
 * FUTURE QUEEN INSTRUCTION *

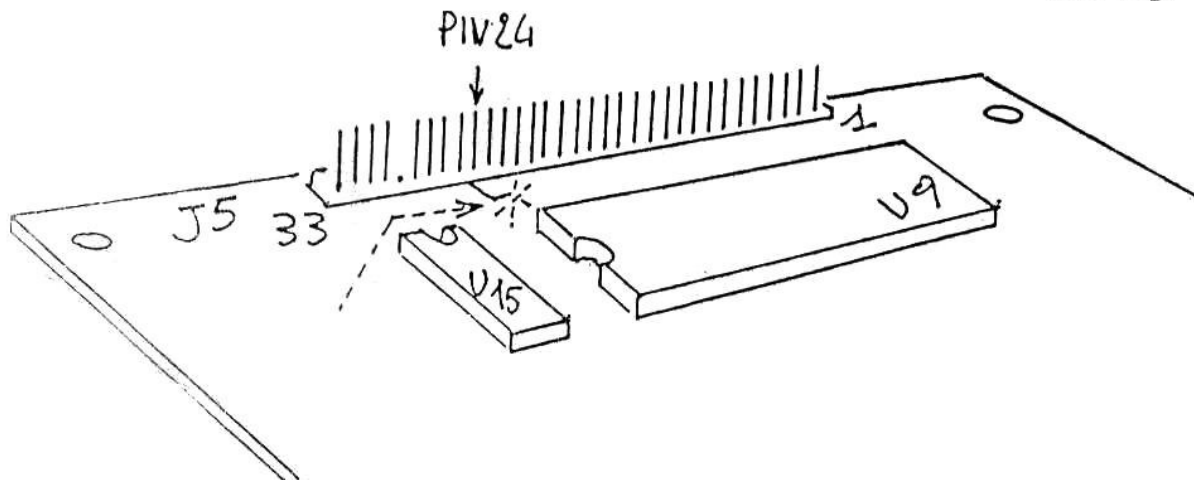
- * Before starting to mount the kit check the electronic board of your old Bally pinball.
- * Relè in front door with new memory stop to work you must insert it by hands.
- * In the connector A3-J5 in solenoid driver there is one wire red/black that you must insert in the connector A3-J2- position 12.

1 - MODIFY OF MPU NEW TYPE BALLY

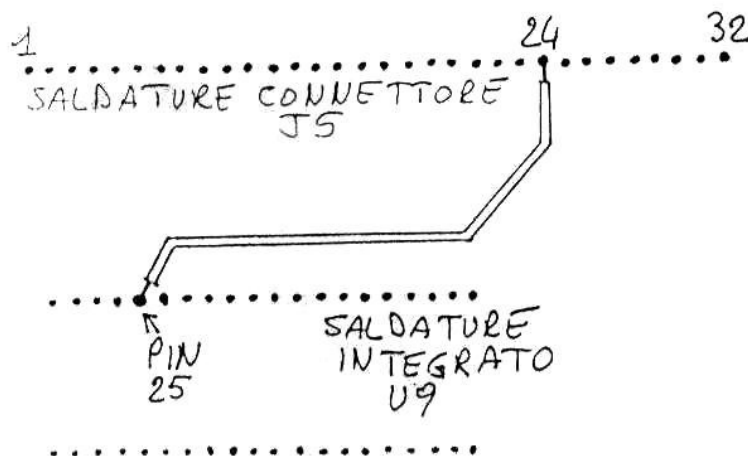
AS 2518-35 YOU CAN RECOGNISE THIS BOARD BECAUSE HAVE IN J5 33 PINS

- A - Take out the old memories game in the position U1,U2,U3,U4,U5,U6.
- B - Clean with alcohol connector J5
- C - Cut track in component side from pin 24 - J5 -

See fig.

