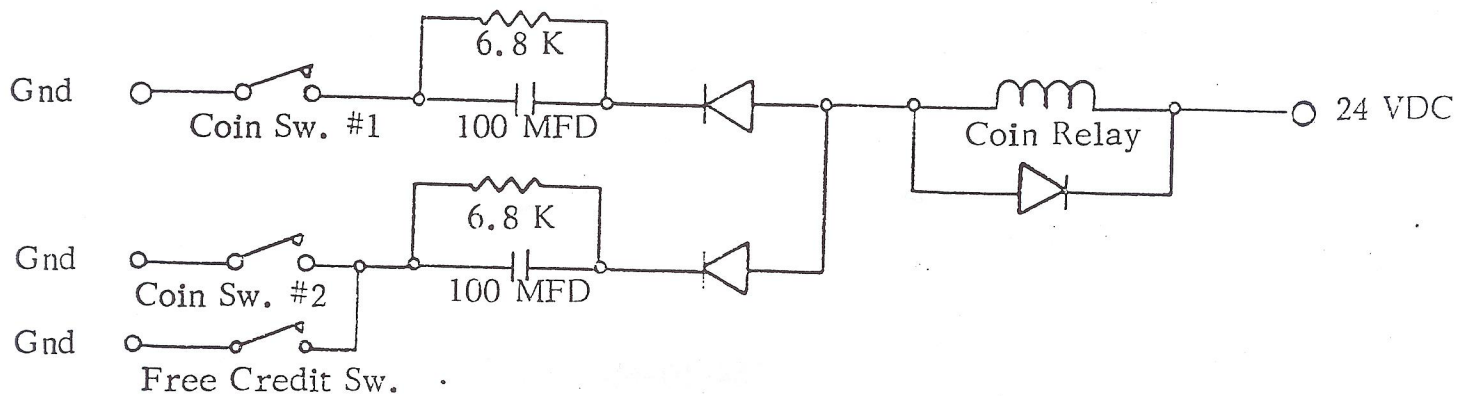


264-10-66

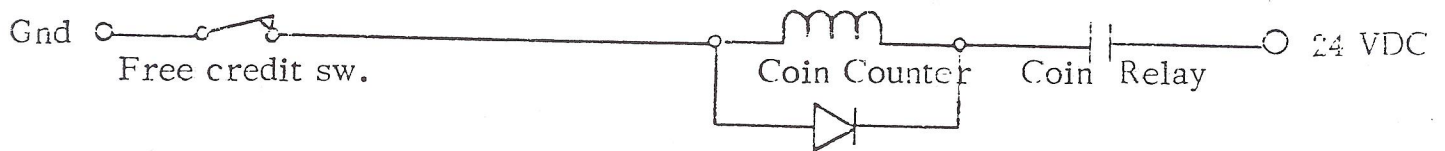
ALLIED'S PINBALL
TROUBLE SHOOTING
GUIDE

Depositing a coin and operating the coin switch, operates the Coin Relay momentarily.



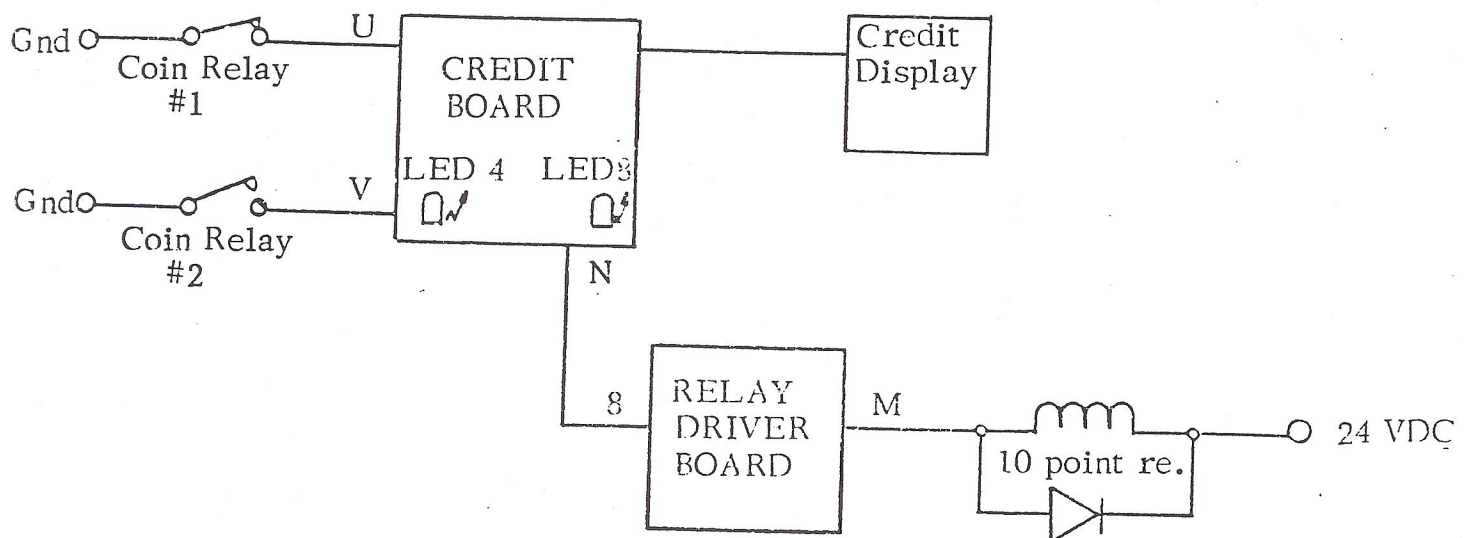
The Coin Relay when energized:

- 1) Operates the Coin Counter

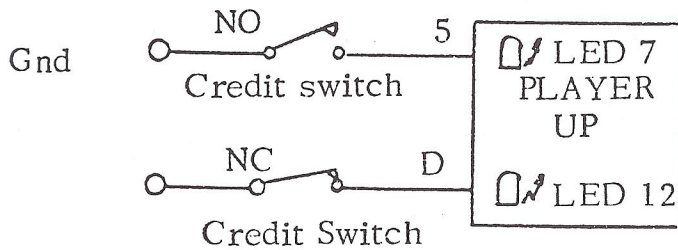


- 2) Signals the Credit Board to:

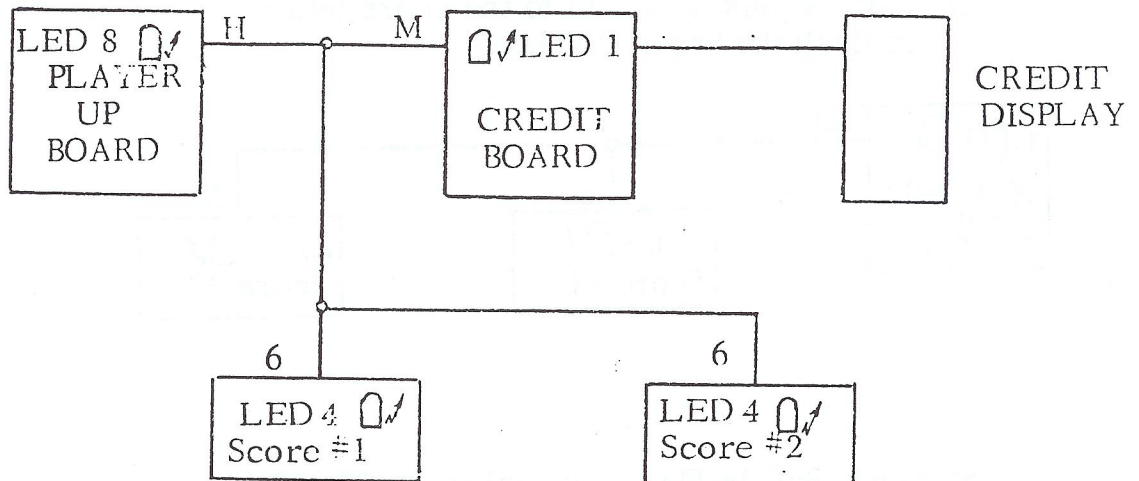
- A) Establish the proper credit
- B) Operates the 10 point Chime Relay



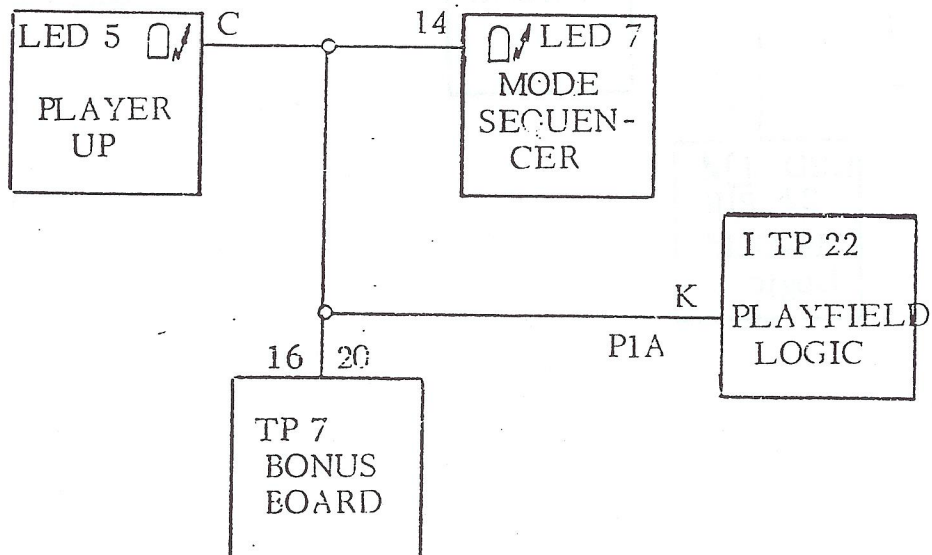
Operating the credit button signals, the Player Up Board to perform the following operations:



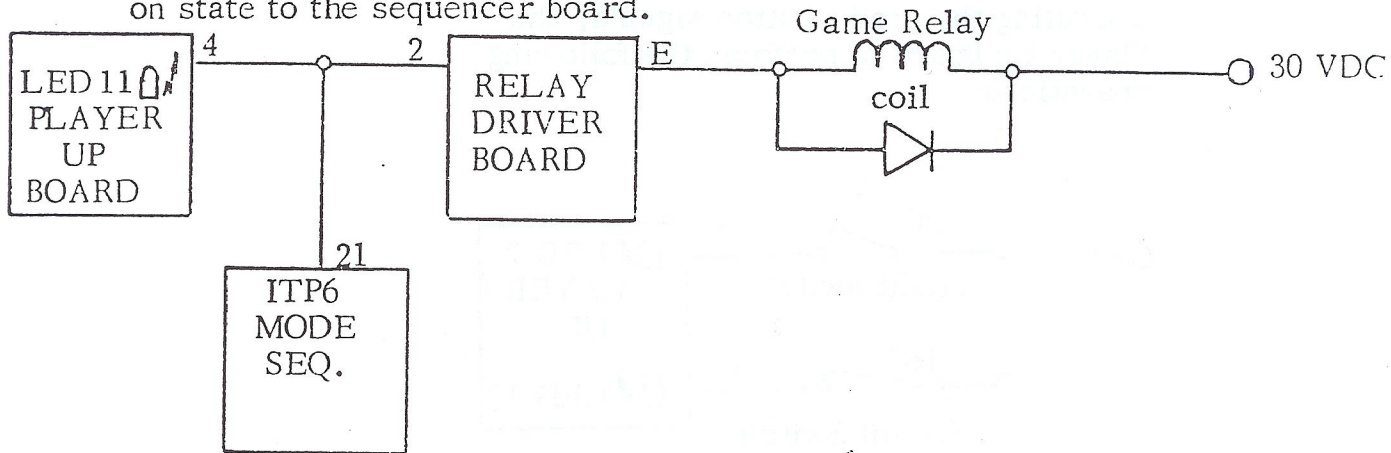
- 1) Resets the score unit to 0 and subtracts 1 credit from the Credit Unit



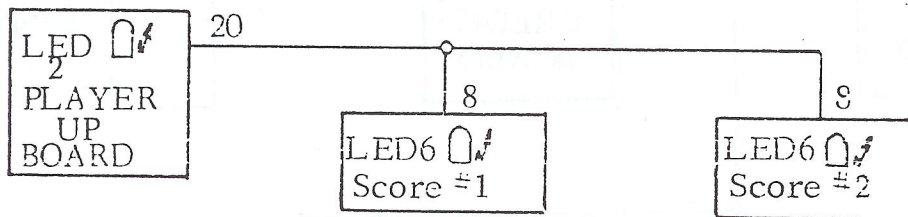
- 2) Resets Mode Sequencer, Bonus and Playfield Logic Boards.



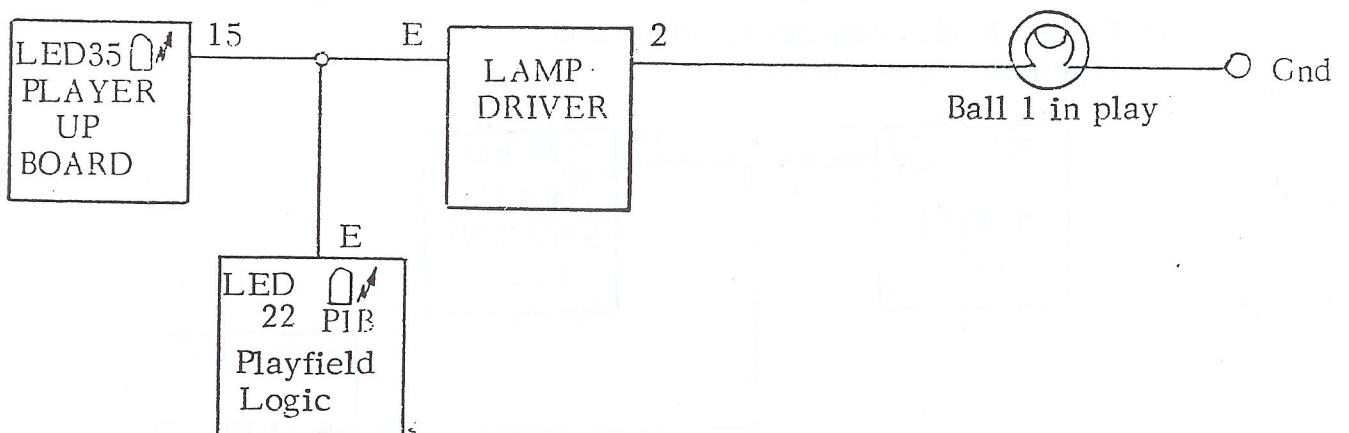
- 3) Energizes the game relay and supplies a game on state to the sequencer board.



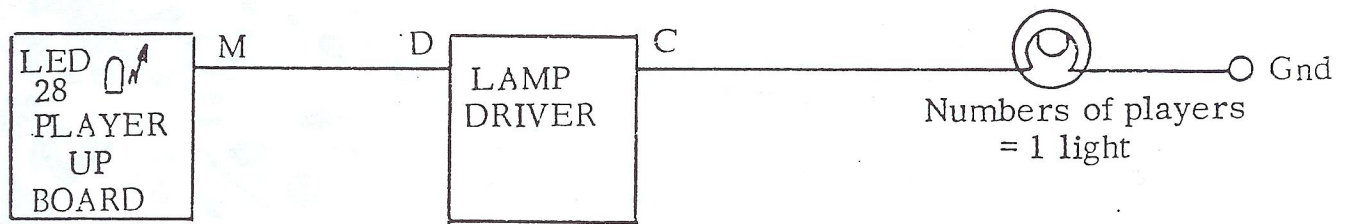
- 4) Sends a pulsing signal to the score units to flash the Score Display.



