start the game. Operator can choose between 1 and 20 coin(s), token(s), or swipes per game	<u>1</u>	<u>ON</u>	<u>ON</u>	<u>ON</u>					
	2	OFF	ON	ON					
	4	ON	OFF	ON					
	8	OFF	OFF	ON					
	10	ON	ON	OFF					
	12	OFF	ON	OFF					
	16	ON	OFF	OFF					
	20	OFF	OFF	OFF					
<b>Average Number of Tickets Awarded Per Credit</b>	25				ON	ON	ON	ON	
	30				OFF	ON	ON	ON	
	35				ON	OFF	ON	ON	
	40				OFF	OFF	ON	ON	
	45				ON	ON	OFF	ON	
	50				OFF	ON	OFF	ON	
	55				ON	OFF	OFF	ON	
	60				OFF	OFF	OFF	ON	
	70				ON	ON	ON	OFF	
	75				OFF	ON	ON	OFF	
	80				ON	OFF	ON	OFF	
	85				OFF	OFF	ON	OFF	
	90				ON	ON	OFF	OFF	
	95				OFF	ON	OFF	OFF	
	100				ON	OFF	OFF	OFF	
	150				OFF	OFF	OFF	OFF	
<b>Game Type</b>	3 Wheel Version								ON
	4 Wheel Version								OFF

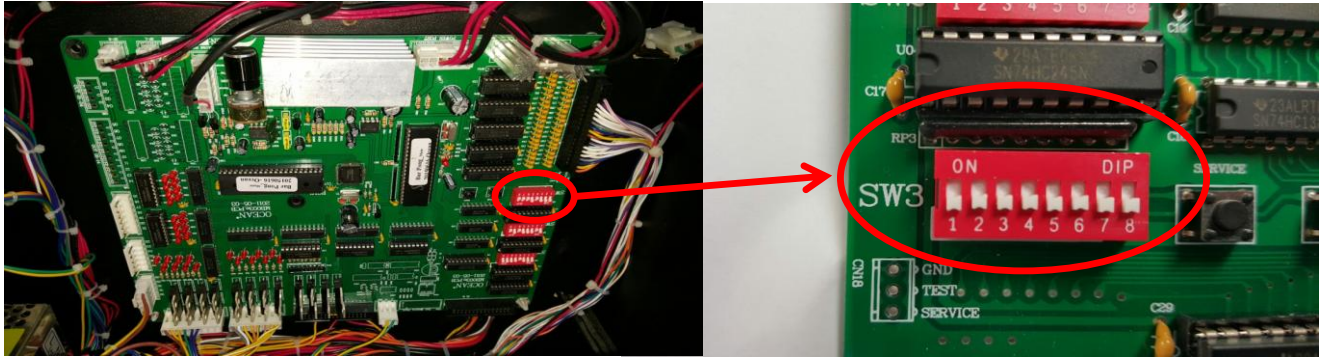
## GAME SETTINGS - DIP SWITCH SETTINGS (SWITCH # 2)



All game settings in Jersey Wheels can be programmed using the three dip switch banks on the I/O board. The switches are Switch # 1 (SW1), Switch # 2 (SW2), and Switch # 3 (SW3). Reference the chart below to make program changes including the number of mercy tickets, wheel speed, and attract mode for SWITCH # 2 (SW2). To operate the program, move each switch to the ON or OFF position. Switches moved towards the word ON are ON. Switches moved away from the ON

SWITCH # 2									
DESCRIPTION	CONTENT	SW21	SW22	SW23	SW24	SW25	SW26	SW27	SW28
Mercy Ticket(s)  Mercy Tickets Are Awarded Regardless of Whether The Player Won	<u>0</u>	<u>ON</u>	<u>ON</u>	<u>ON</u>					
	1	OFF	ON	ON					
	2	ON	OFF	ON					
	3	OFF	OFF	ON					
	5	ON	ON	OFF					
	8	OFF	ON	OFF					
	10	ON	OFF	OFF					
	15	OFF	OFF	OFF					
Wheel Speed	Slow				ON	ON			
	Standard				OFF	ON			
	<u>Fast</u>				<u>ON</u>	<u>OFF</u>			
	Fastest				OFF	OFF			
Attract Mode	Attract Mode ON						ON		
	Attract Mode OFF						OFF		
Test Mode(s)	<u>Game Play</u>							<u>ON</u>	<u>ON</u>
	TEST							OFF	ON
	TEST							ON	OFF
	TEST							OFF	OFF