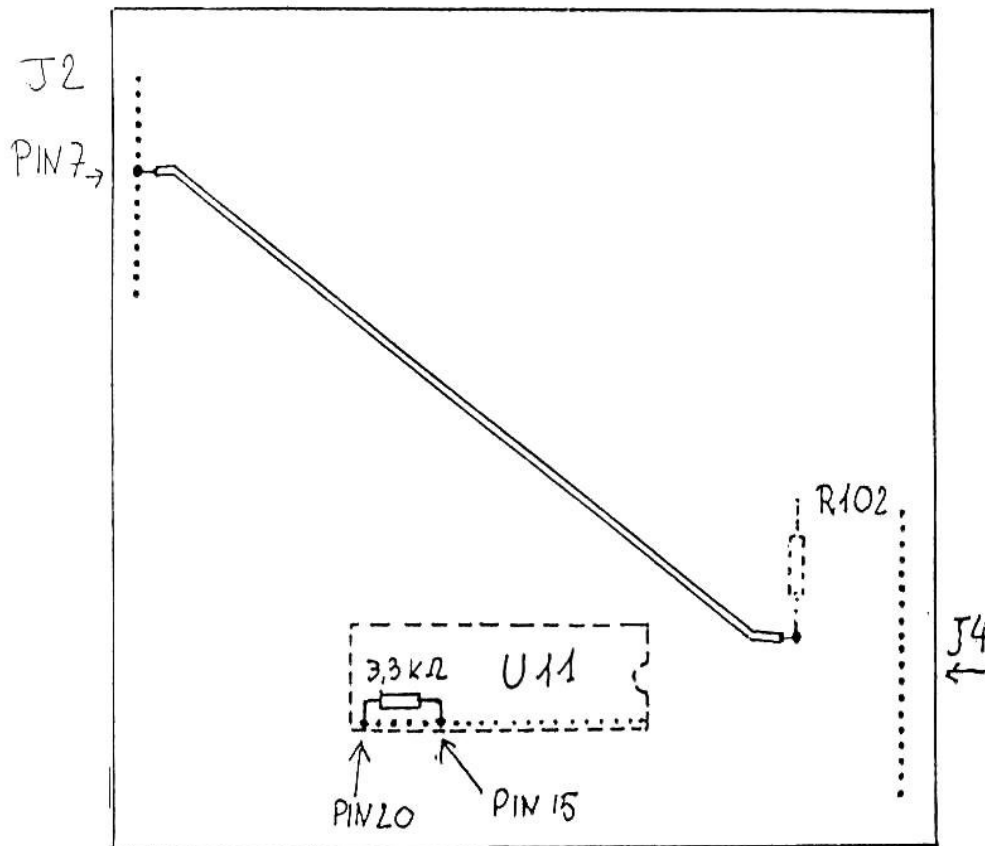


- D - In solder side connect pin 25 U9 with J5 pin 24.