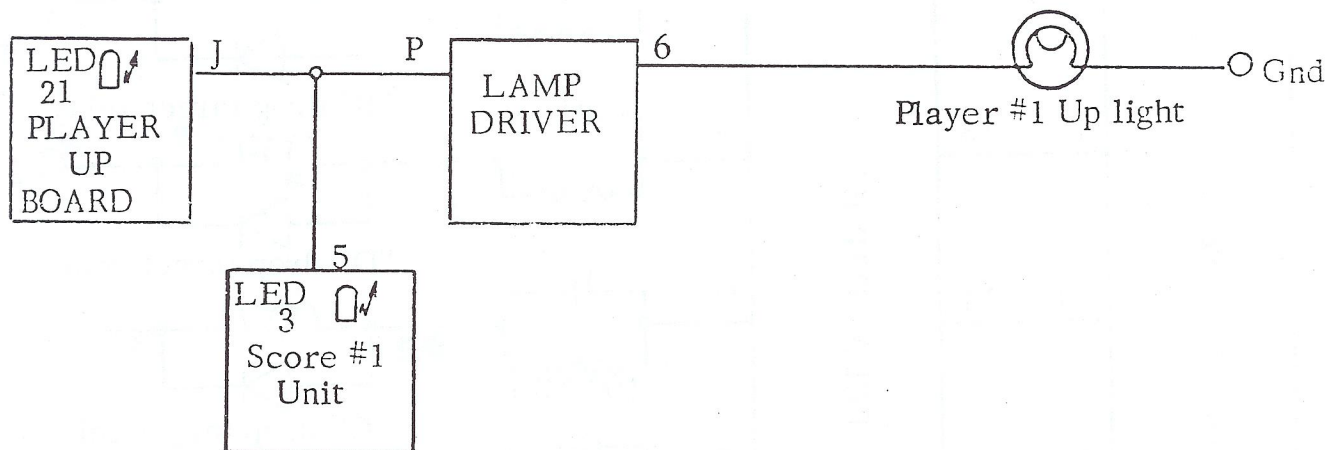
- 5) Sends Ball In Play #1 signal to the Playfield Logic Board and lights Ball In Play light.



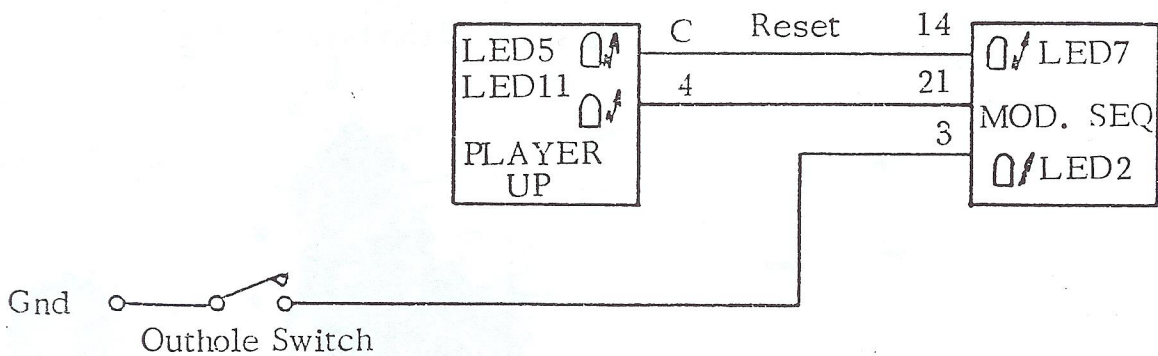
6) Lights Numbers of Players = 1 Light



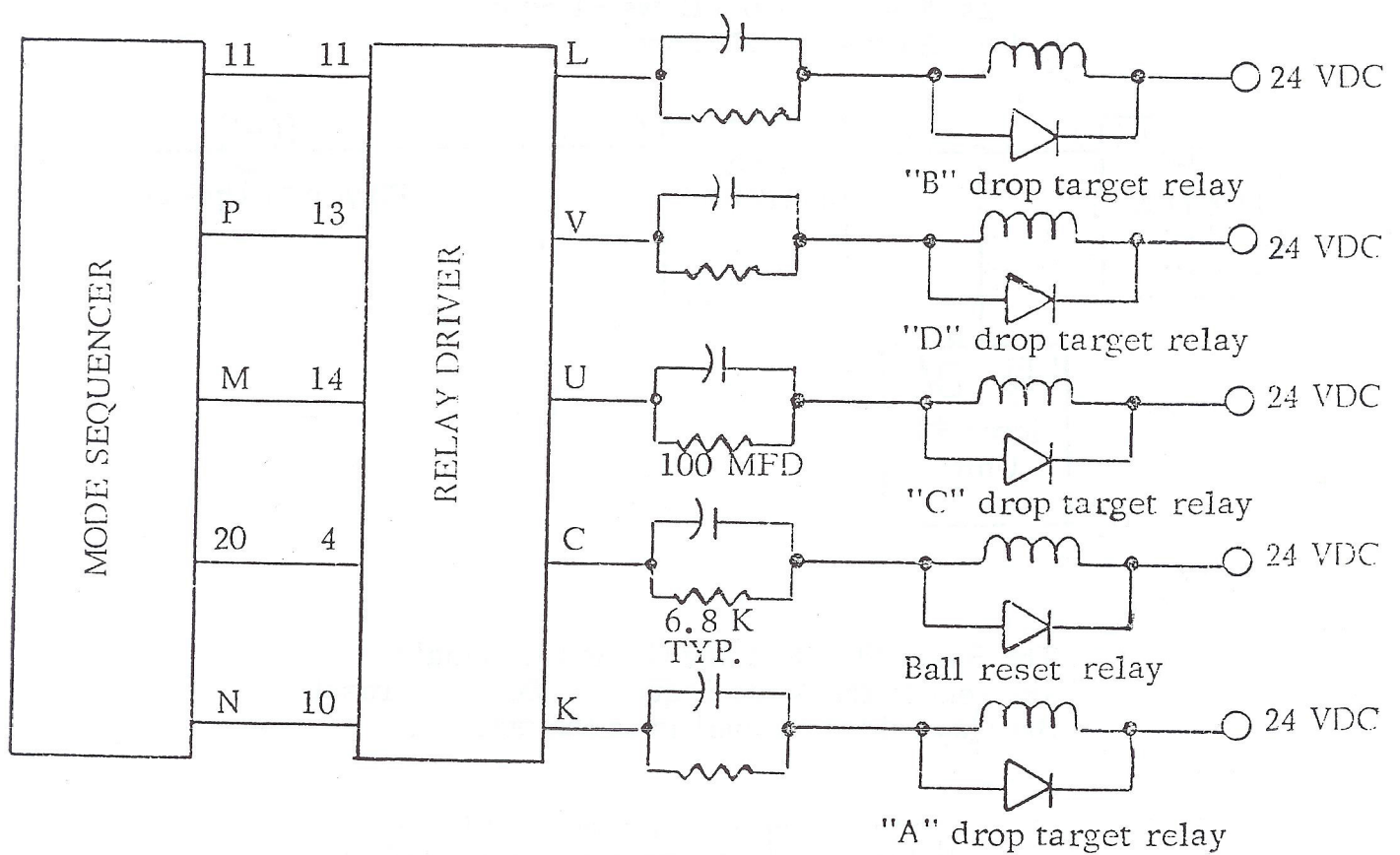
7) Lights Player #1 Up allows #1 Score Unit to flash and add score



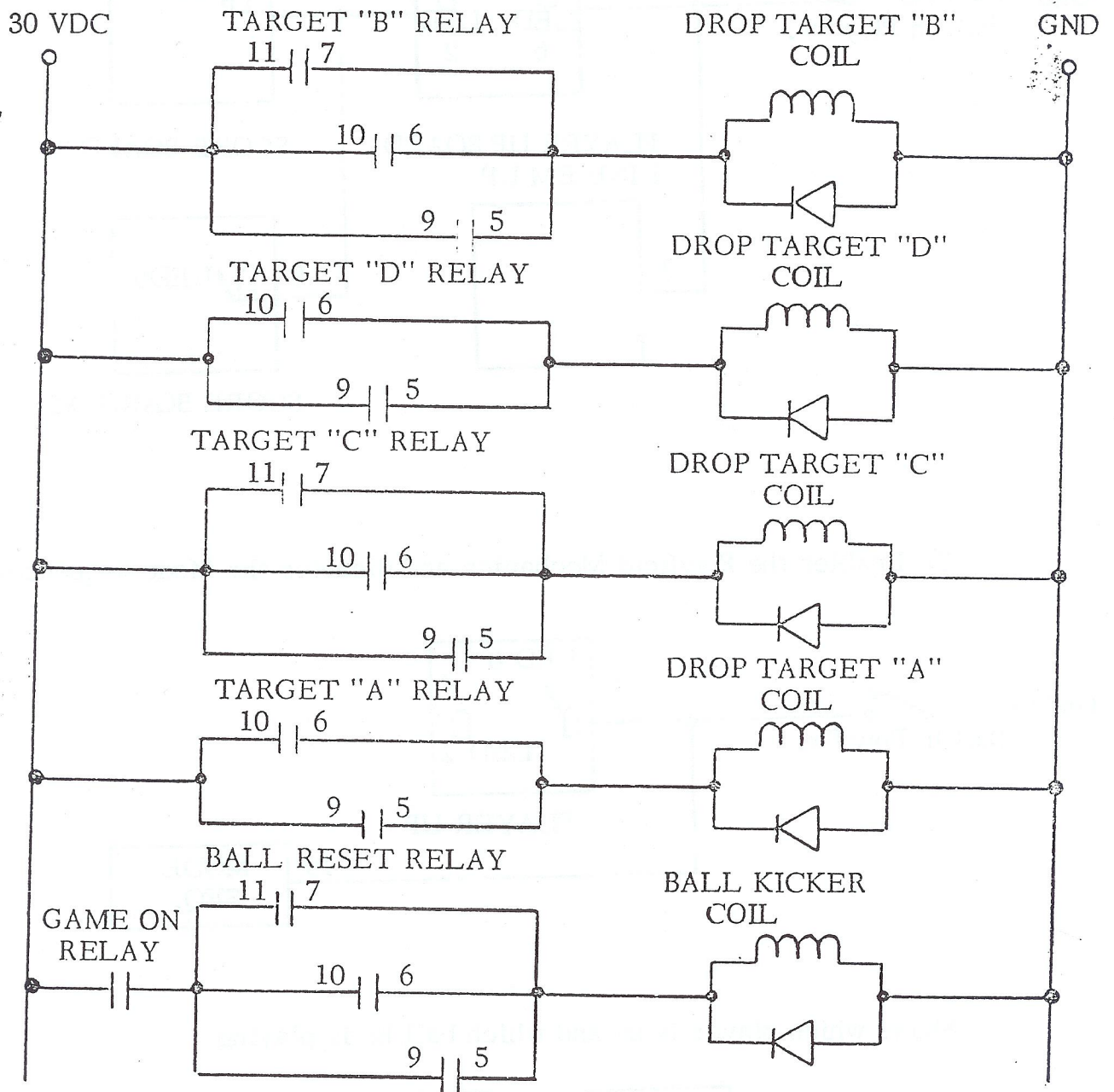
8) The Reset Playfield and Game On signals are sent to the Mode Sequencer Board to reset the Playfield if the ball is in the outhole.



8 A) The Mode Sequencer Board resets the Playfield and kicks the ball into the Shooter Lane.



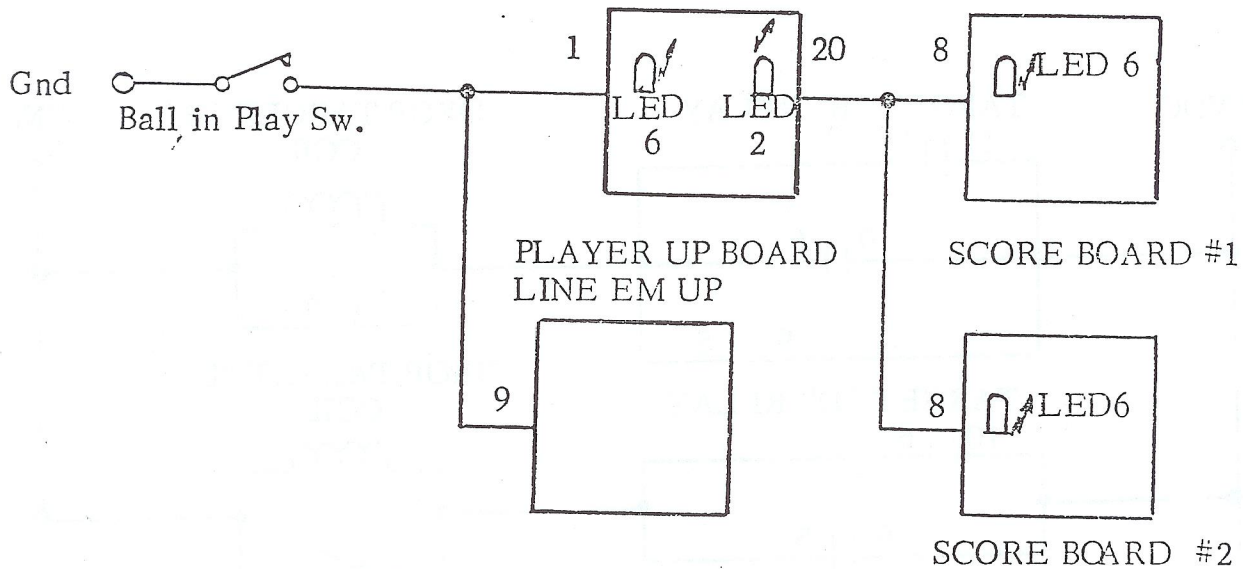
As the Drop Target relays energize the Drop Target coil energizes causing the Drop Target to come up.



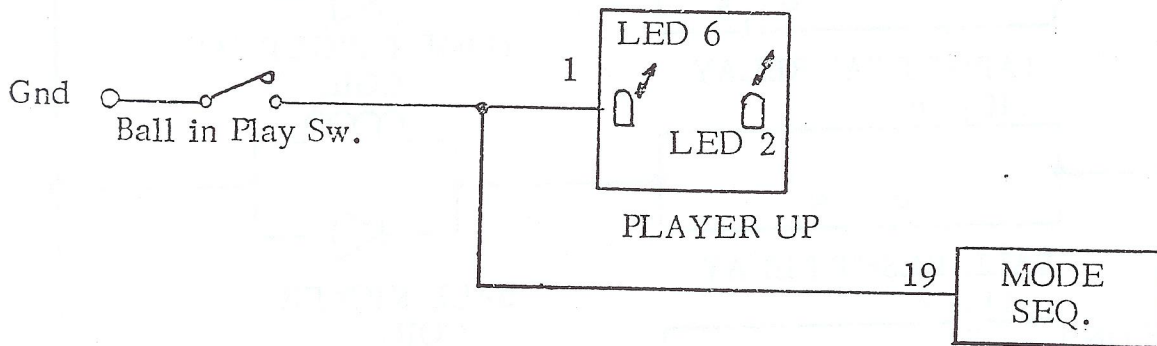
Shooting the ball on to the playfield operates the Ball in Play switch.

The Ball in Play switch when operated:

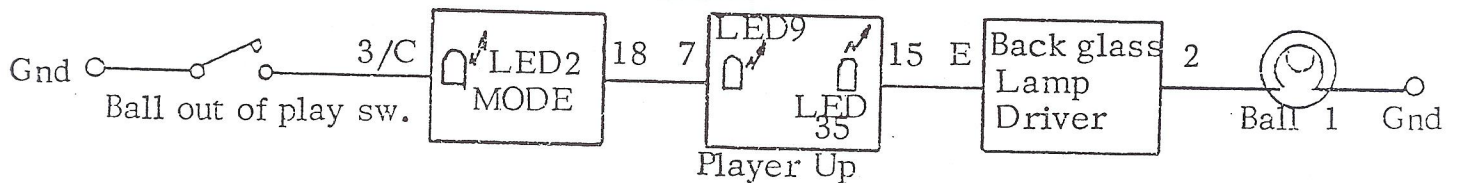
- 1) Stops the score from flashing and resets Line Em Up.



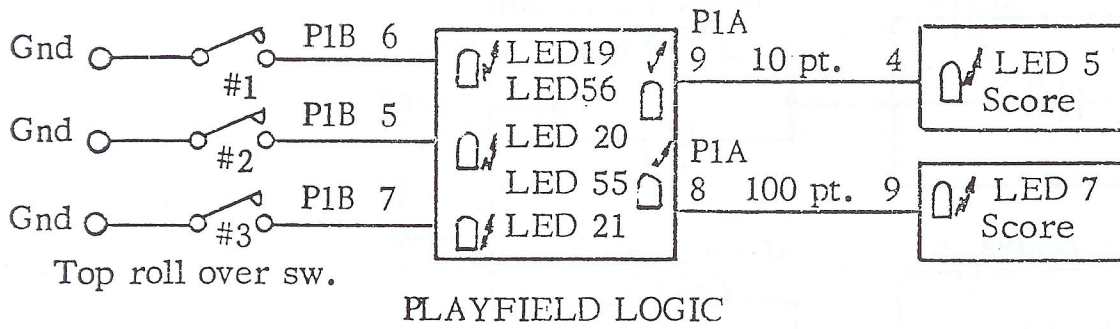
- 2) Enables the Playfield Mechanics and disables the Mode Sequencer.