## GAME SETTINGS - DIP SWITCH SETTINGS (SWITCH # 3)



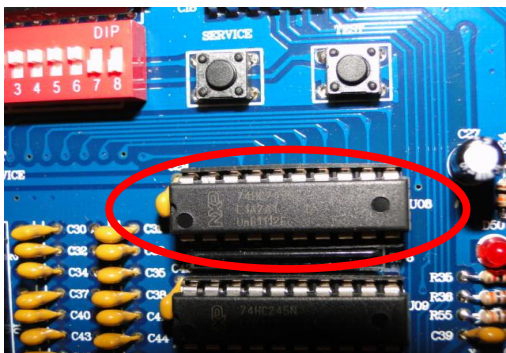
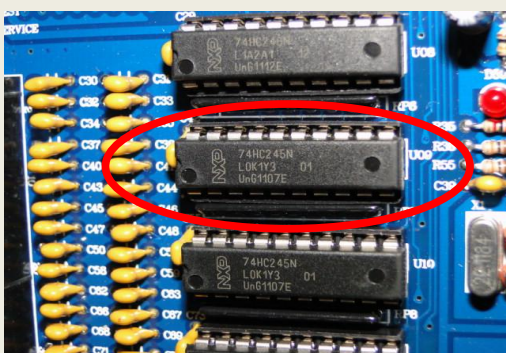
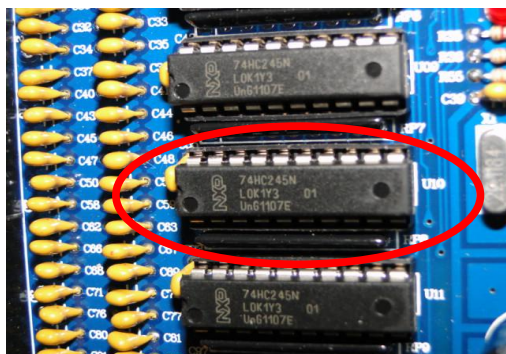
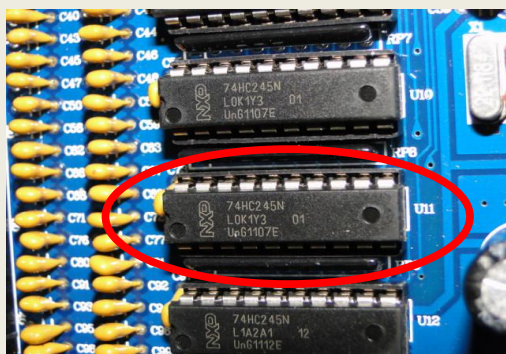
All game settings in Jersey Wheels can be programmed using the three dip switch banks on the I/O board. The switches are Switch # 1 (SW1), Switch # 2 (SW2), and Switch # 3 (SW3). Reference the chart below to make program changes including game mode options for SWITCH # 3 (SW3). To operate the program, move each switch to the ON or OFF position. Switches moved towards the word ON are ON. Switches moved away from the ON towards the numbers are OFF.

SWITCH # 3												
DESCRIPTION	SCORE GROUP				SW31	SW32	SW33	SW34	SW35	SW36	SW37	SW38
	I	II	III	IV								
Wheel Speed	16					ON	ON					
	17					OFF	ON					
	18					ON	OFF					
	19					OFF	OFF					
Game Mode	Version # 1							ON	ON			
	Version # 2							OFF	ON			
	Version # 3							ON	OFF			
	Version # 4							OFF	OFF			
Must Remain OFF					OFF							



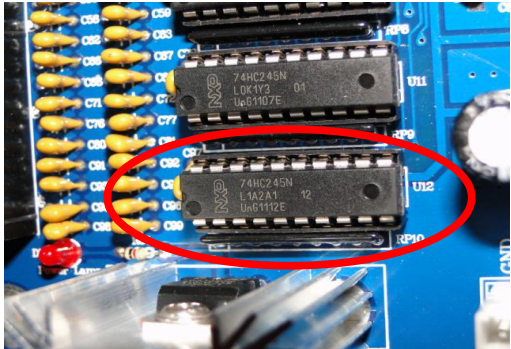
# MAIN BOARD INPUTS

## JERSEY WHEELS - MAIN BOARD INPUT IC (74HC245N) CHART

IC	INPUT #	CONTENT	PICTURE
U08	1	COIN UP SIGNAL	
	2	BILL ACCEPTOR	
	3	TICKET SIGNAL	
	4	TICKET FEEDBACK # 1	
	5	TICKET FEEDBACK # 2	
	6	STOP BUTTON	
	7	WHEEL # 1 - HOME SENSOR	
	8	WHEEL # 2 - HOME SENSOR	
U09	9	WHEEL # 3 - HOME SENSOR	
	10	WHEEL # 4 - HOME SENSOR	
	11	WHEEL # 1 - SCORE SENSOR	
	12	WHEEL # 2 - SCORE SENSOR	
	13	WHEEL # 3 - SCORE SENSOR	
	14	WHEEL # 4 - SCORE SENSOR	
	15		
	16		
U10	17		
	18		
	19		
	20		
	21		
	22		
	23		
	24		
U11	25		
	26		
	27		
	28		
	29		
	30		
	31		
	32		