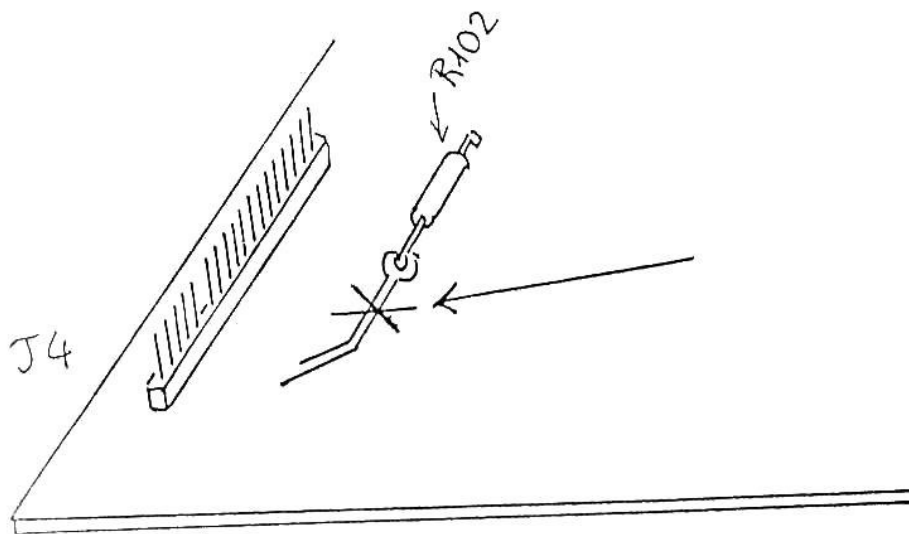


E - In solder side mont the resistor 3,3 KOHM between pin 15 and pin 20 component U11.

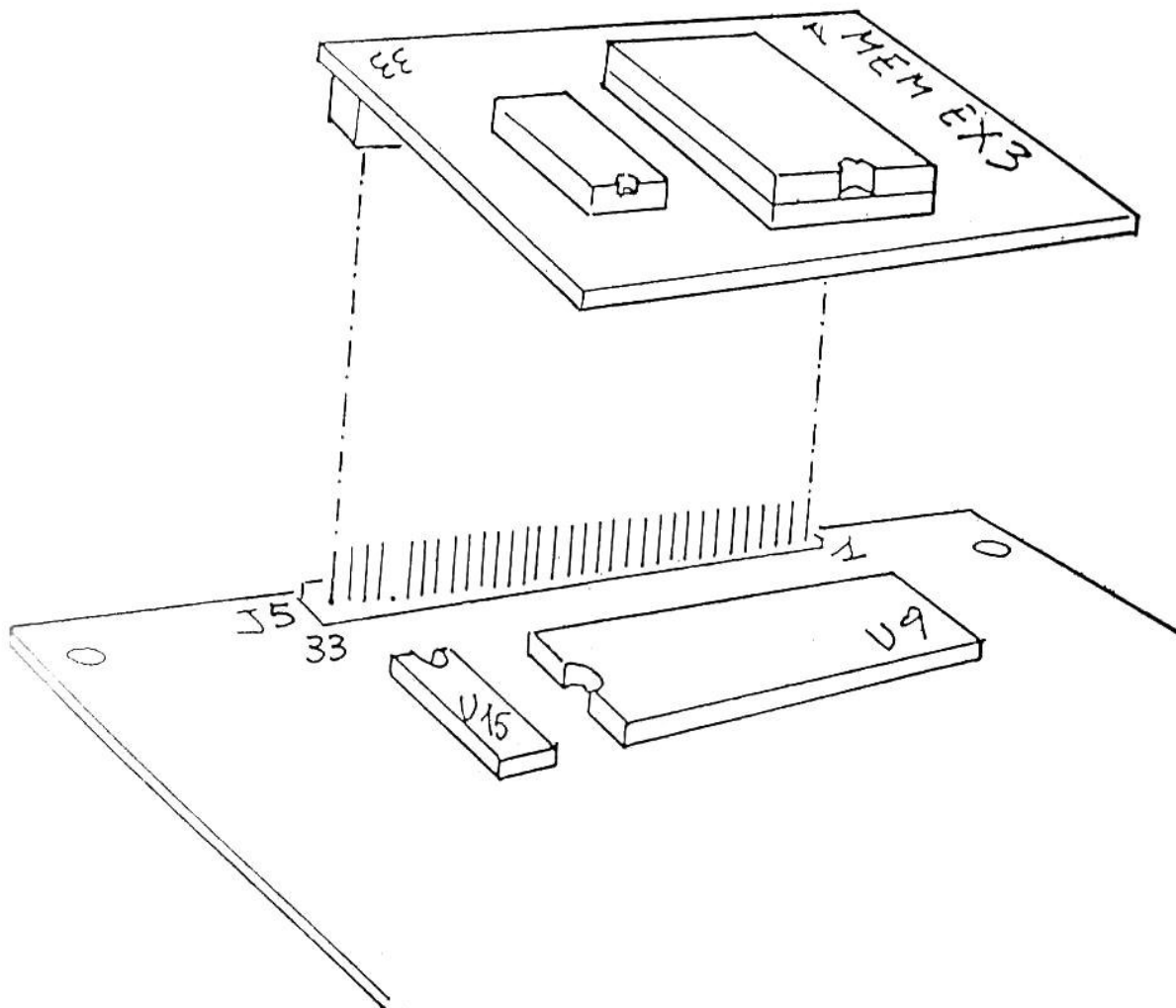
F - Connect with isolated wire pin 7 J2 with resistor R 102 (down part).