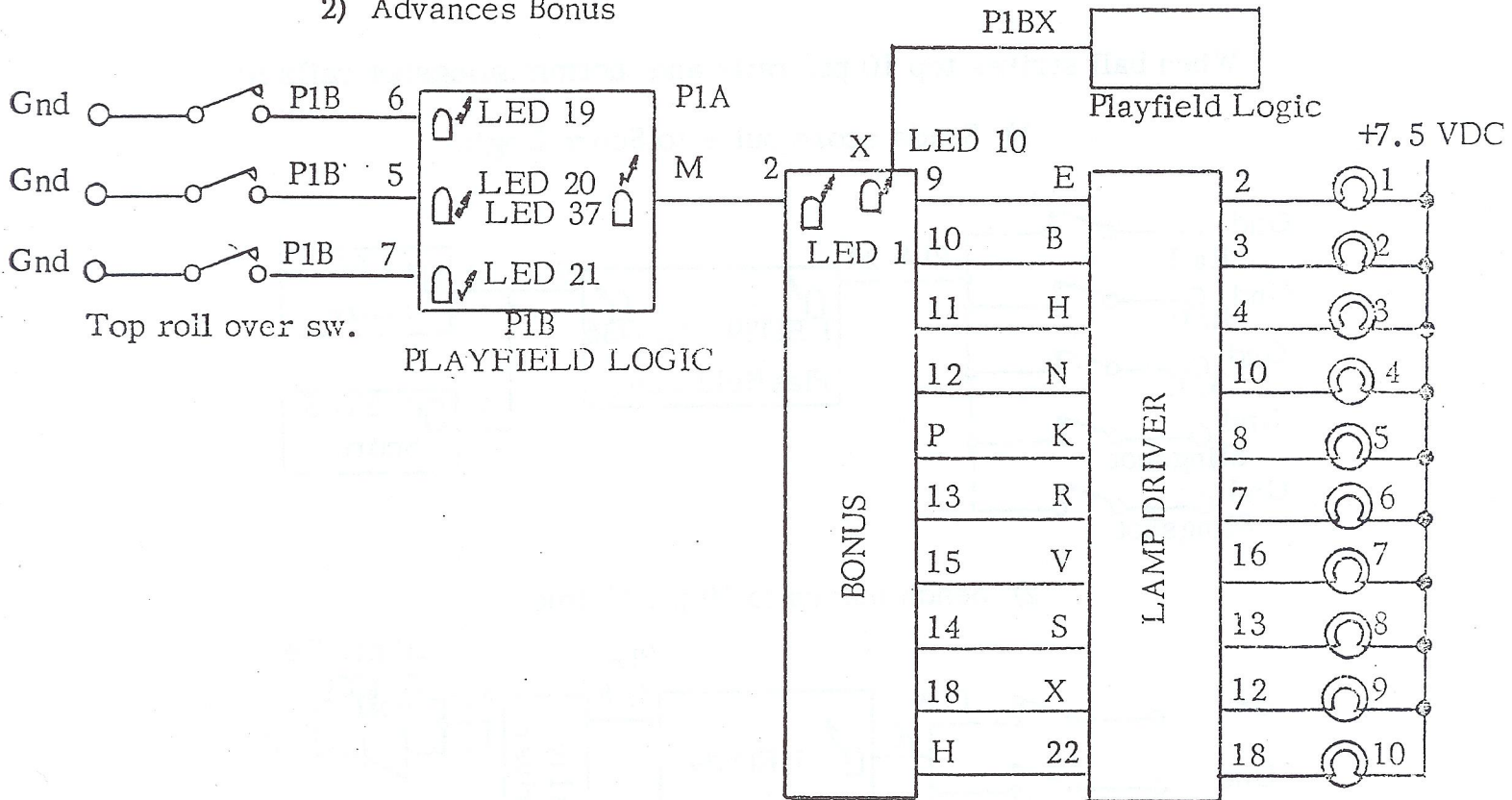
Shows which player is up and which ball he is playing



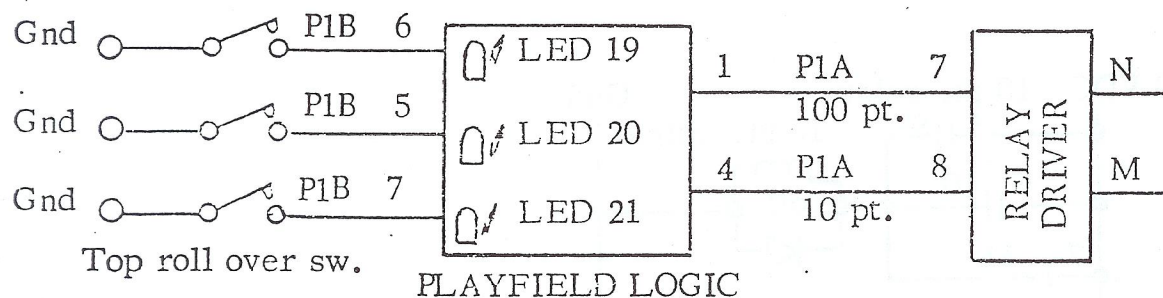
When ball enters Playfield and goes through top roll overs
1) Sends score to score logic



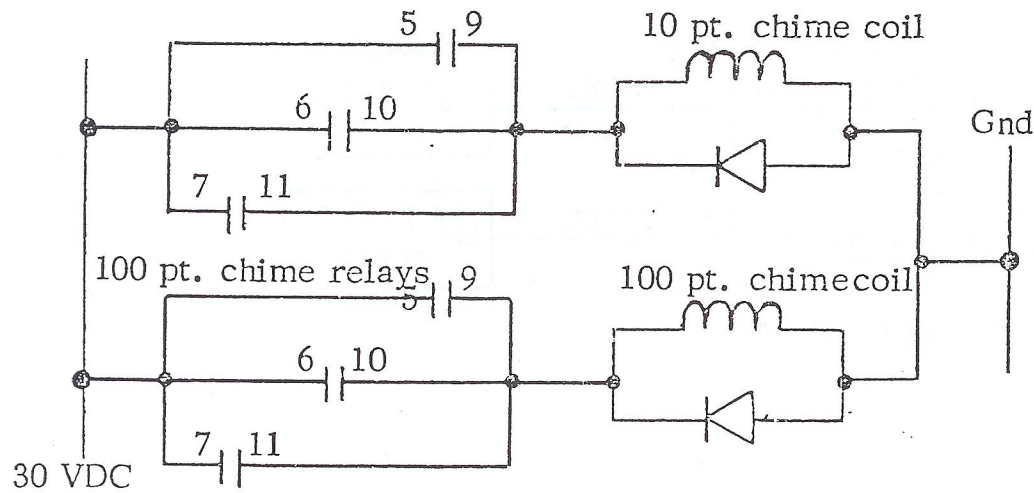
2) Advances Bonus



3) Sends pulse to Chime Unit

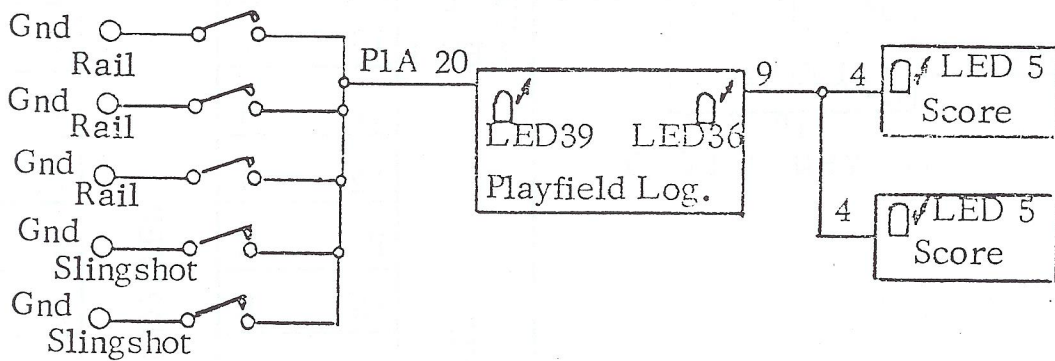


10 pt. chime relay contacts

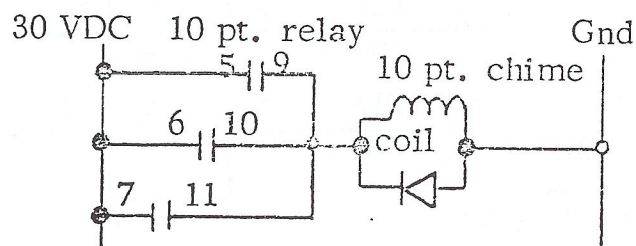
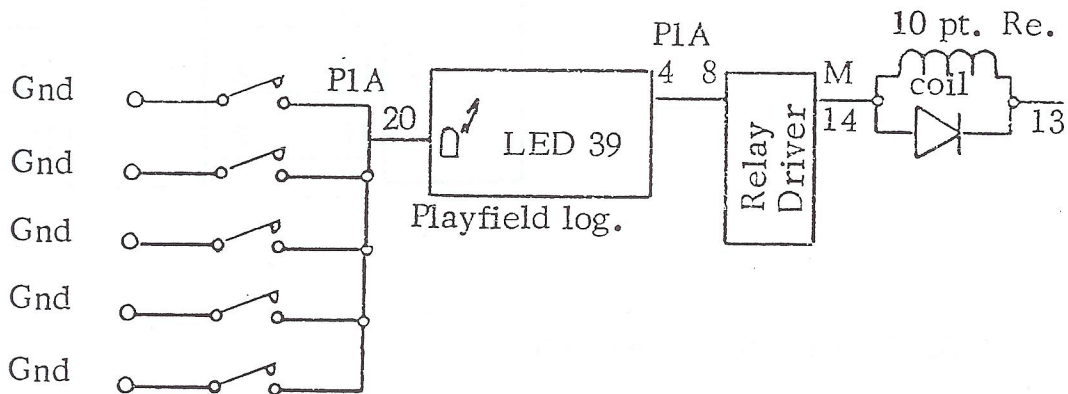


When ball strikes top 10 pt. rails and bottom slingshot rails it:

- 1) Sends score pulse to Score Logic

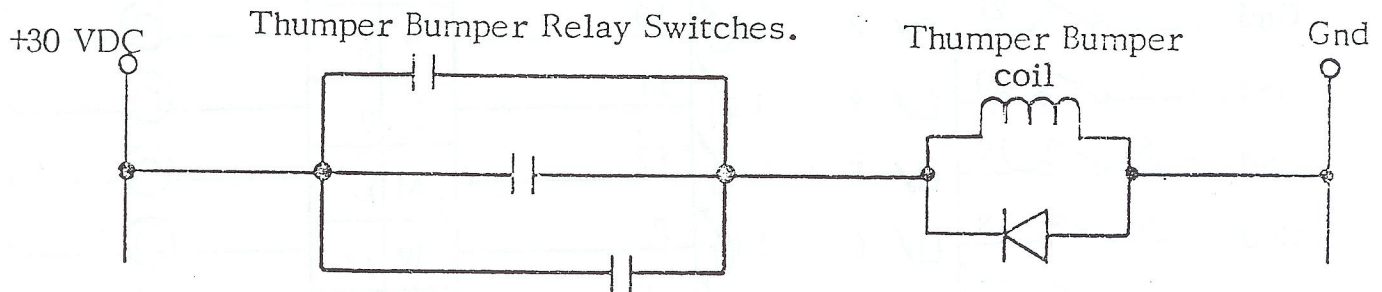
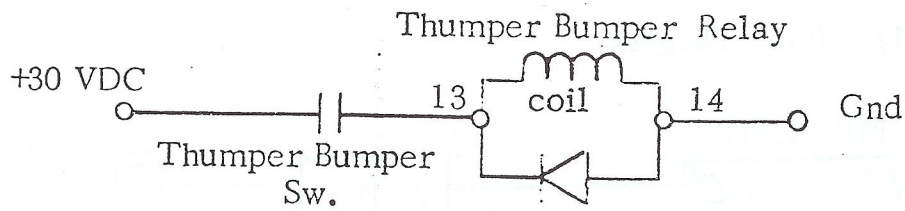


- 2) Sends pulses to 10 pt. Chime

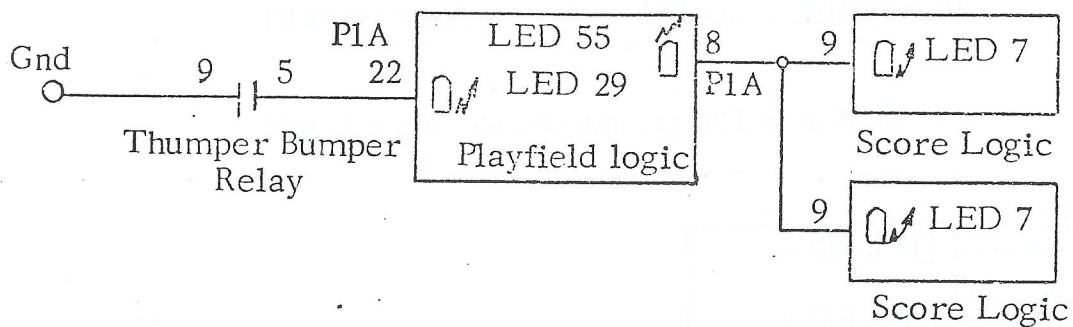


When ball strikes the Thumper Bumper it:

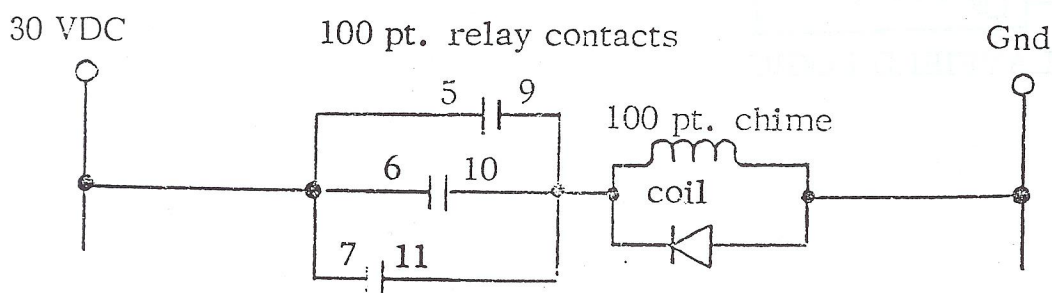
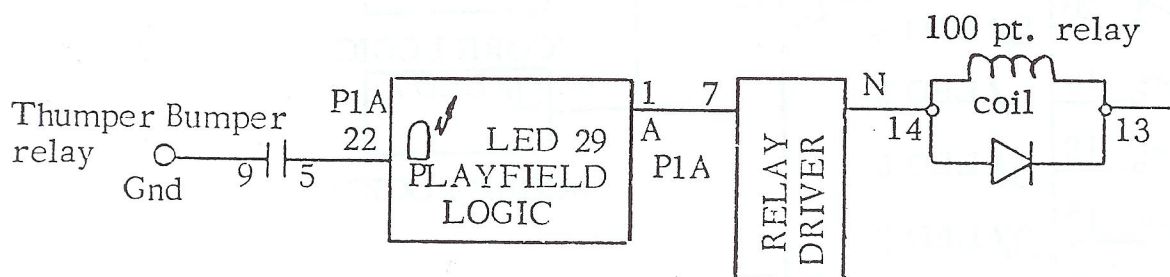
- 1) Actuates the Thumper Bumper relay