## MAIN BOARD INPUTS - CONTINUED

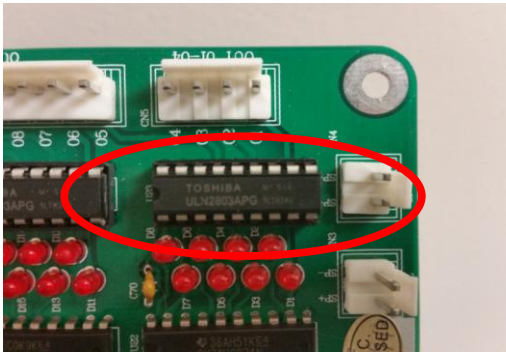
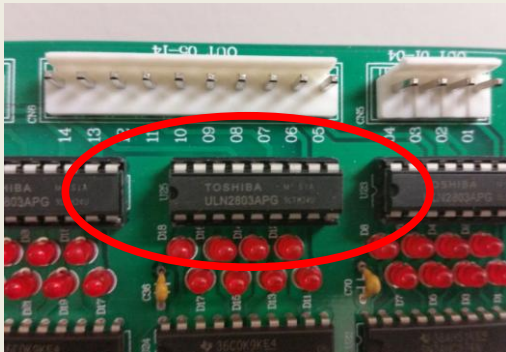
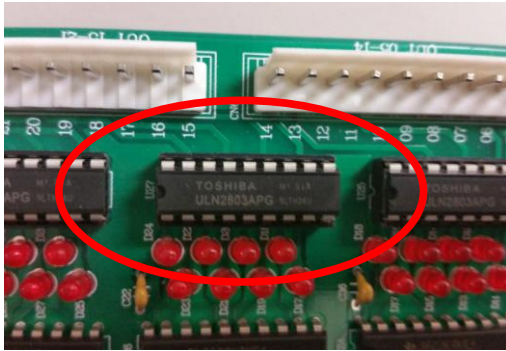
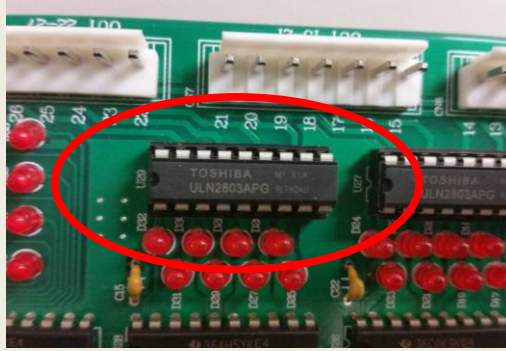
### JERSEY WHEELS - MAIN BOARD INPUT IC (74HC245N) CHART

IC	INPUT #	CONTENT	PICTURE
U12	33		
	34		
	35		
	36		
	37		
	38		
	39		
	40		

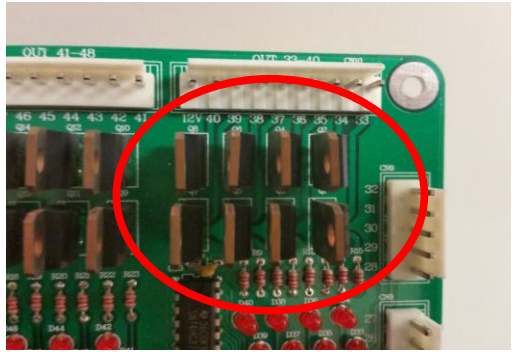
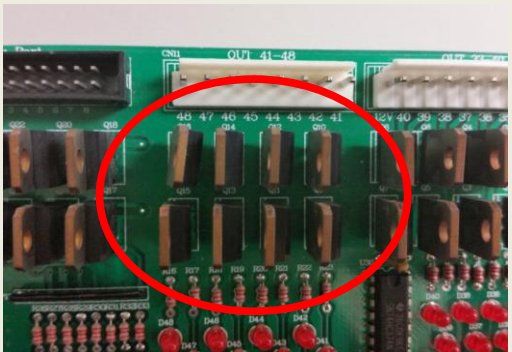
The Jersey Wheels input/output board utilizes 5 input IC's to control all inputs used within the game. In Jersey Wheels, only TWO of the FIVE IC's are used. You may use the THREE spare input IC's in U10, U11, & U12 on the board in order to replace the other input IC's should one become corrupt.



