

**PACHINKO GAME**  
**INSTALLATION AND OPERATION INSTRUCTIONS**

Refer to the Parts Location Chart and the front of the game in the following instructions.

1. INSTALLATION

1. Assemble game base.
2. Attach game to base using bolts, washers and wingnuts provided.
3. Level the game using the levelers on the base.
4. Open the front of the game with key provided.
5. Various movable parts are secured with rubber bands for safe shipment. These rubber bands must be removed before game is operated.
6. Adjust tilt mechanism to desired sensitivity by loosening the thumb screw on the weight and sliding it up or down the rod. Re-tighten thumb screw.
7. Inspect the ball shooter mechanism (10) area and familiarize yourself with the related parts. Test the operation of the lever, on the front of the game, by pushing it down and releasing quickly several times.
8. Open the glass front door by lifting the front door release (4) in back on left of front door. Open the lower front tray door by pressing the plunger on the far left top of lower front door, on front of game.
9. Make sure ball stop is in correct position. This may be adjusted by unscrewing thumb screw (7) and putting

- into position 4, 5, 6 or 7.
10. Pour package of balls into the ball hopper (load tray) (6).
  11. Make sure connectors at right and left hand side of circuit board (20) are connected by applying light pressure evenly to top and bottom of connector simultaneously.
  12. Plug the power cord into any 115v AC, 60 Hz outlet.
  13. At power turn on, the panel light, game light at the upper left hand corner and digital score light will come on.
  14. Insert quarter and observe the following:
    - a. The counter on the coin box will advance one count.
    - b. The ball release chute (7) will be tilted three times by the ball release solenoid (8) to release ball into the front tray.
    - c. Score will be set to "00".
    - d. Replay will go to "0".
    - e. Various hit pockets will open due to activation of the hit posket solenoid (13).
  15. Play the game by shooting the balls into the hit pockets. Each hit scores 10 points and can accumulate up to 990 on game count. A free game will be accumulated for each 100 points up to a maximum of nine replays.
  16. The game is over when there are no balls left in the front tray.
  17. If replays have been accumulated, press the replay button (15) (instead of inserting another quarter) for FREE game.

Replay button activation does not advance counter in the coin box. (Replay button will repeat steps #13, b,c, and e. Replay counter will go to next lower number.)

18. If the game is moved to another location, do the following:
  - a. Place a container at the bottom of the shaft behind ball stop thumb screw (7).
  - b. Remove balls from the game. This is done by unscrewing the thumb screw (7). The balls will pour into the container.
  - c. Balls in the front tray should be shot back into the ball hopper (6) in the normal manner where they will run into the container.
  - d. Attach rubber bands as found in step 5 of Installation.