G - Cut track between resistor R 102 and the connector J4 (pin 6) in component side.



H - To mount mem ex 3 (memory board) in J5 and check the exact position pin one with pin one.



I - Check the battery of MPU if the tension is under 3,6 volts or if you look acid on it change.

2 - MODIFY OF MPU OLD TIPE BALLY AS 2518-17 YOU CAN RECOGNISE THIS BOARD BECAUSE HAVE IN J5 32 PINS

A - Do the same modify of new MPU pins.

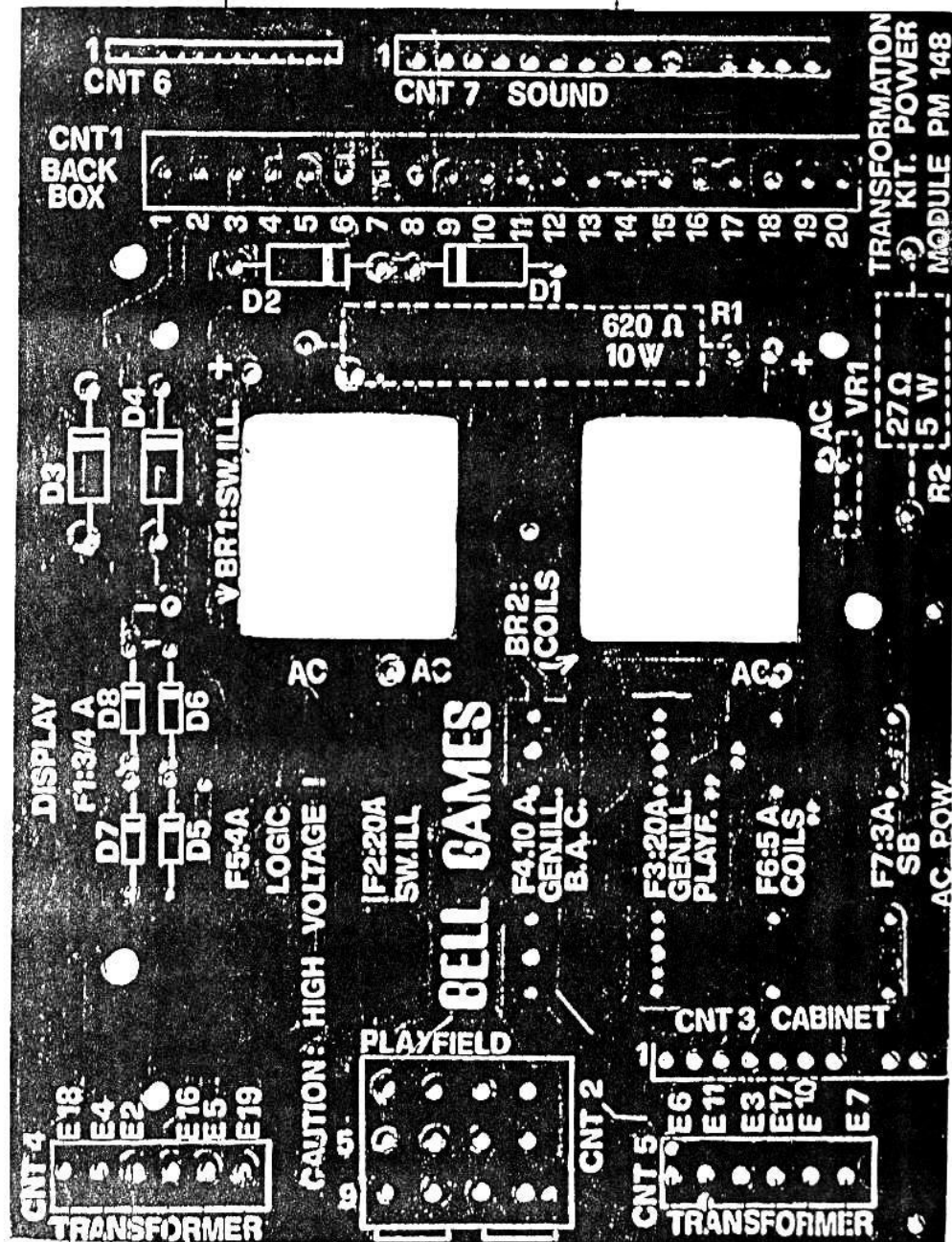
B - Connect in solder side pin 24 component U9 to pin 32 connector J5.

