TANGLES' PIN PARTS

TPP-1007

Replacement for 6 Digit Bally / Stern Display

Description

The TPP-1007 display will replace the Bally A5-2518-21 and Stern A-434 6-digit displays used on many machines from approximately 1977 to 1986. Parts used in this assembly have been sourced through reliable channels to ensure highest quality and reliability.

The TPP-1007 comes fully assembled. No soldering is required. No modifications are needed to your pinball machine. This display unit uses only the 5-volt supply. The high voltage supply is not used. This means this display will operate even if the high voltage circuitry is faulty or has been disabled. The display will work fine with the high-voltage still operational, so this unit may be used with a mix of old and new displays.

Installation

Warning: High voltages are present inside the head of the pinball machine. Ensure the power is off and the mains cable is disconnected before you commence work.

- 1. Ensure power is off.
- 2. Disconnect the 20-way Molex plug from the old Bally / Stern module.
- 3. Slide the old module out forward from the metal housing.
- 4. Slide the TPP-1007 assembly in from the front.
- 5. Plug the 20-way Molex plug into the board, taking note of the key to orientate the plug correctly.
- 6. Power on the pinball machine.

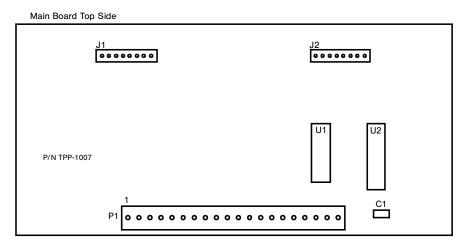
Attaching the Optional Card Shroud

- 1. Cut the Cardboard shroud as indicated by the faint lines on the card stock.
- 2. Bend the triangular side wings back.
- 3. Attach the stick-on foam strip to the top and bottom of the display, sticking to the circuit board.
- 4. Slide the card shroud over the LED modules and press back to rest against the foam strip.

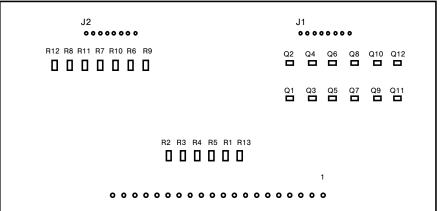


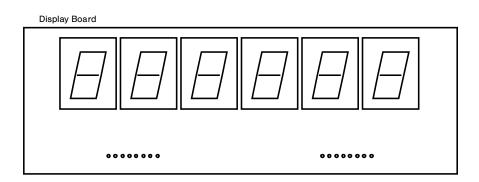


Board Layout









Parts List

Designator	Description
U1	MC4543
U2	ULN2003
Q1,Q3,Q5,Q7,Q9,Q11	PDTC143XT transistor
Q2,Q4,Q6,Q8,Q10,Q12	PDTB113ZT transistor
R6 – R12	RC1206JR-0768RL 680hm 1206 resistor
R1 – R5, R13	RC1206JR-071KL 1KOhm 1206 resistor
C1	0.1uF Ceramic radial capacitor
D1 – D6	8011BY 7 segment LED display yellow
P1	2 x Molex 10way 1-640383-0
J1,J2	MC34753 8-way 0.1" right angle board-to-board

Compatibility

The TPP-1007 is compatible with Stern and Bally 6 Digit displays. Note that many 7 digit machines are compatible with a 6-digit display in the credit display position.

Stern PN A-434

Ali 1980	Meteor 1979
Dracula 1979	Nugent 1978
Galaxy 1980	Pinball 1977
Hot Hand 1979	Stars 1978
Lectronamo 1978	Stingray 1977
Magic 1979	Trident 1979
Memory Lane 1978	Wildfyre 1978

Used in the credit / ball display on these Stern machines:

Big Game 1980		
Catacomb 1981		
Cheetah 1980		
Dragonfist 1982		
Flight 2000 1980		
Freefall 1981		
Iron Maiden 1981		

Lightning 1981 Nine Ball 1980 Orbitor 1 1982 Quicksilver 1980 Seawitch 1980 Split Second 1981 Viper 1981

Bally PN AS-2518-21

Black Jack 1978 Dolly Parton 1979 Eight Ball 1977 Evil Knievel 1977 Freedom 1977 Future Spa 1979 Goldball 1983 Grand Slam 1983 Harlem Globetrotters 1979 Hotdoggin 1980 Kiss 1979 Lost World 1978 Mati Hari 1978 Mystic 1980 Night Rider 1977 Nitro Groundshaker 1980 Paragon 1979 Playboy 1978 Power Play 1978 Rolling Stones 1980 Silverball Mania 1980 Six Million Dollar Man 1978 Space Invaders 1980 Star Trek 1979 Strikes and Spares 1978 Supersonic 1979 Viking 1980 Voltan 1979

Used in the credit / ball display on these Bally machines:

Beat The Clock 1985 Black Pyramid 1984 BMX 1983 Centaur 1981 Centaur II 1983 Cybernaut 1985 Eight Ball Champ 1985 Eight Ball Deluxe 1981 Eight Ball Deluxe 1984 Eight Ball Deluxe Limited Edition 1982 Elektra 1981 Embryon 1981 Fathom 1981 Fireball Classic 1984 Fireball II 1981 Flash Gordon 1981 Frontier 1980 Kings of Steel 1984 Lady Luck 1986 Medusa 1981 Mr & Mrs Pacman 1982 Rapid Fire 1982 Skateball 1980 Speakeasy 1982 Speakeasy 4 1982 Speakeasy 4 1982 Spectrum 1982 Spy Hunter 1984 Vector 1982 Xenon 1980 X's & O's 1984