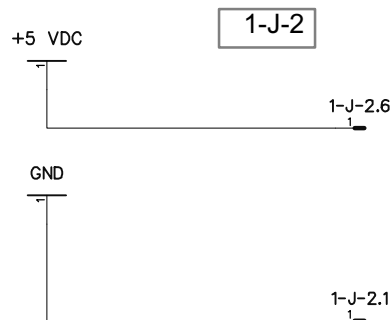
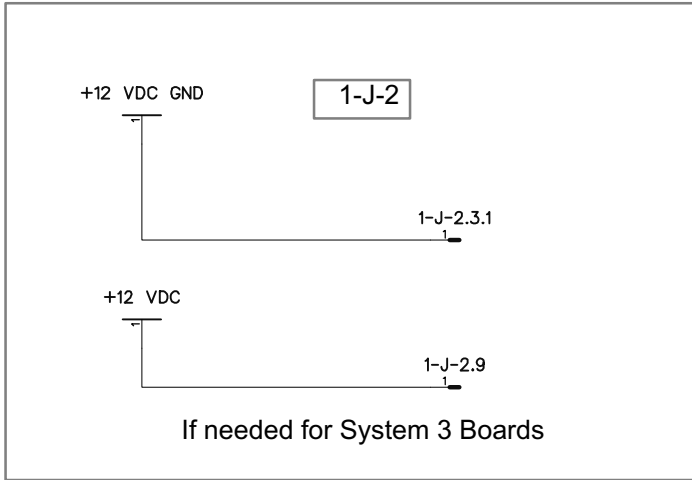


2

1



Run Main Power In (+5VDC)
Through switch on top of enclosure.



GND is the COMMON terminal of the +5 VDC power supply.
All GNDs are tied together. All +5 VDCs are tied together.

WILLIAMS PINBALL SYSTEM 3 - 7
TEST SYSTEM

Size	PROVIDED "AS IS." USE AT YOUR OWN RISK.	Rev
A		3.0
Date: February 8, 2016		(C) 2016 TIMOTHY J. MARSH
POWER CONNECTIONS		Sheet PWR

2

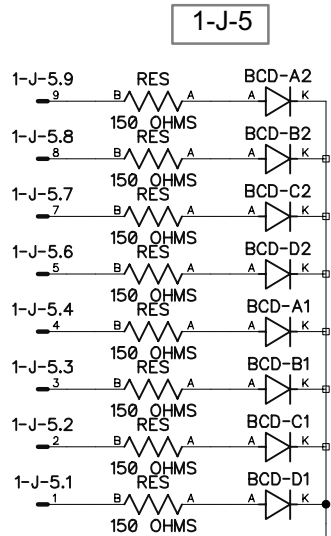
1

B

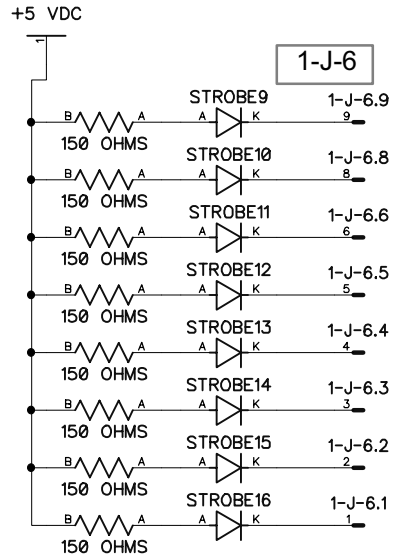
B

A

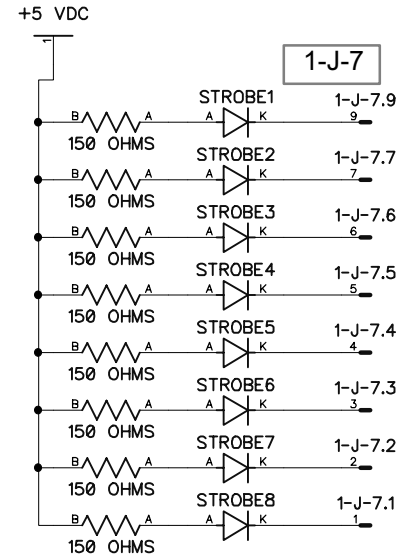
A



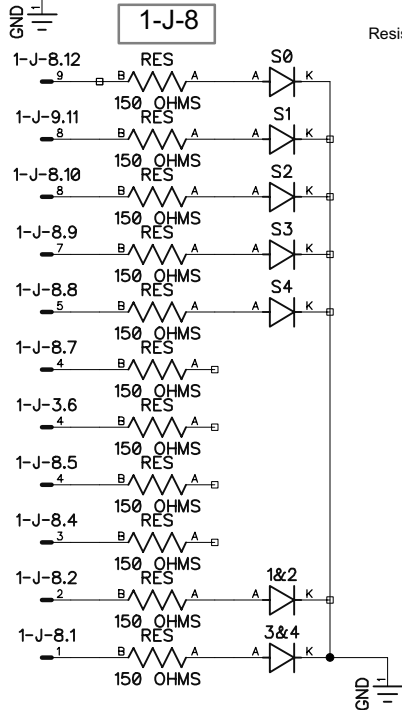
Resistor values will depend on choice of LEDs.