- 2) Sends 100 pt. pulses to Score Logic

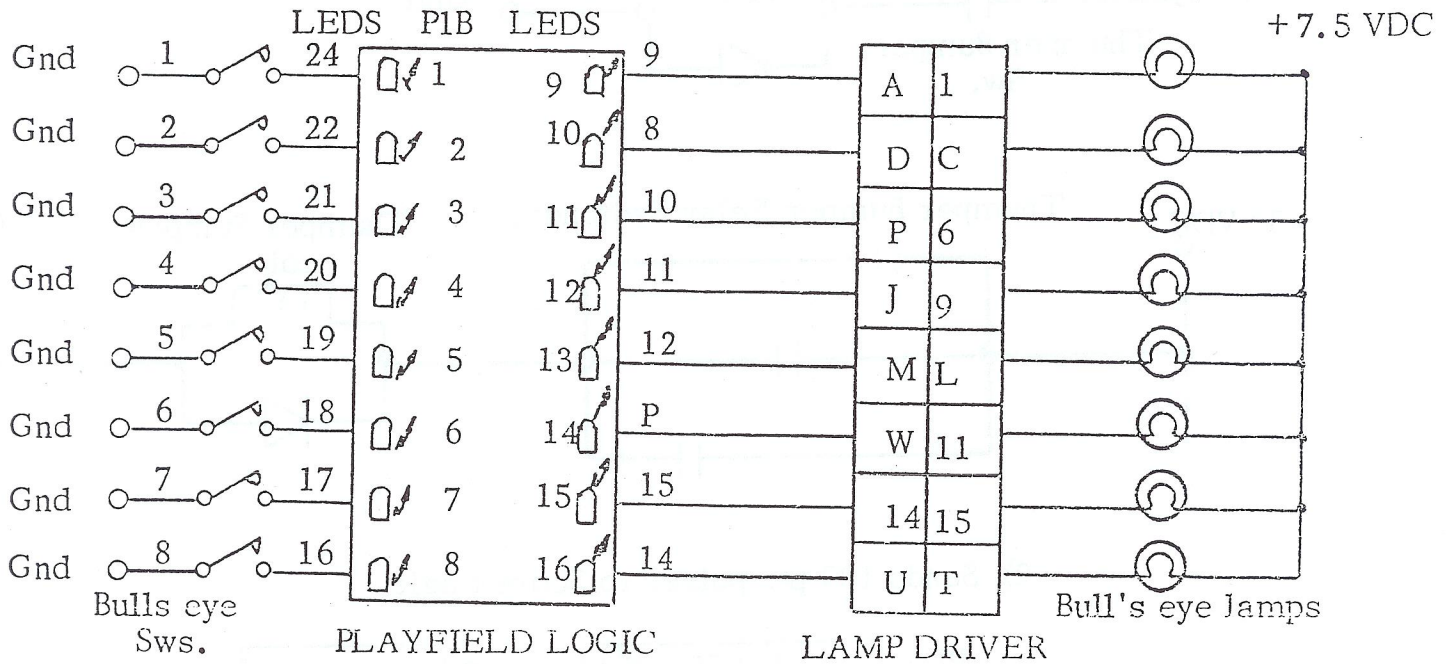


- 3) Sends pulses to 100 pt., Chime

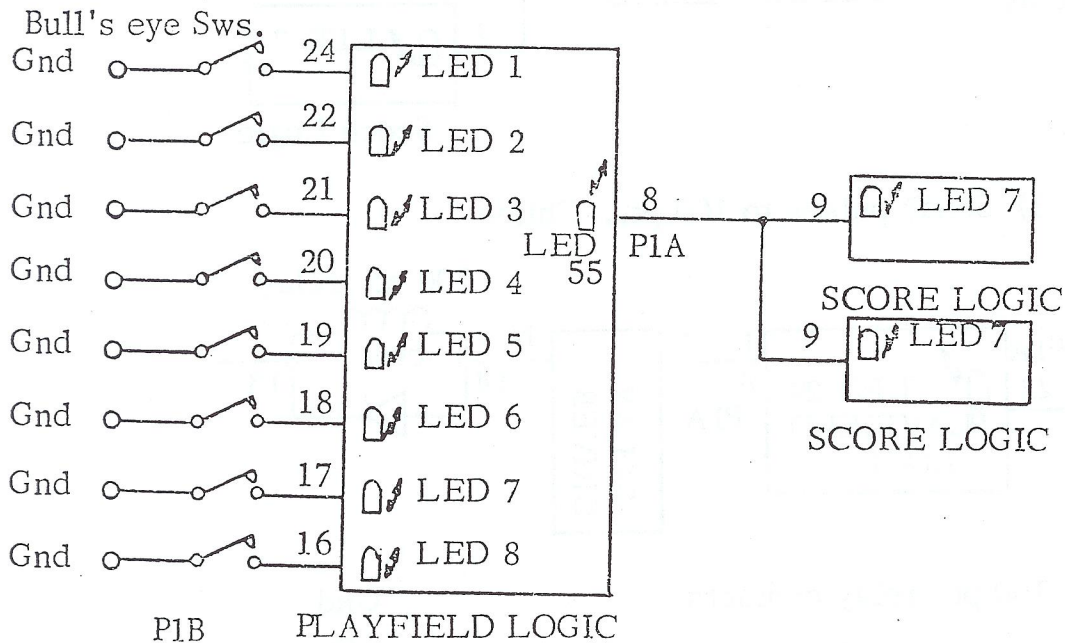


When ball strikes the Bull's Eye Target:

1) Lights Targets

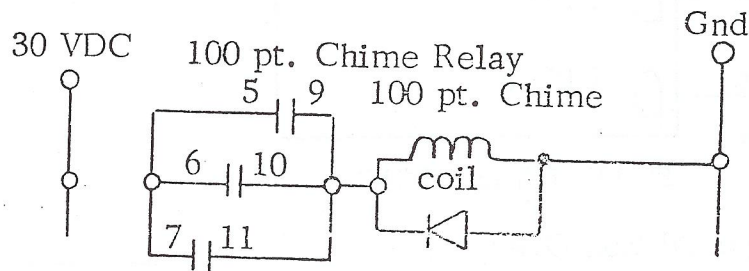
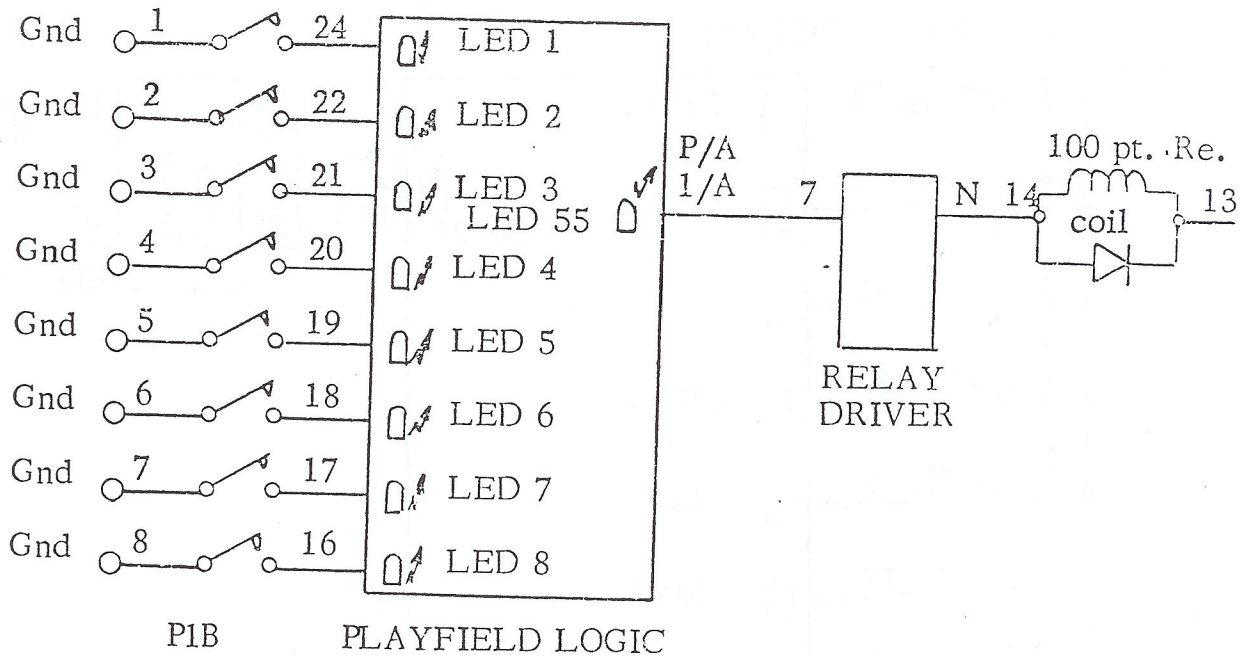


2) Sends 100 pt. pulses to Score Logic

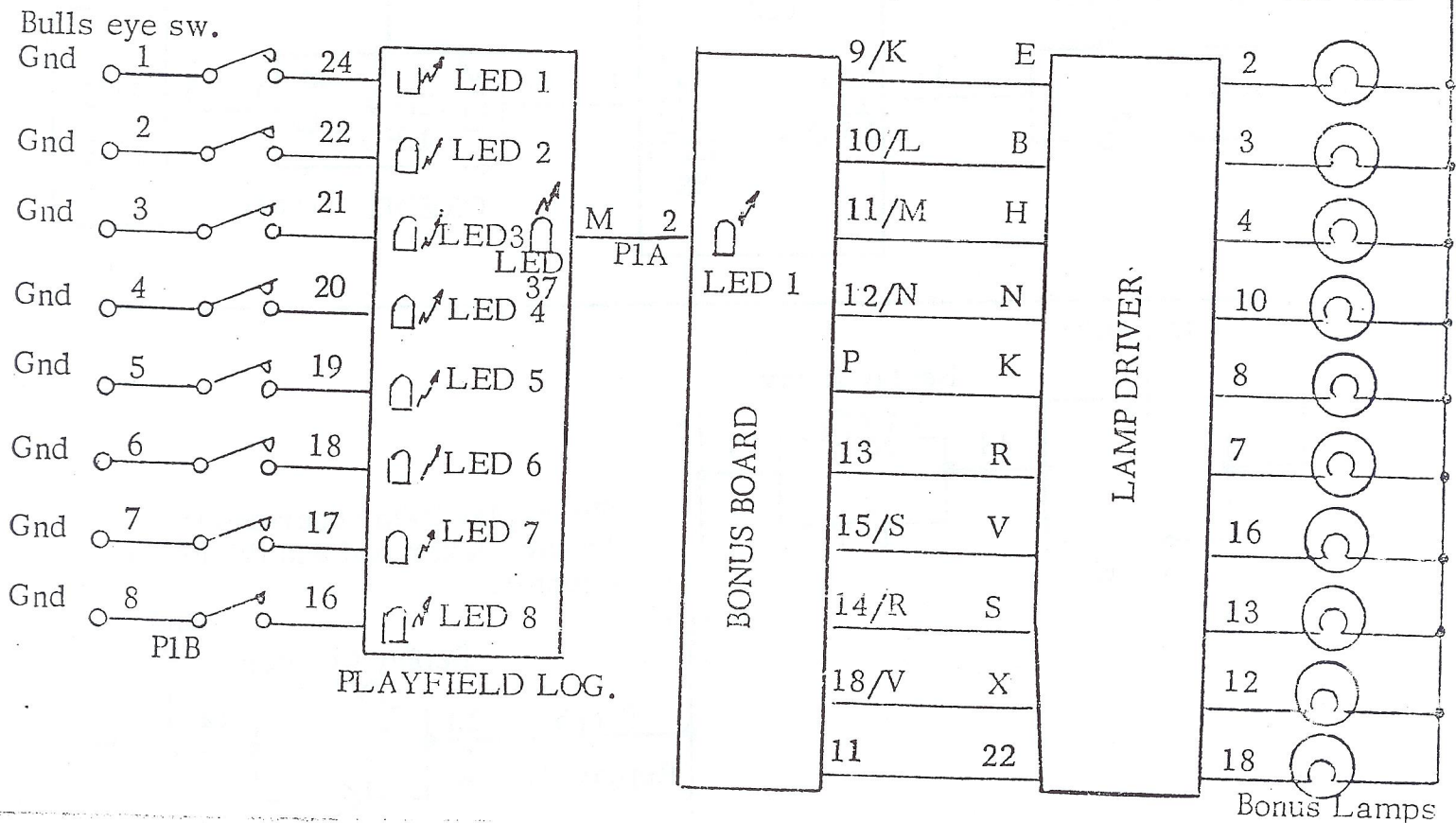


Bulls eye Sws.

3) Sends pulses to 100 pt. Chime Unit

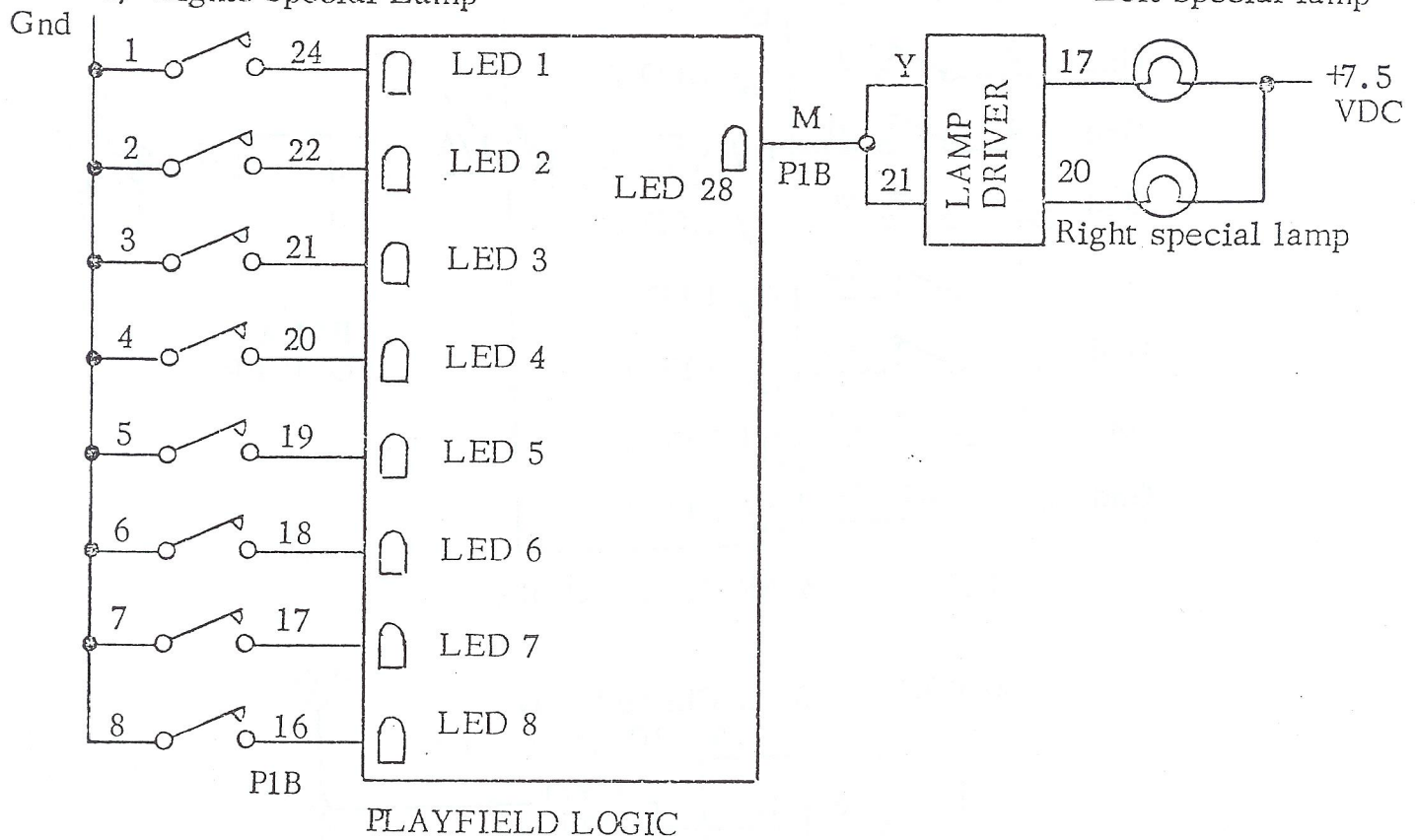


4) Sends pulses to Bonus Board and lights Bonus Lamps.