# MAIN BOARD OUTPUTS

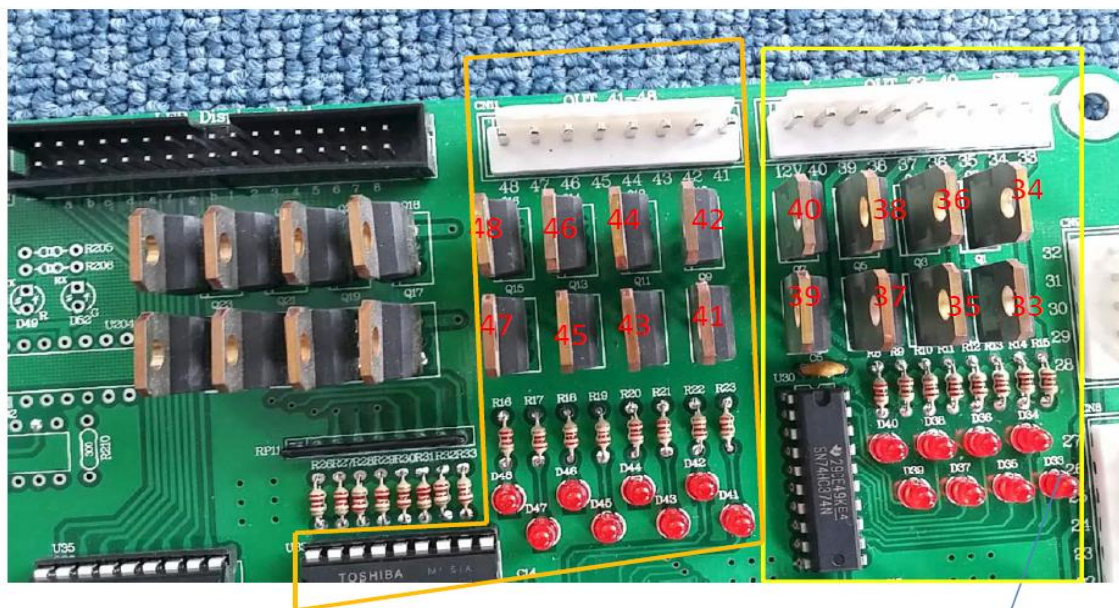
JERSEY WHEELS - MAIN BOARD IC (ULN2803) OUTPUT CHART			
IC	OUTPUT #	CONTENT	PICTURE
U23	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
U25	9		
	10		
	11		
	12		
	13		
	14		
	15		
	16		
U27	17		
	18		
	19		
	20		
	21		
	22		
	23		
	24		
U29	25		
	26		
	27		
	28		
	29	WHEEL # 1 - POINTER	
	30	WHEEL # 2 - POINTER	
	31	WHEEL # 3 - POINTER	
	32	WHEEL # 4 - POINTER	

## MAIN BOARD OUTPUTS - CONTINUED

JERSEY WHEELS - MAIN BOARD IC (ULN2803) OUTPUT CHART			
IC	OUTPUT #	CONTENT	PICTURE
Q1-Q8	33	COIN COUNTER	
	34	TICKET COUNTER	
	35	TICKET DRIVER	
	36	COIN LOCK	
	37	STOP BUTTON LED	
	38	TICKET OWED LED	
	39		
	40		
Q9 - Q16	41	WHEEL # 1 - MOTOR DIRECTION	
	42	WHEEL # 2 - MOTOR DIRECTION	
	43	WHEEL # 3 - MOTOR DIRECTION	
	44	WHEEL # 4 - MOTOR DIRECTION	
	45	WHEEL # 1 - STEP MOTOR SIGNAL OUTPUT	
	46	WHEEL # 2 - STEP MOTOR SIGNAL OUTPUT	
	47	WHEEL # 3 - STEP MOTOR SIGNAL OUTPUT	
	48	WHEEL # 4 - STEP MOTOR SIGNAL OUTPUT	

Out41-48

Out 33-40



Indicate  
Led:41-48

Indicate  
Led:33-40

# JERSEY WHEELS TROUBLESHOOTING GUIDE

The troubleshooting section of this manual is to be used as a guide for determining what component maybe faulty and what steps are recommended to rectify the problem. Before contacting your distributor, please check to make sure that the unit is in fact plugged in and receiving power and that there are no loose connections. Should you have any questions, please contact the JET SERVICE DEPARTMENT before servicing the unit. Servicing the unit in a way not described in this manual could void any warranties on the unit.

As in all parts of this manual, the troubleshooting guide is color coordinated in order to quickly identify the problem, the probable cause, and the solution. When diagnosing a problem - always check the most simple things first.

## FOR ALL SERVICE OR TO ORDER PARTS - PLEASE CONTACT THE FOLLOWING



### JENNISON ENTERTAINMENT TECHNOLOGIES

822 SOUTH NOVA ROAD  
DAYTONA BEACH, FLORIDA 32114

MAIN PHONE: + 1-(386)-255-1599

TOLL FREE (WITHIN THE USA): 1-855-JET-GAME



### BOBS SPACE RACERS

427 15TH STREET  
DAYTONA BEACH, FLORIDA 32117

MAIN PHONE: + 1-(386)-677-0761