Resistor values will depend on choice of LEDs.



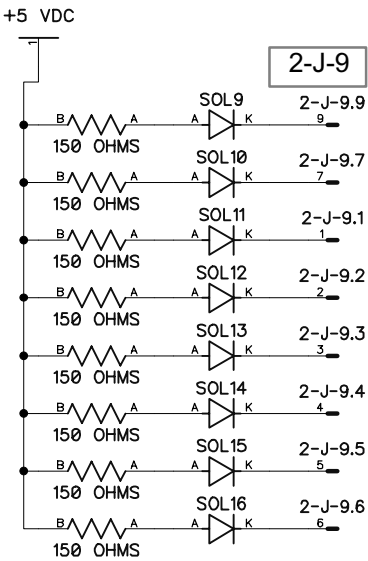
Resistor values will depend on choice of LEDs.



Resistor values will depend on choice of LEDs.

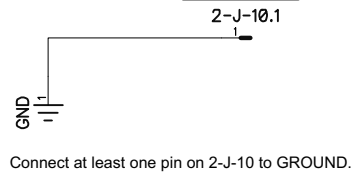
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WILLIAMS PINBALL SYSTEM 3 - 7		
TEST SYSTEM		
Size	PROVIDED "AS IS." USE AT YOUR OWN RISK.	Rev
A		3.0
Date: February 8, 2016		(C) 2016 TIMOTHY J. MARSH
TEST ROM NO. 0 - MPU BOARD		Sheet 0

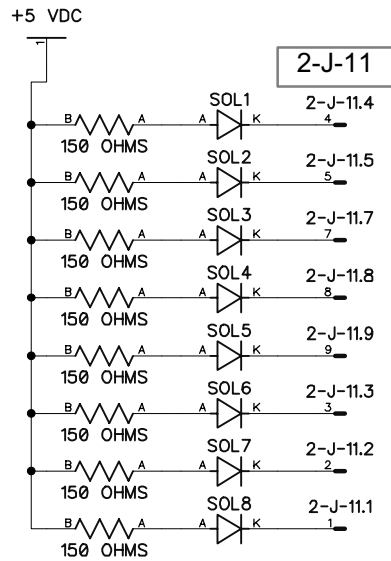


2-J-9

2-J-10

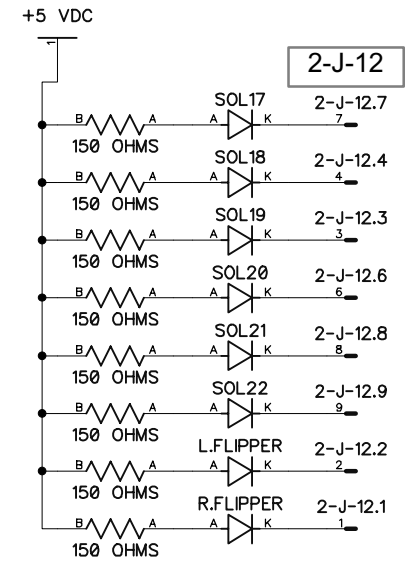


Resistor values will depend on choice of LEDs.



2-J-11

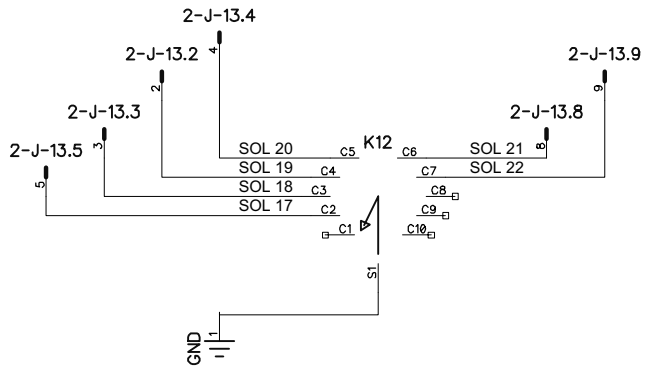
Resistor values will depend on choice of LEDs.



2-J-12

Resistor values will depend on choice of LEDs.

2-J-13



This selector switch is used to simulate the special solenoid switches on the playfield. Need at least a 7 position switch, 10 position switch shown.

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WILLIAMS PINBALL SYSTEM 3 - 7 TEST SYSTEM

Size	PROVIDED "AS IS." USE AT YOUR OWN RISK.	Rev
A		3.0
Date: February 8, 2016	(C) 2016 TIMOTHY J. MARSH	
TEST ROM NO. 1 - SOLENOIDS	Sheet 1	

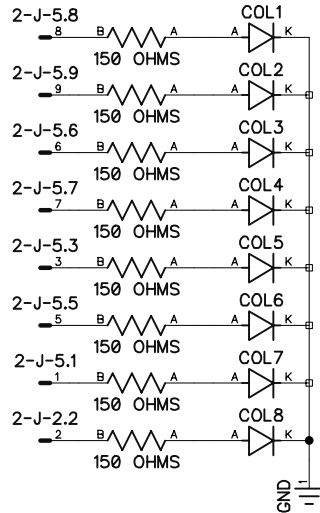
+5 VDC

2-J-4

2-J-4.1
1

Connect at least one pin on 2-J-4 to +5 VDC

2-J-5



Resistor values will depend on choice of LEDs.