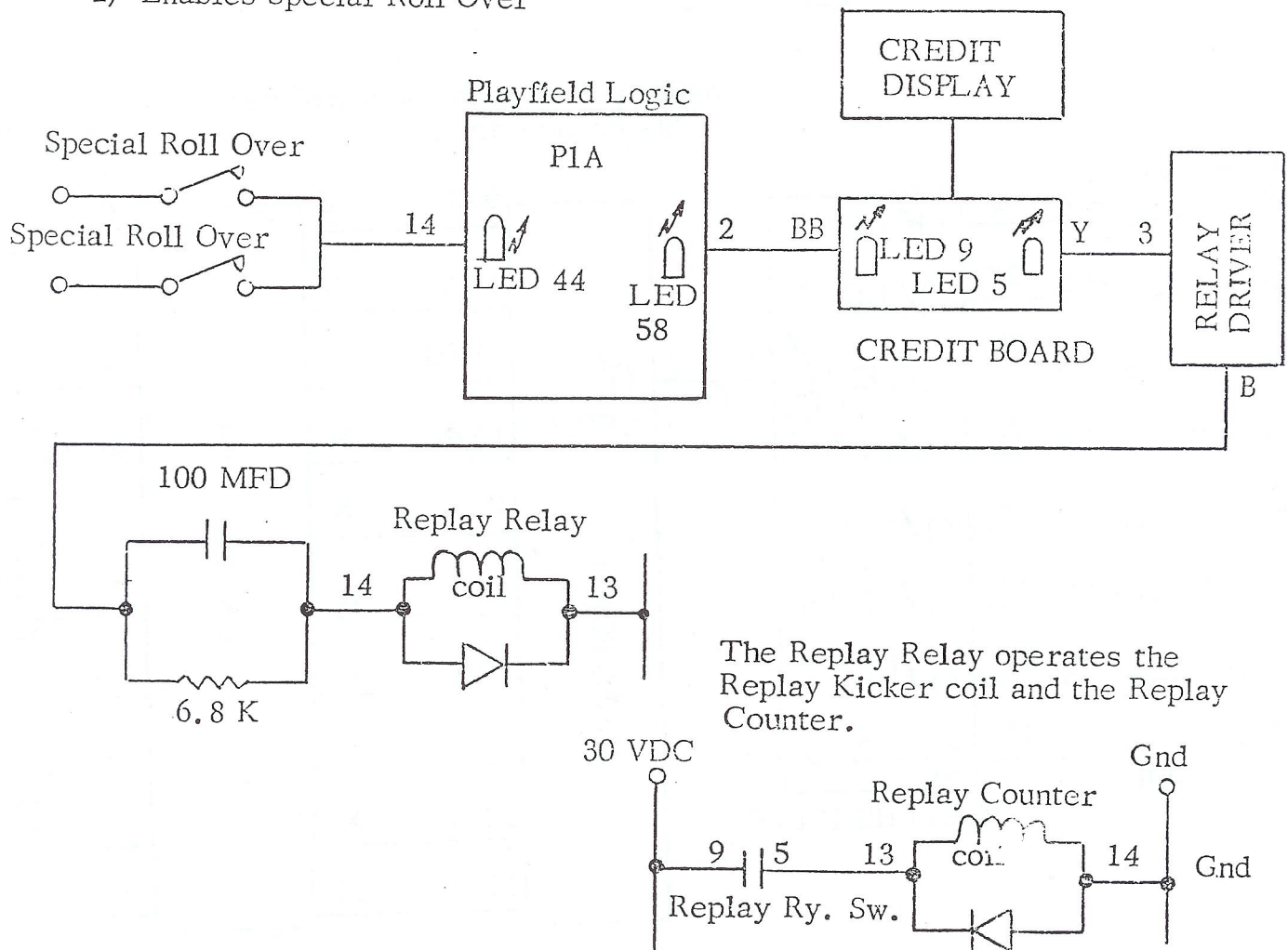


When all 8 targets are lit :

1) Lights Special Lamp



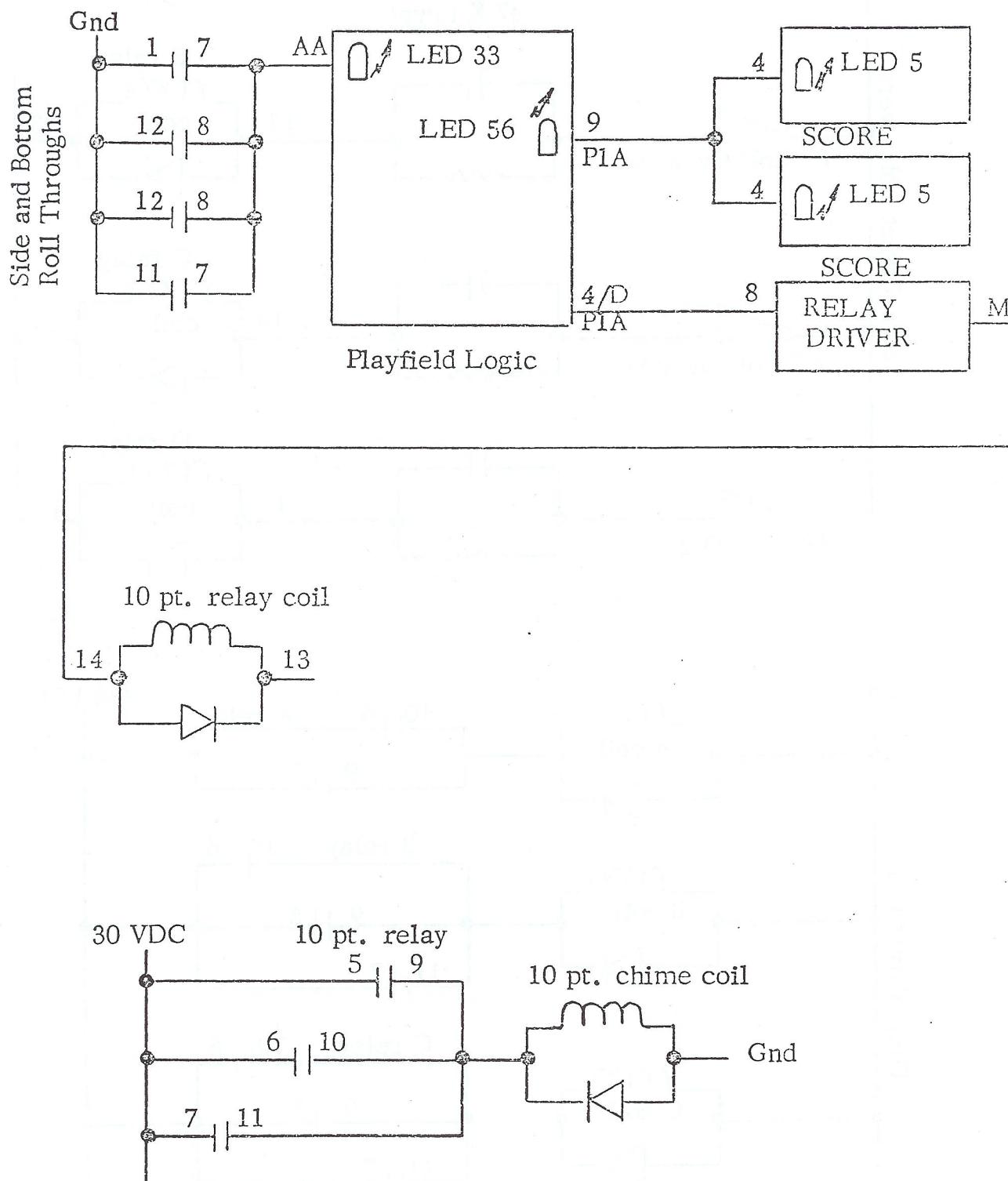
2) Enables Special Roll Over



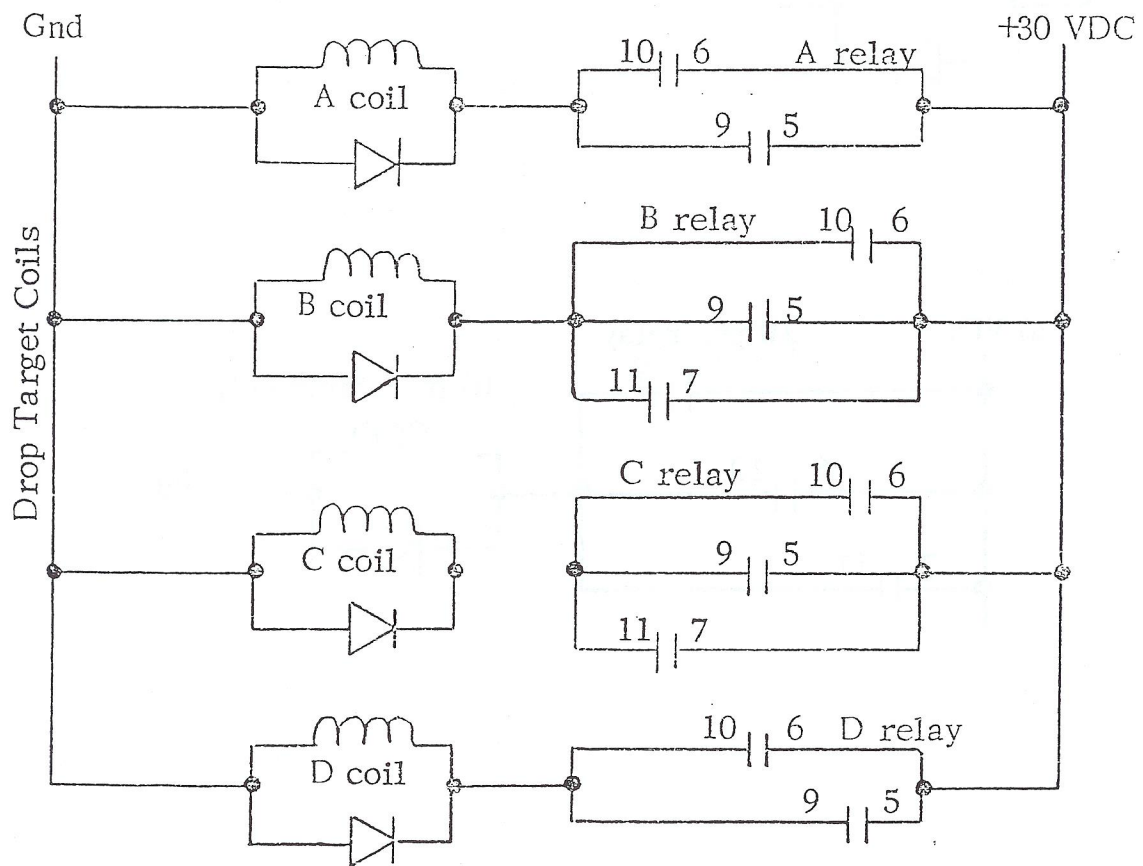
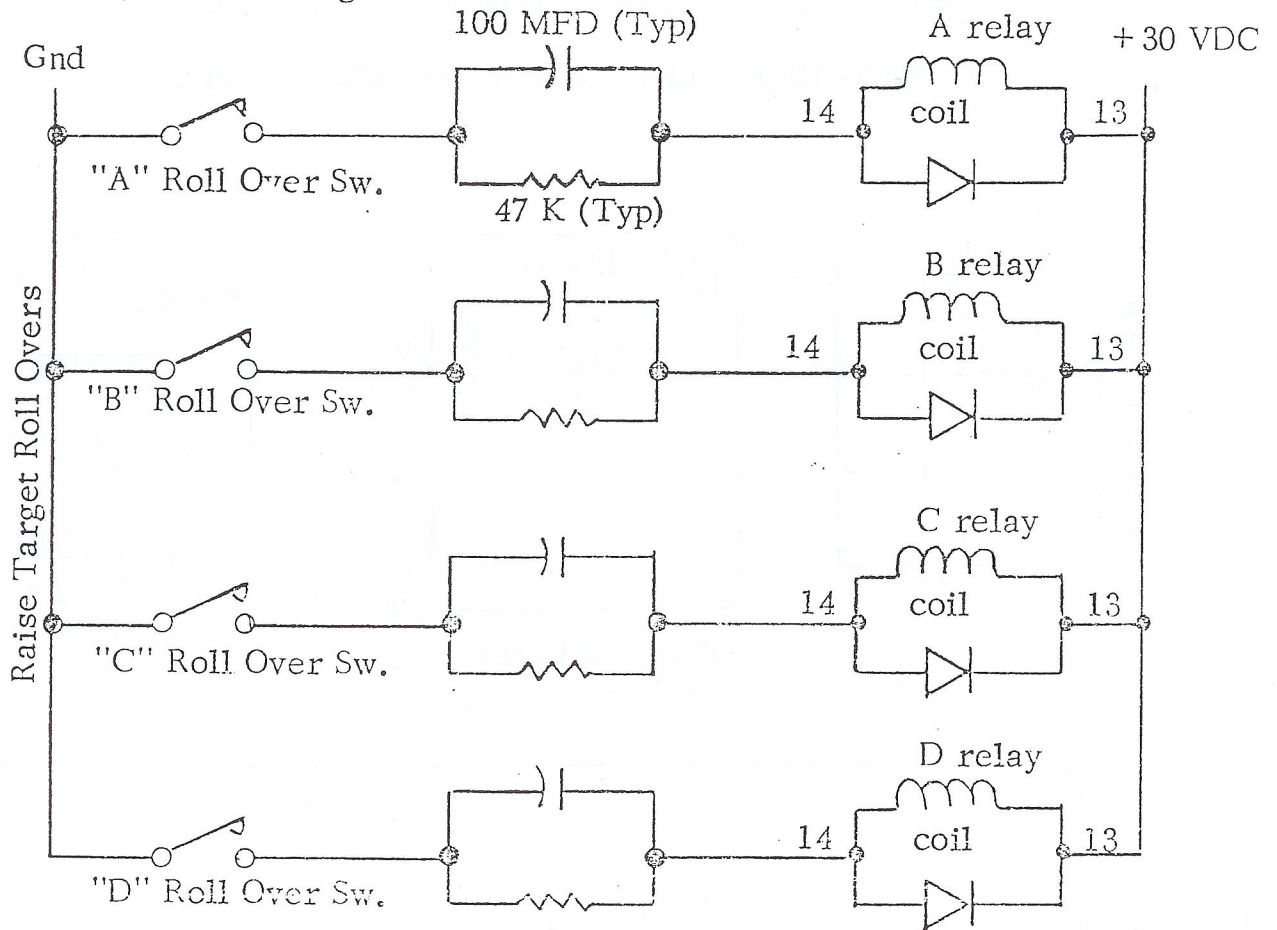
The Replay Relay operates the Replay Kicker coil and the Replay Counter.

When ball goes over A, B, C or D Roll Throughs

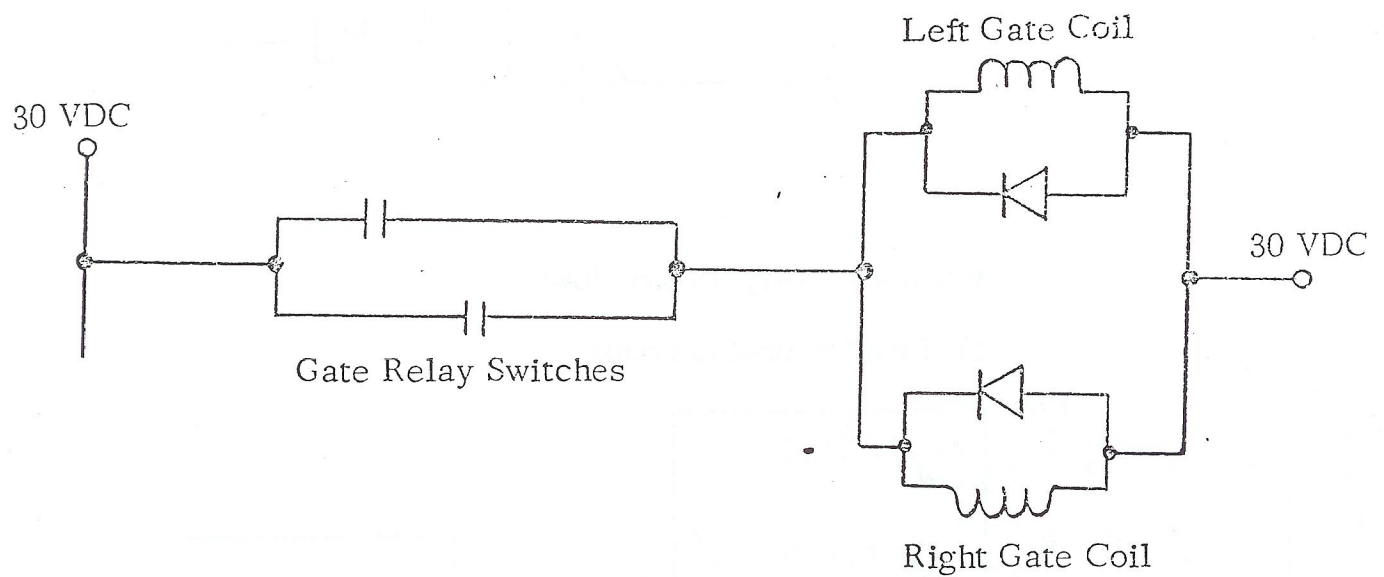
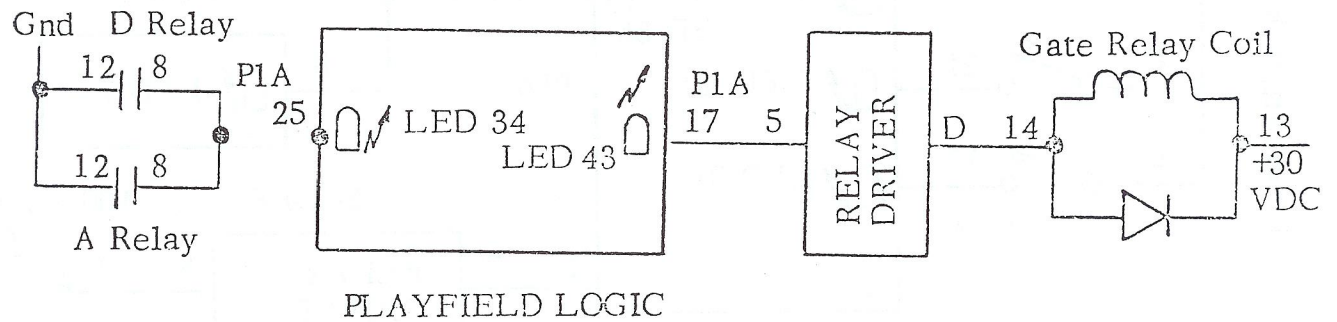
- 1) Sends 10 pt. pulses to Score and Chime Units.



