

OPERATION FOR THE CONVERSION OF ONE OLD BALLY PINBALL IN
A "SUPER BOWL"

- 1) Solder the 15 pins plug with 9 wires on the solenoid driver in connector J 3; J 4 and connect the sound.

SOLENOID DRIVER

J 3

1
2
3
4
5
6
7
8
9
10 WHITE
11 YELLOW BLUE
12
13
14
15 RED
16
17
18
19
20 YELLOW GREEN
21
22

J 4

1
2
3 ORANGE *Blue*
4 ORANGE BLACK
5 ORANGE RED
6 YELLOW BROWN
7 WHITE BROWN
8

SOUND

J 1

1 YELLOW BROWN
2 ORANGE RED
3 ORANGE BLACK
4 ORANGE BLUE
5 RED
6 YELLOW GREEN
7 *Red White (no solder)*
8 WHITE BROWN
9
10 BLUE YELLOW
11 KEY
12
13
14
15 WHITE

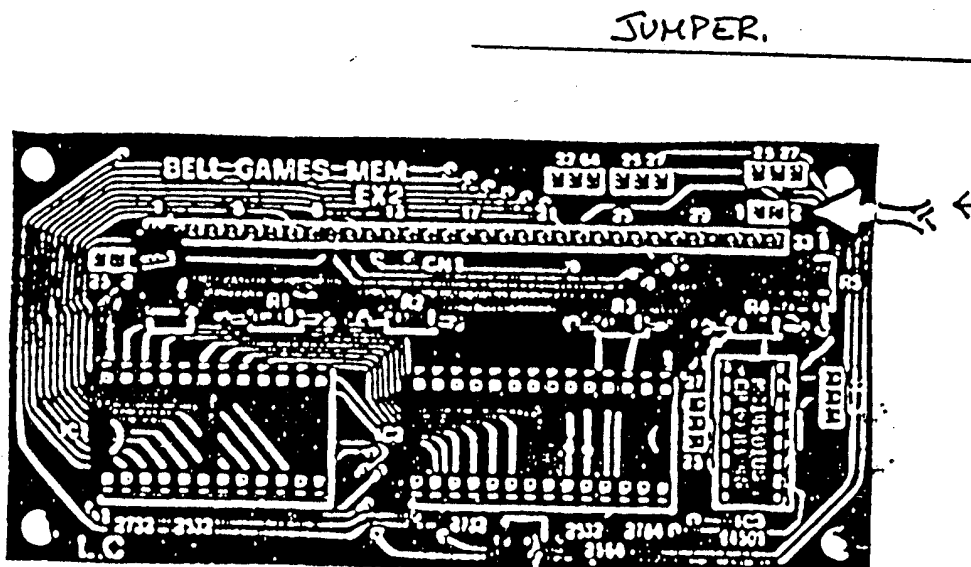
SUPER.

If the old pinball have the sound plug (supersonic, star trek, ecc. ecc.) you don't need to do this operation, but you must insert one wire from pin 7 CNT 1 (power transformer module) color orange to pin 10 (sound connector 15 pins).

2) Cut the wires of the transformer connector 20 pins and see the schema.

POSITION	COLOR	SIZE
1	WHITE	0,80 Ø
2	RED-BLACK	0,35 "
3	GREY-BLUE	0,35 "
4	RED-WHITE	0,35 "
5	BLUE	0,80 "
6	WHITE-BLACK	0,35 "
7	ORANGE	0,35 "
8	WHITE-BLUE	0,35 "
9	RED	0,80 "
10	ORANGE	0,80 "
11	BLUE-BLACK	0,35 "
12	WHITE-BROWN	0,35 "
13	YELLOW	0,35 "
14	GREY	0,35 "
15	WHITE-YELLOW	0,35 "
16	WHITE	0,35 "
17	RED-YELLOW	0,35 "
18		
19	WHITE-ORANGE	0,35 "
20	GREEN	0,80 "

- 3) Mount on the display our o and behind put one lamp 7 volts and connect with the ather lamps.
- 4) Take out from MPU logic board the old memories game in the position U1, U2, U3, U4, U5, U6.
If your MPU is the old one with the connector J 5 with 32 pins, look the MPU on the side components and cut the connection beetwin the connector J 5 position 32 and the ather components.
In solder side make a jumper from J 5 pin 32 and U9 pin 24.
Inserit the connectors of the board with the memories of a new game (mem ex 2) in position J 5 and do a jumper from 1, and 2 see the schema.