2-J-6

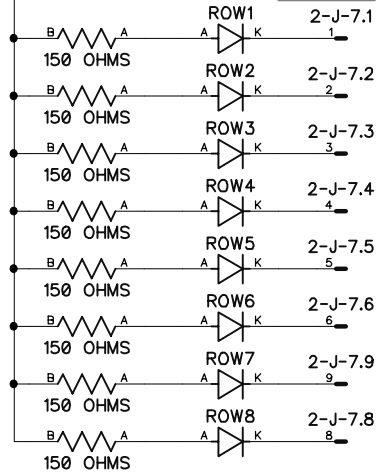
2-J-6.1
1

GND

Connect at least one pin on 2-J-6 to GROUND.

+5 VDC

2-J-7



Resistor values will depend on choice of LEDs.

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WILLIAMS PINBALL SYSTEM 3 - 7 TEST SYSTEM

Size	PROVIDED "AS IS." USE AT YOUR OWN RISK.	Rev
A		3.0
Date: February 8, 2016		(C) 2016 TIMOTHY J. MARSH
TEST ROM NO. 2 - LAMP MATRIX		Sheet 2

2

1

B

B

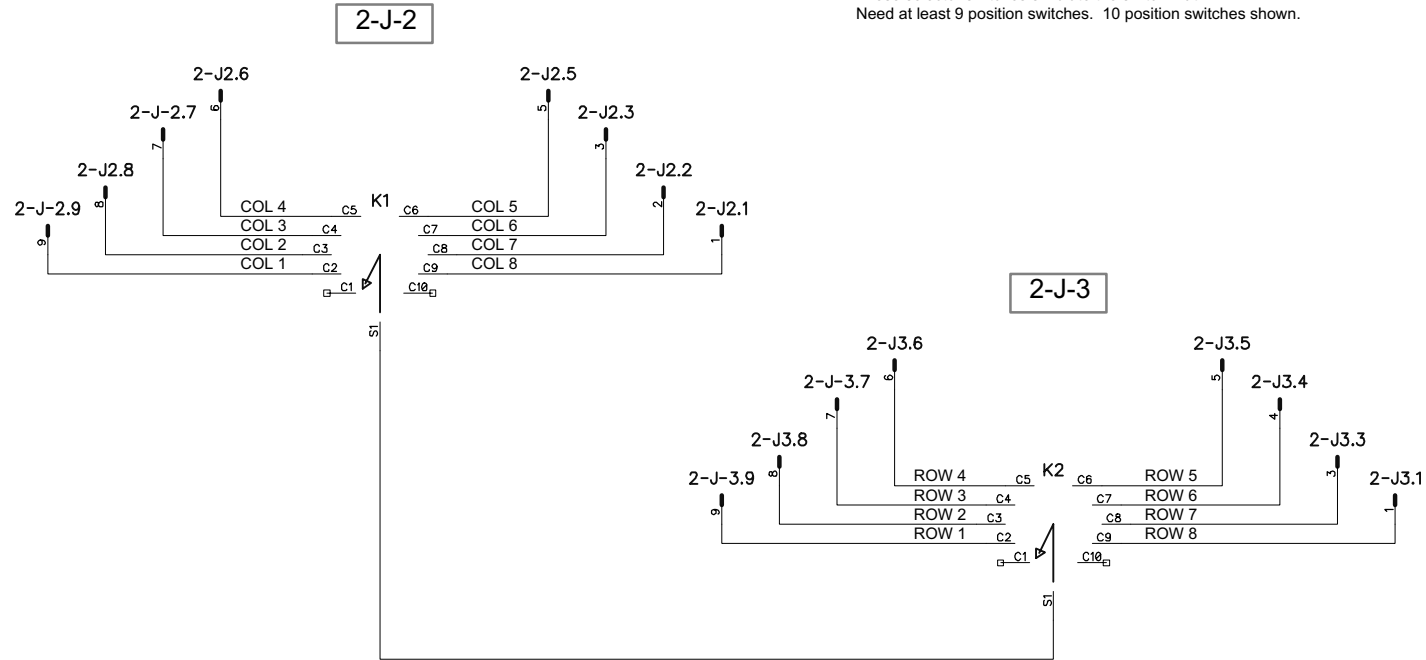
A

A

2

1

These selector switches simulate the switch matrix.
Need at least 9 position switches. 10 position switches shown.



GND is the COMMON terminal of the +5 VDC power supply.
All GNDs are tied together. All +5 VDCs are tied together.

WILLIAMS PINBALL SYSTEM 3 - 7		
TEST SYSTEM		
Size	PROVIDED "AS IS." USE AT YOUR OWN RISK.	Rev
A		3.0
Date: February 8, 2016		(C) 2016 TIMOTHY J. MARSH
TEST ROM NO. 3 - SWITCH MATRIX		Sheet 3