2) Raises Targets

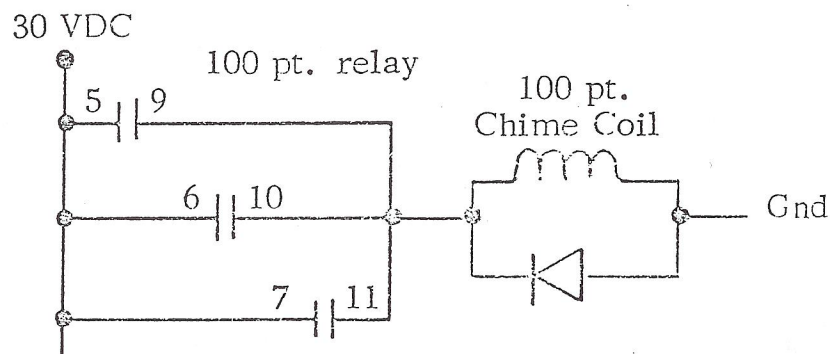
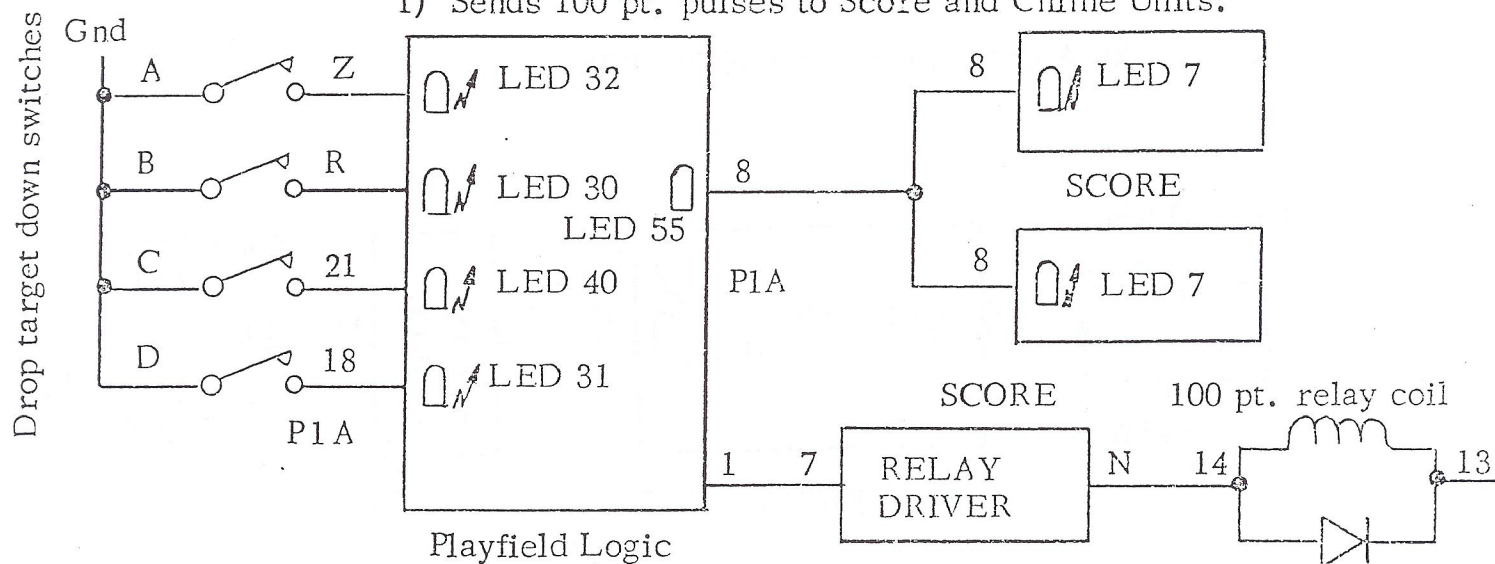


3) A and D Roll Overs open gates



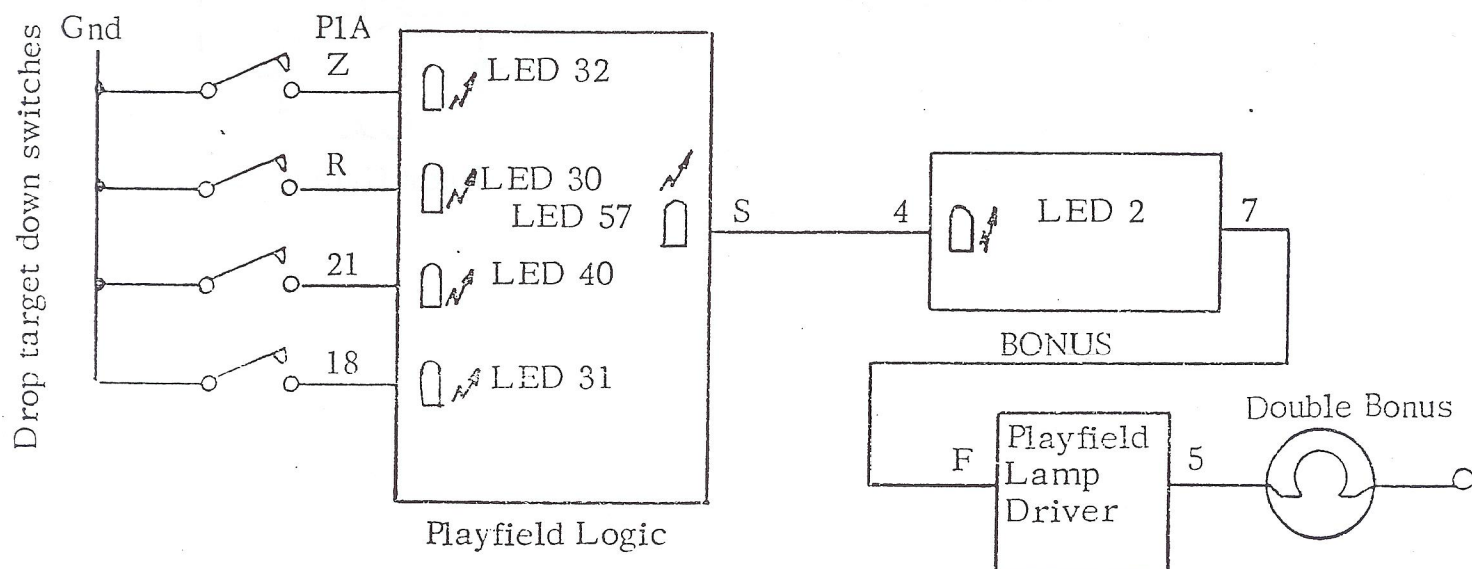
When ball hits Drop Targets, it:

1) Sends 100 pt. pulses to Score and Chime Units.



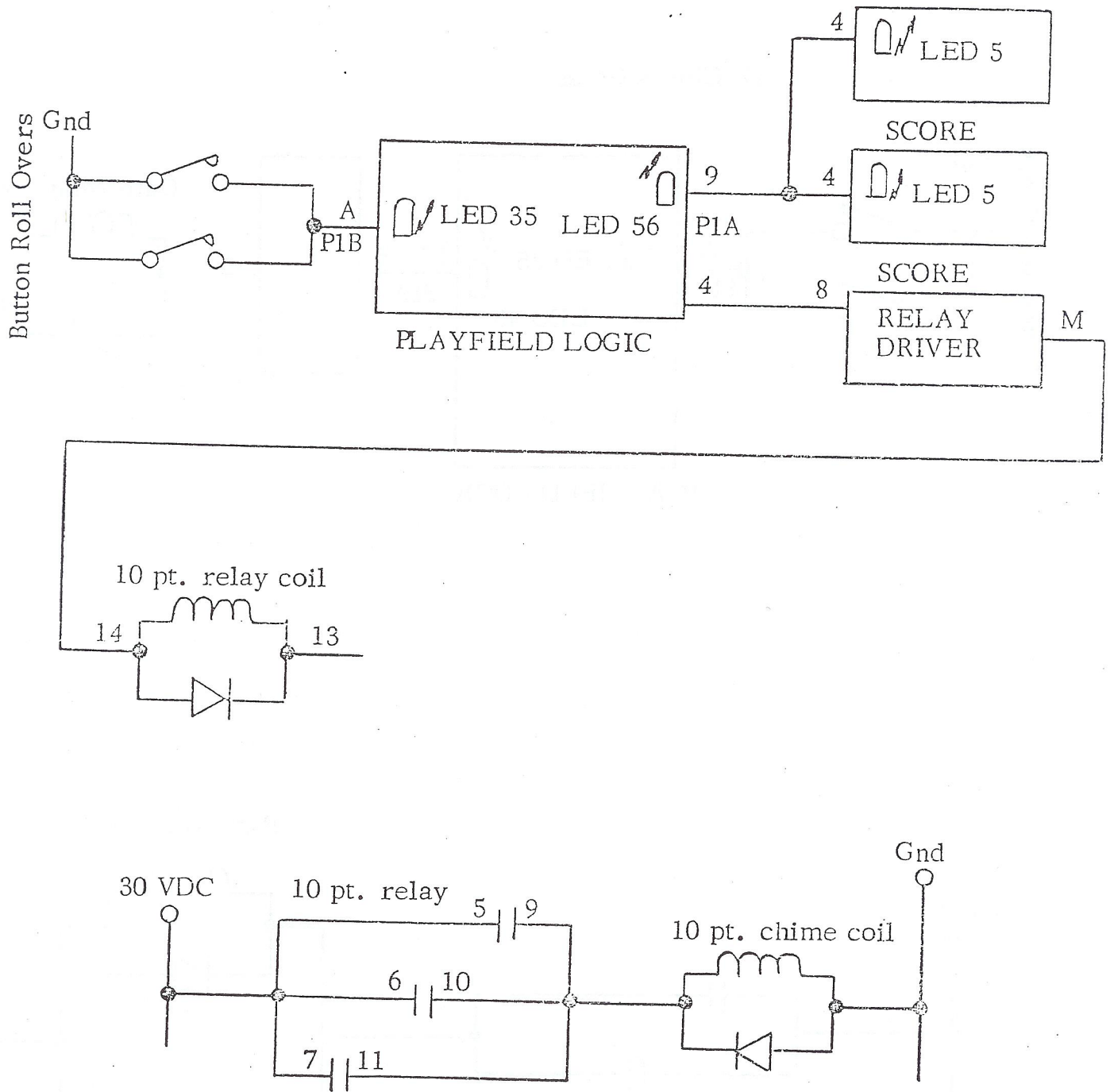
When all 4 targets are down

1) Enables double bonus

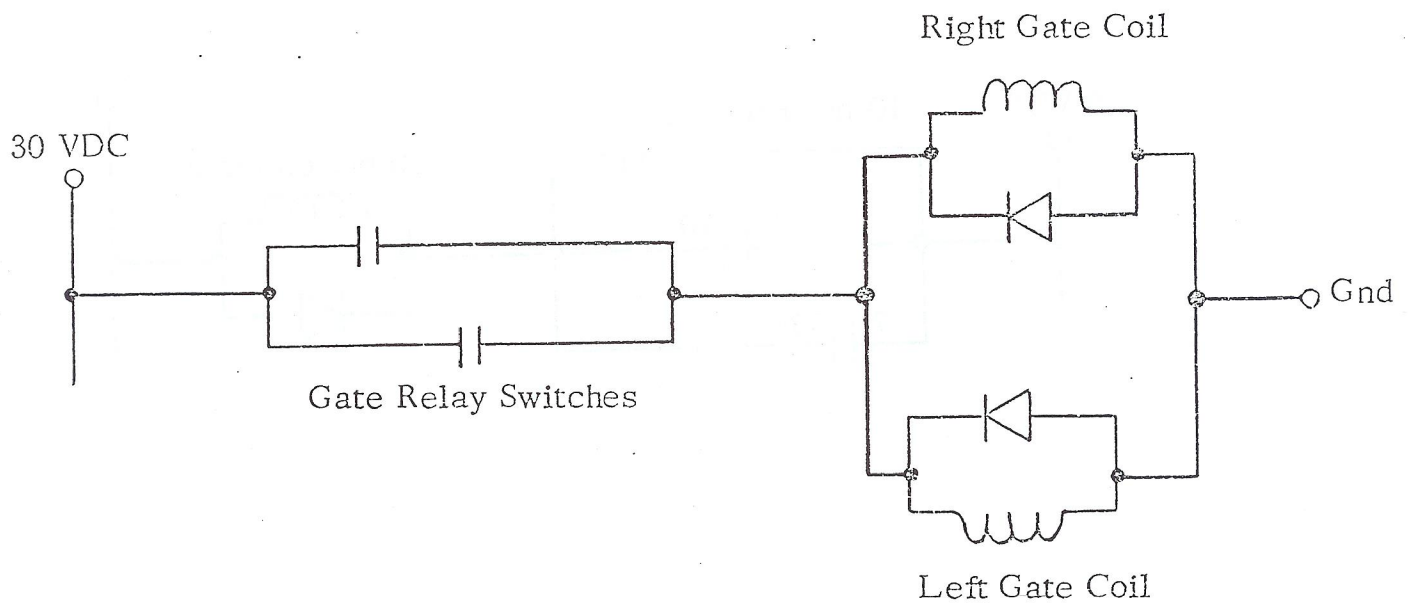
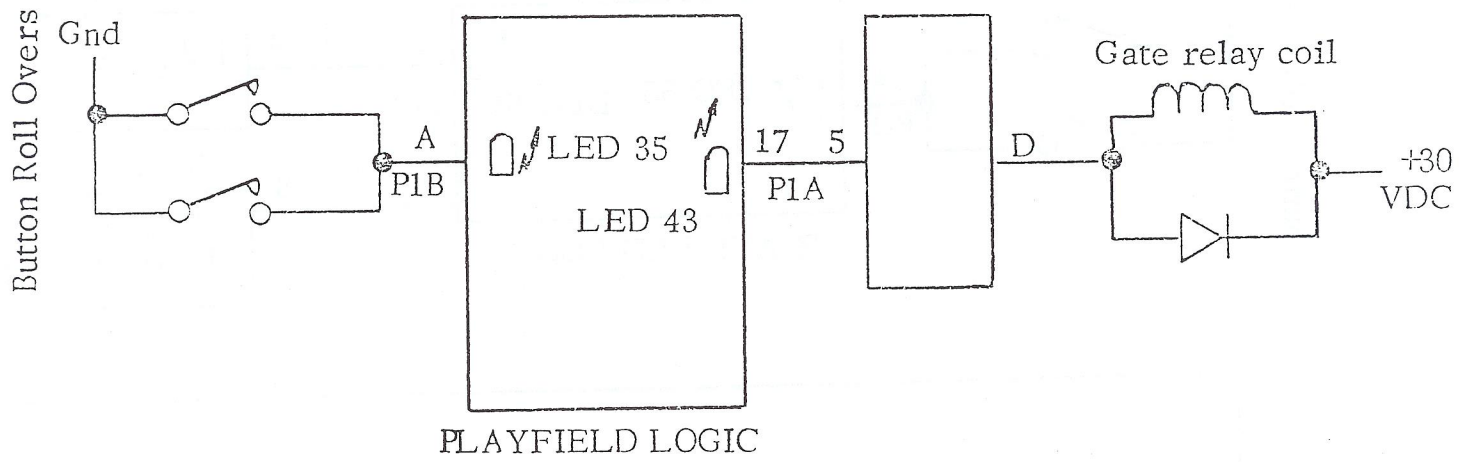