3 - CONNECTION OF NEW POWER BOARD

A - Take out the old power supply and mount the new PM 148.2 connect the transformer's wire in the following sistem.

TO J4 SOLENOID DRIVER

TO SOUND BOARD.



Green 0,35
White/Green
White/Black
White
Orange
Green 0,80

Blue
Black
White / Red
Red 0,35
Red 0,80
Yellow

POWER BOARD POSITION	COLOR	TRANSFORMER RIF. NUMBER
E. 10/220 VOLTS	RED 0,80	1
E. 11/6,3 "	BLACK	18
E. 18/170 "	GREEN 0,35	8
E. 19/7,8 "	GREEN 0,80	14
E. 17/49 "	RED 0,35	2
E. 6/6,3 "	BLUE	17
F. 7/220 "	YELLOW	12
E. 4/170 "	WHITE/GREEN	10
E. 2/12ac. "	WHITE/BLACK	16
E. 5/7,8 "	ORANGE	13
E. 3/49 vac.	WHITE/RED	6
E. 16/12 ac.	WHITE	15

B - Cut the wires of transformer's connector 20 pins white and see the schema.

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

C - Connect cnt 7 from power supply PM 148.2 to sound board
"Be careful for the exact position". "See key".

D - Take out from solenoid driver position J4 the connector and insert it in power module cnt 6.

E - Connect the cablinh behind cnt 6 to solenoid driver position J4.

4 - CONNECTION OF AUX LAMP DRIVER.

A - Do a jumper between two connectors:

J1 - 8 M.P.U.
J4 - 9 LAMP DRIVER

B - The board vib 152 aux lamp driver must be mounted near the lamp driver.

C - Disconnected from original lamp driver J4 and connect it in vib 152 aux lamp driver C1 position.

D - Connect in C2 - vib 152 aux lamp driver the connector 20 pins from playfield.

E - Disconnect J2 lamp driver and connect the connector from playfield with 7 wires not connected.

F - Solder 3 wires in the following position on the back box lamps.

RED = TILT
BLACK = GAME OVER
WHITE = SHOOT AGAIN

(Ather wires are not used).

IMPORTANT *****

A - If the old pinball is 7 digit SW 22 in on position.

B - In the old pinball is 6 digit position SW 22 in off and mount an additional "zero" in dispaly.

VERY IMPORTANT *****

This pinball is working with two balls.

TOP WHITE LIGHTS

After have mounting on top the lamps connect in the following sistem.
with the wires that arrive from connector J2 lamp driver:

+ 43 VDC JELLOW (common)

SCR 38 ORANGE LAMP RIGHT

SCR 40 WHITE/BLACK LAMP LEFT

In serie between 43 VDC and the rwo lamps mont two resistors 5 watt 47 OHM

See fig.