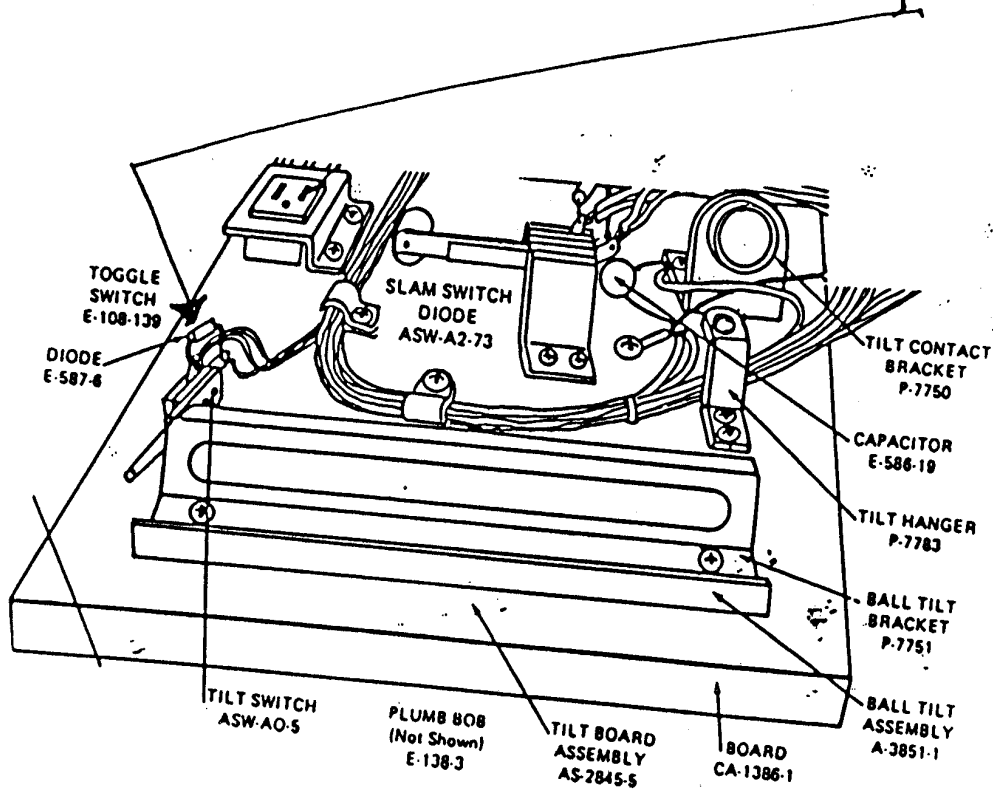
In case that is a new M.P.U. tipe(as 2518_35) with 33 pins in J5 you only inserit our memories board mem ex 2 in J5 and dont do the jumper from 1 and 2.

5) KNOCKER

- A) If knocker is in back box, on the connector J 3 (solenoid-driver) change position the of wire black-white from 4 in 7.
- B) If knocker is in cabinet, on the connector J 2 (solenoid-driver) change the position of the wire black white from 5 in 6.

6) TILT

In cabinet tilt part, take out the two wires red-yellow (attention must be connected the two wires) from



And make a jumper from the same position to slam switch with red and green.

7) Don't connect the connector J 2 lamp driver and connect
our from playfield with 3 wires not connected.
And solder this 3 wires in the following position on the
black box lamps

ROSE - TILT

BLACK - GAME OVER

GREEN WHITE - SHOOT AGAIN

For mounting a new power board see the schema and solder the old wires of the transformer in the exact position

POWER BOARD POSITION	COLOR	TRANSFORMER RIF. NUMBER
1	RED 0,80	1
2	BLACK	18
3	GREEN 0,35	8
4	GREEN 0,80	14
5	RED 0,35	2
6	BLUE	17
8	YELLOW	12
9	WHITE-GREEN	10
10	WHITE-BLACK	16
11	ORANGE	13
12	WHITE RED	6
7	White	15

SEE DIAGRAM