When ball rolls over Close Gate Buttons:

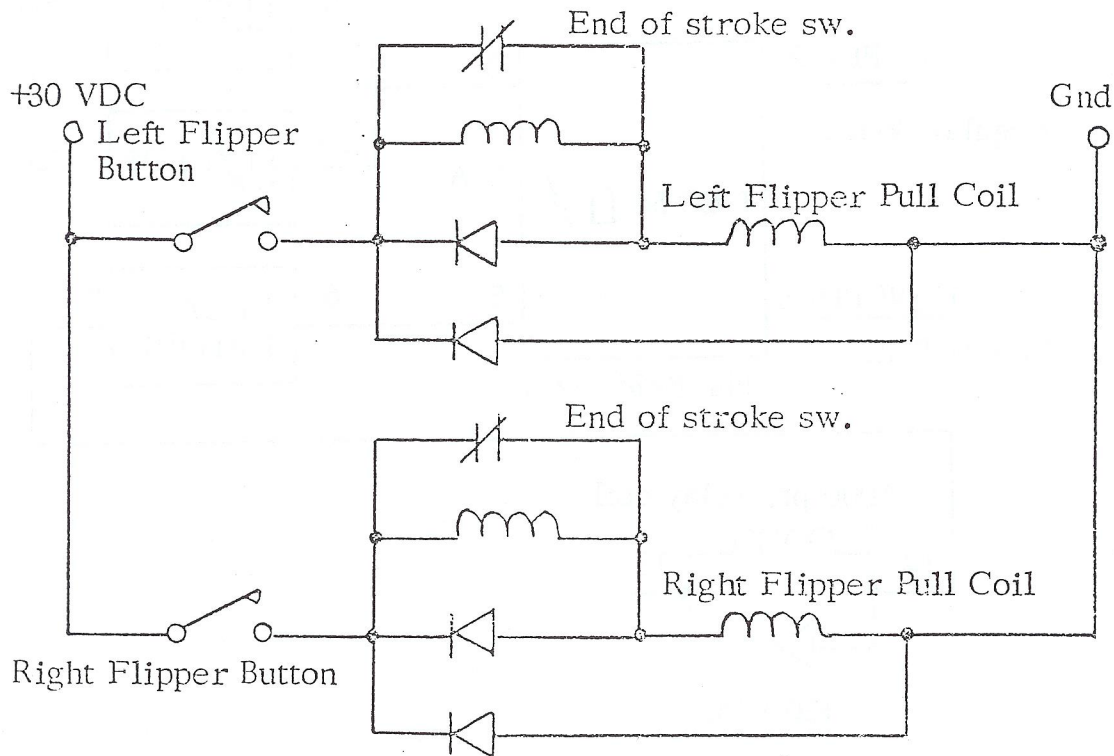
- 1) Sends 10 pt. pulses to Score and Chime Units.



2) Closes Gates

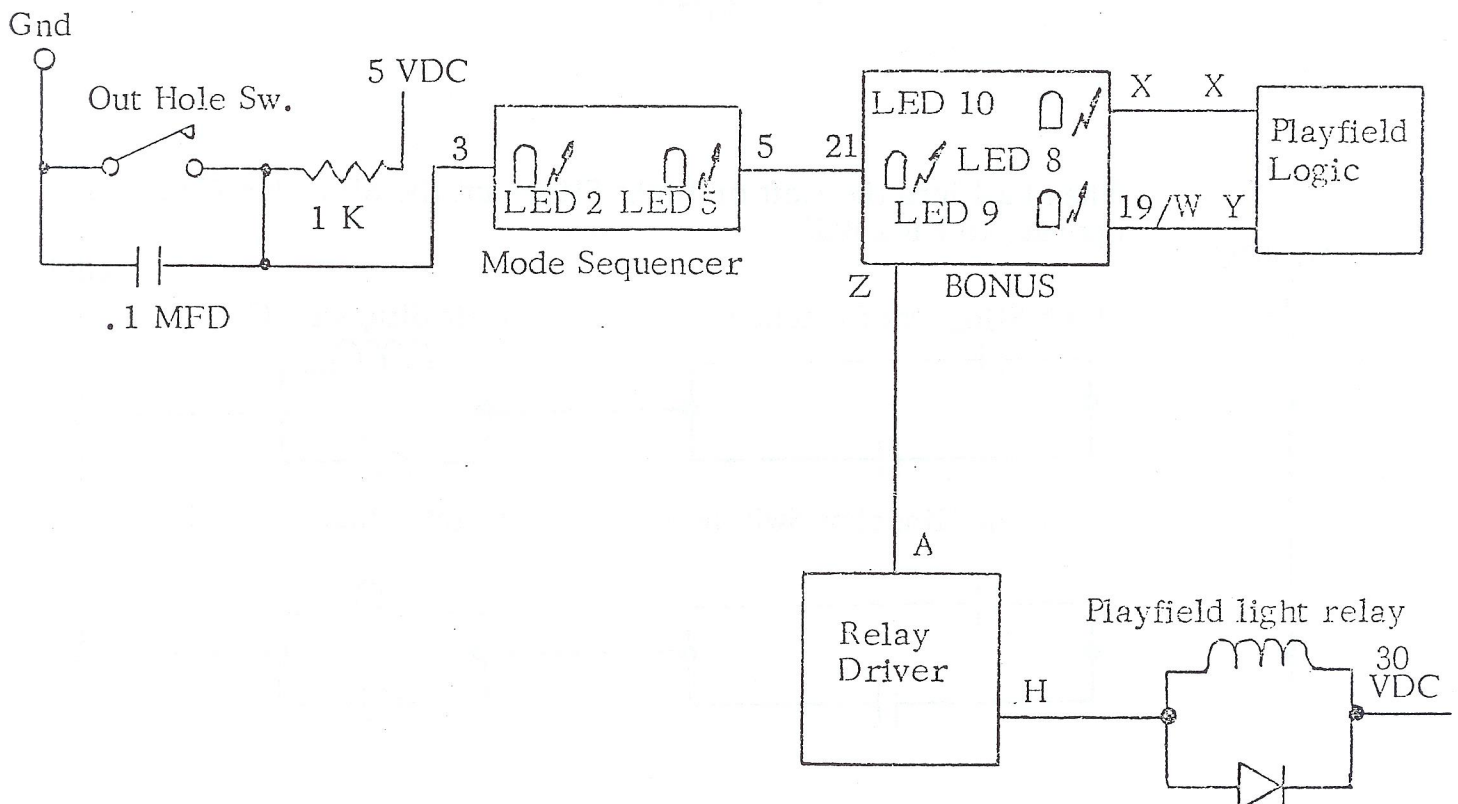


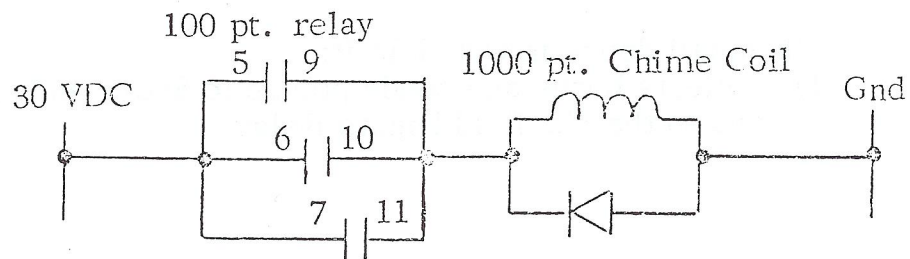
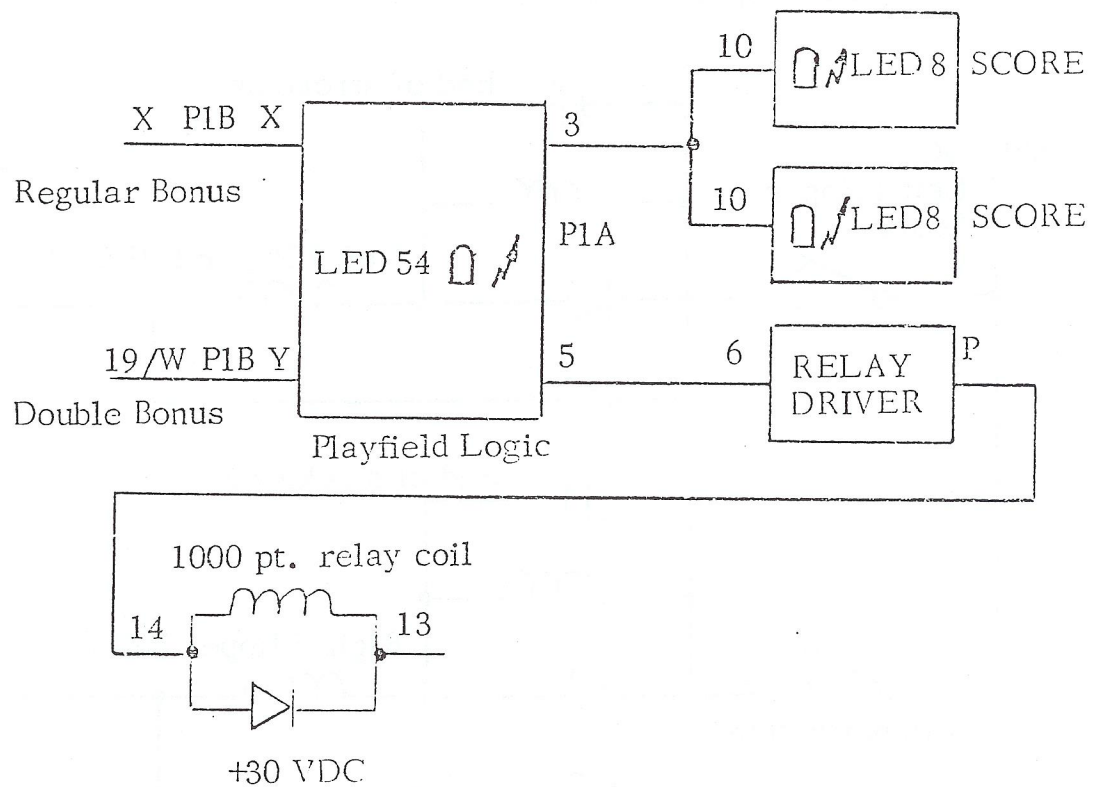
When Flipper Buttons are pushed:



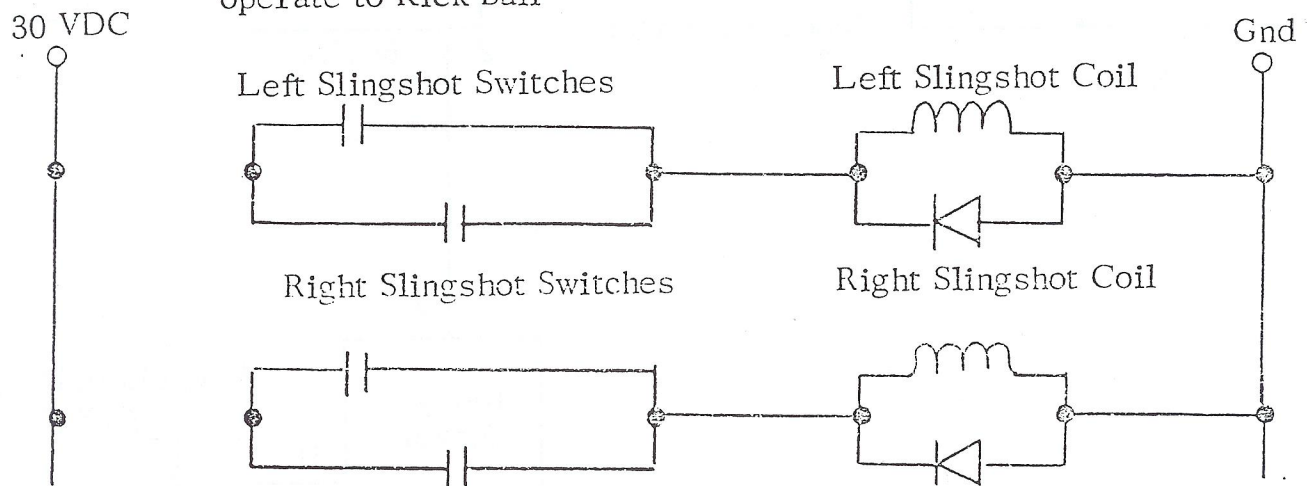
When ball drops in Out Hole it:

- 1) Collects bonus and sends pulses to Score and Chime Units, and to the Playfield Lights Relay.

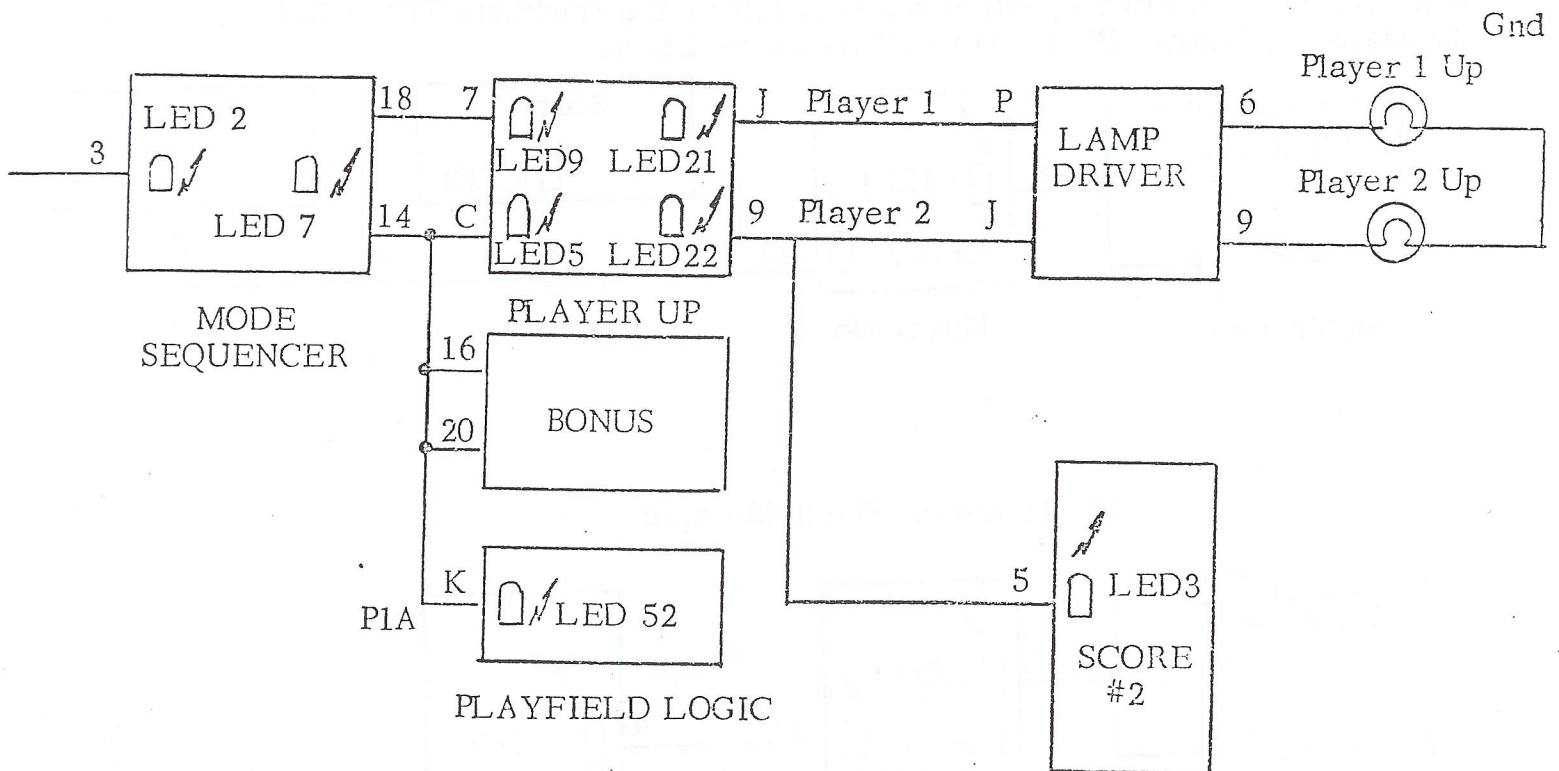




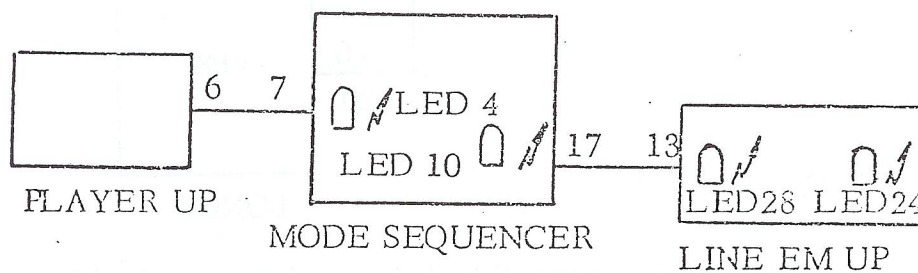
When ball hits the Left or Right Slingshot the Slingshot Coil will operate to Kick Ball



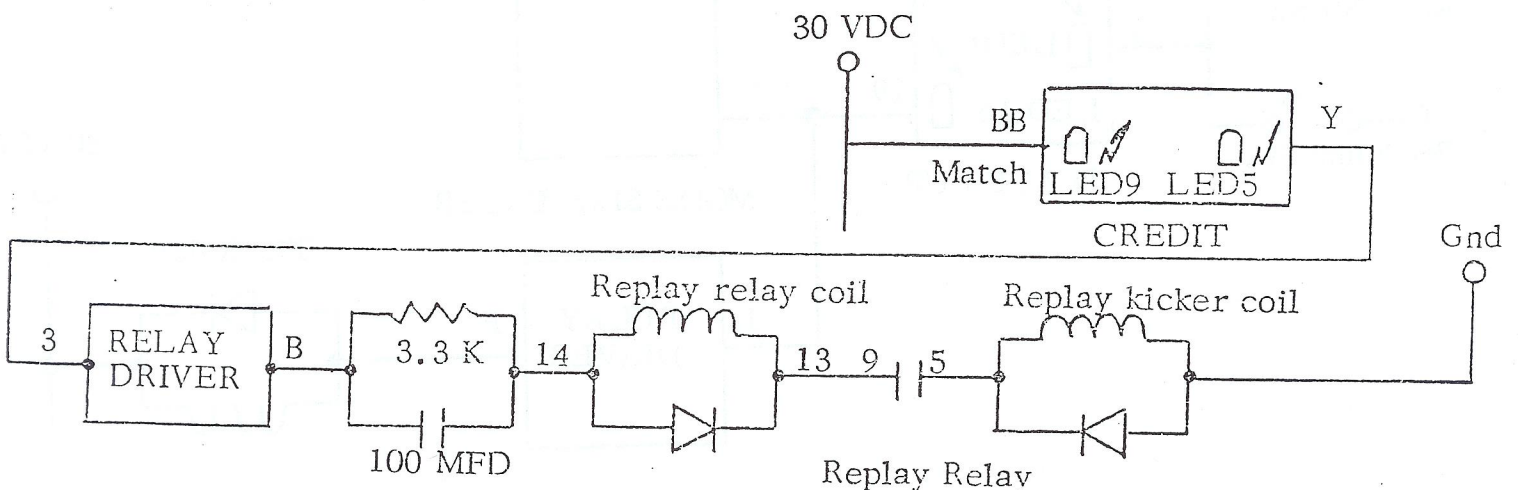
- 2) Resets Playfield and tells which player is up or ball is in play.



When the last ball falls in the outhole and the bonus is collected the match feature is started

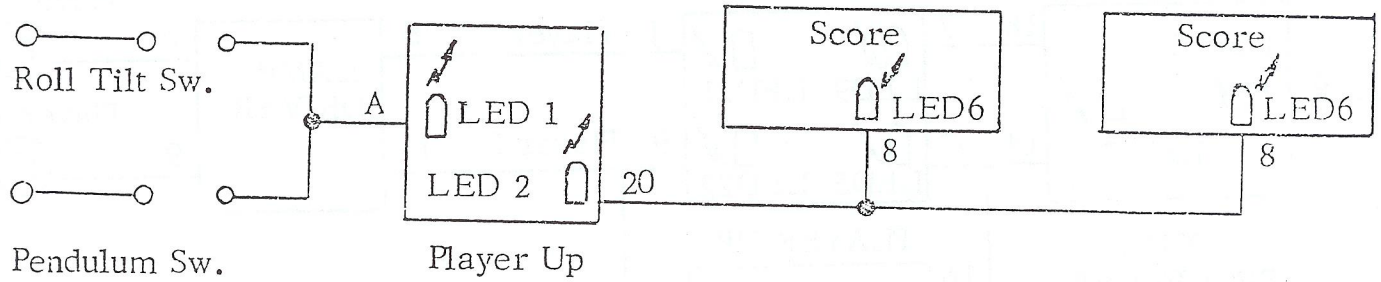


Is match is achieved, 1 credit is added to the Credit Board and the Replay Kicker Coil is operate

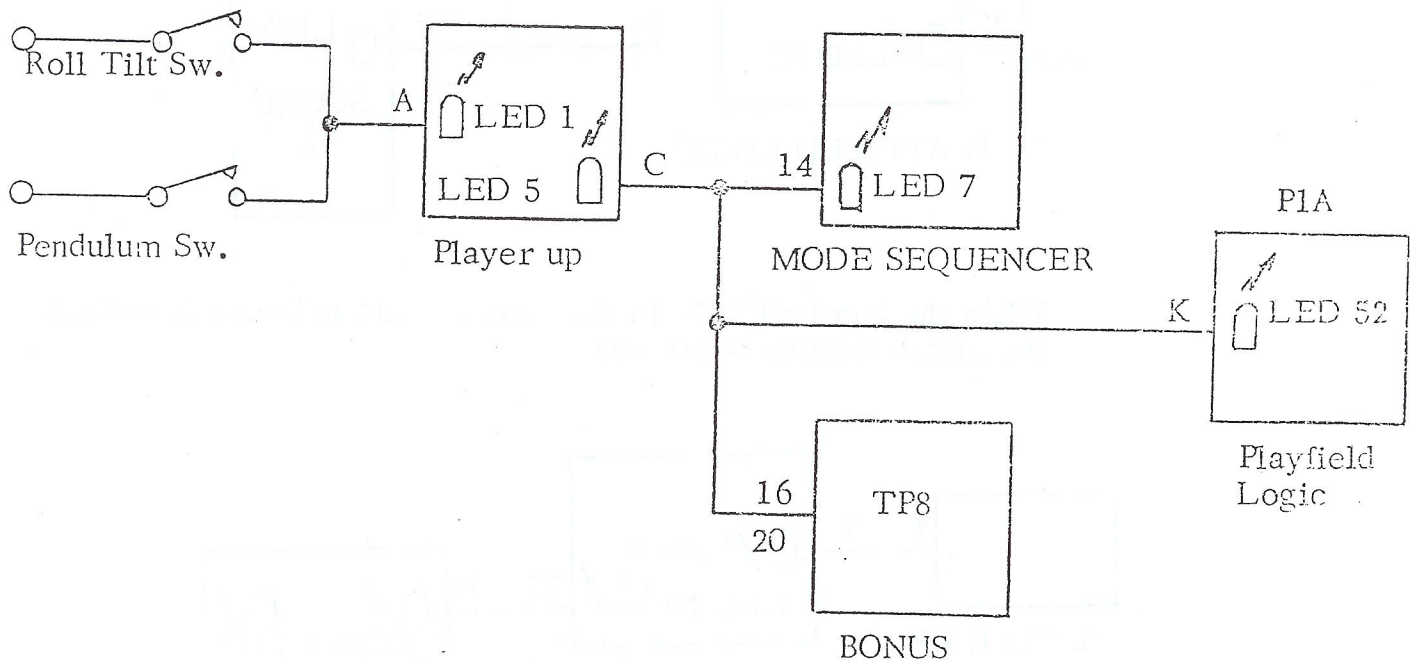


TILT CIRCUIT

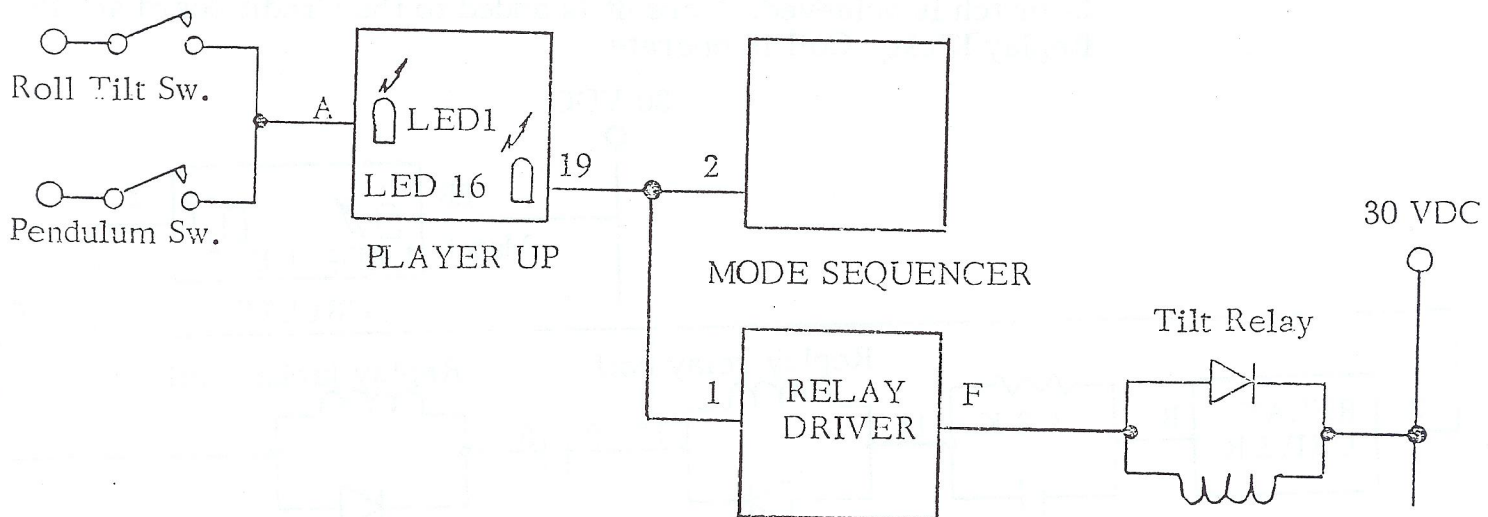
When the game is tilted by either the Roll Tilt or the Pendulum Tilt switches, the Player Up Board will 1) Turn off the Score Lights



2) Resets the Playfield Logic

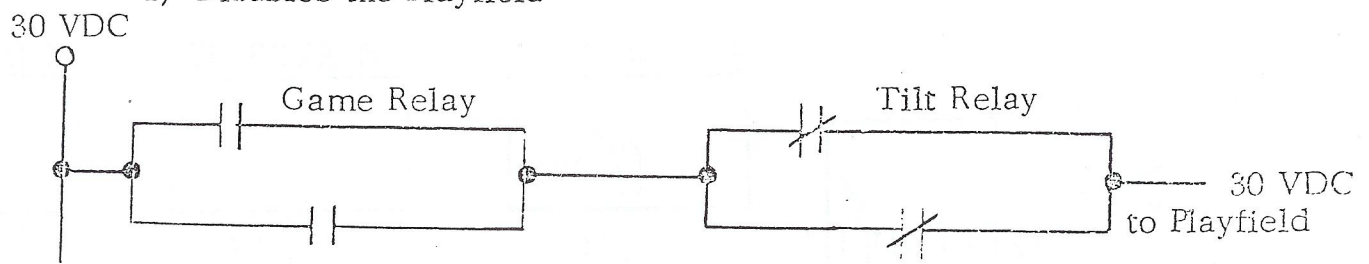


3) Energizes the Tilt Relay and resets the Mode Sequencer Board

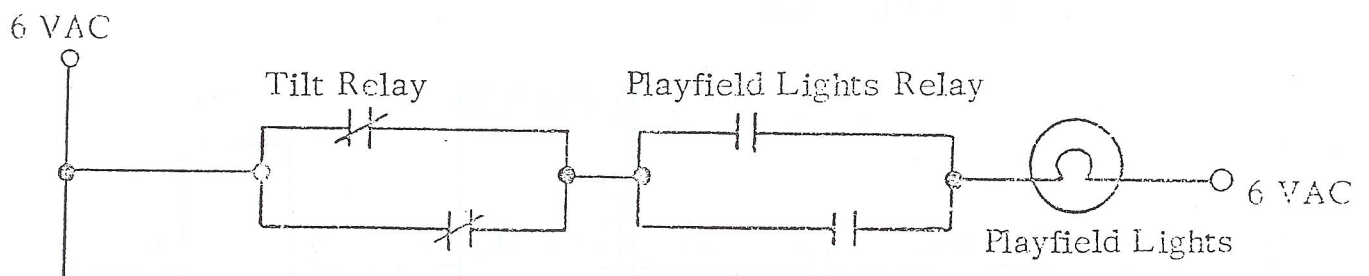


The tilt relay when operated

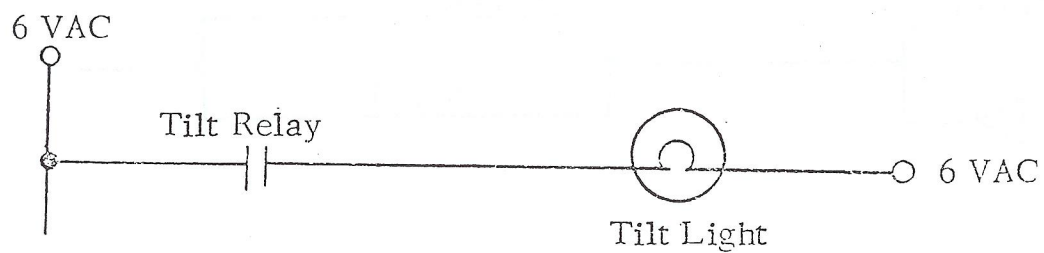
1) Disables the Playfield



2) Turns off the Playfield Lights

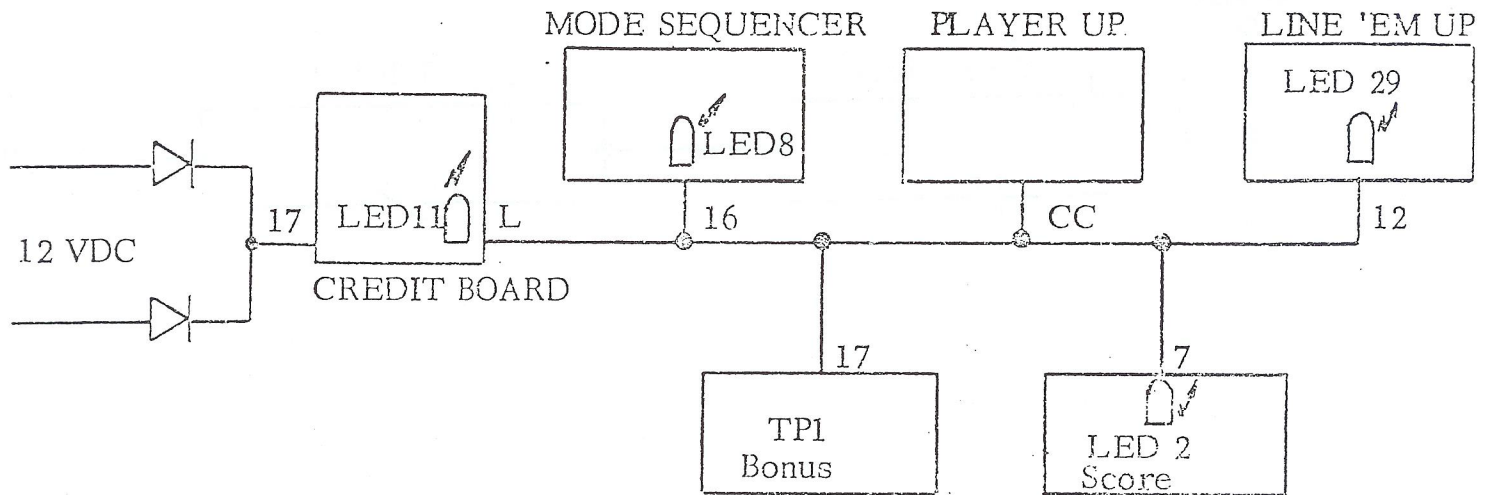


3) Turns on the tilt light



INITIALIZING CIRCUIT

- 1) When power is turned on it initializes the boards



SLAM SWITCHES

- 1) When either of the slam switches are broken the Player Up Board loses its ground.