#### 11. INSTALLATION - WALL MOUNTING

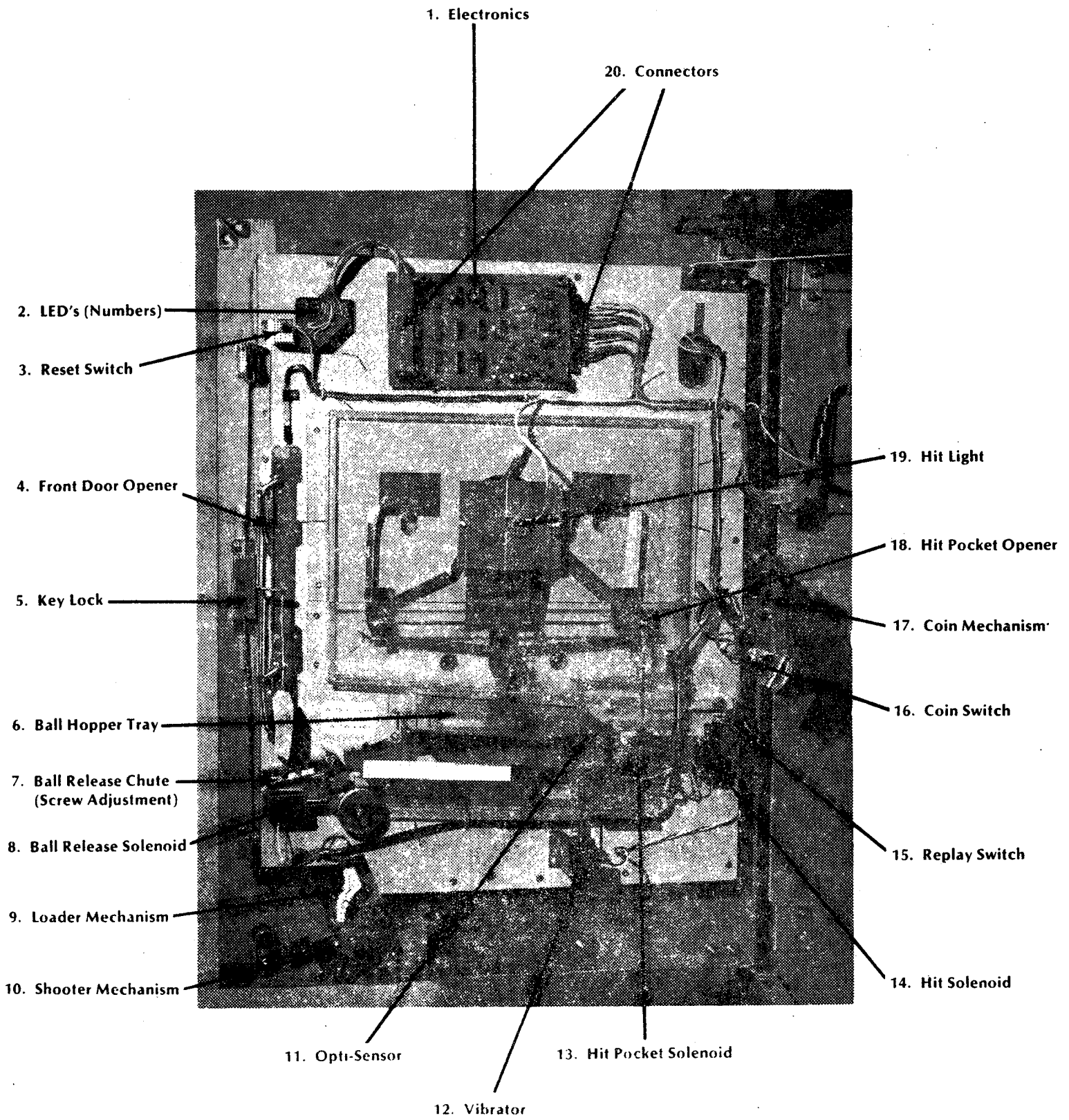
Wall mounting of the Pachinko game is recommended wherever possible. When mounting game on a wall the base is not necessary if the following mounting procedures are observed:

1. Obtain strong angle iron about as wide as the game.
2. Drill holes at both angles.
3. Bolt angle iron to wall, making sure it is level.
4. Bolt bottom of game to angle iron.
5. Bolt back of game to wall by using heavy screws and washers or use another angle iron on top.

## 111. OPERATION

1. A ball into any hit pocket will roll into the opti sensor (11) causing it to pivot and energize the ball release solenoid (8), pulling down the ball release chute (7) and releasing the balls to the front tray. The score will advance 10 points.
2. As the balls roll out of the ball release chute (7), they turn off the ball release solenoid (8) allowing the chute to return to the load position. Balls refill the ball release chute after first being leveled by the vibrator (12).
3. A free game is given for every 100 points scored. A maximum of nine replays may be accumulated. Each time the button is pressed the replay counter counts down. At "0" the replay button has no effect.
4. The tilt mechanism sensitivity may be readjusted for each location depending upon abuse (not necessary if wall mounted). When the game is tilted, the tilt solenoid (14) locks the opti sensor (11) so that no hits are scored. Also the "tilt" light on the front will appear by the ball shooter.
5. If because of many hits in a row, most of the balls are in the front tray, the ball hopper (6) may be emptied to a point where there are not enough balls available for release to the front tray. They will activate the opti sensor scoring points, but no balls will be released.

6. During the game, balls in some hit pockets will activate the hit pocket opener (18) mechanism and reopen some or all of the hit pockets. (This is also done at the start of the game by hit pocket solenoid) (13). This Mechanism should always operate freely and at no time should balls remain "stuck" on the opener shaft.
7. Number of balls released by ball release chute (7) may be adjusted by different placement of thumb screw (7). To release more balls, simply adjust thumb screw accordingly. Always make sure 4 balls are dumped.



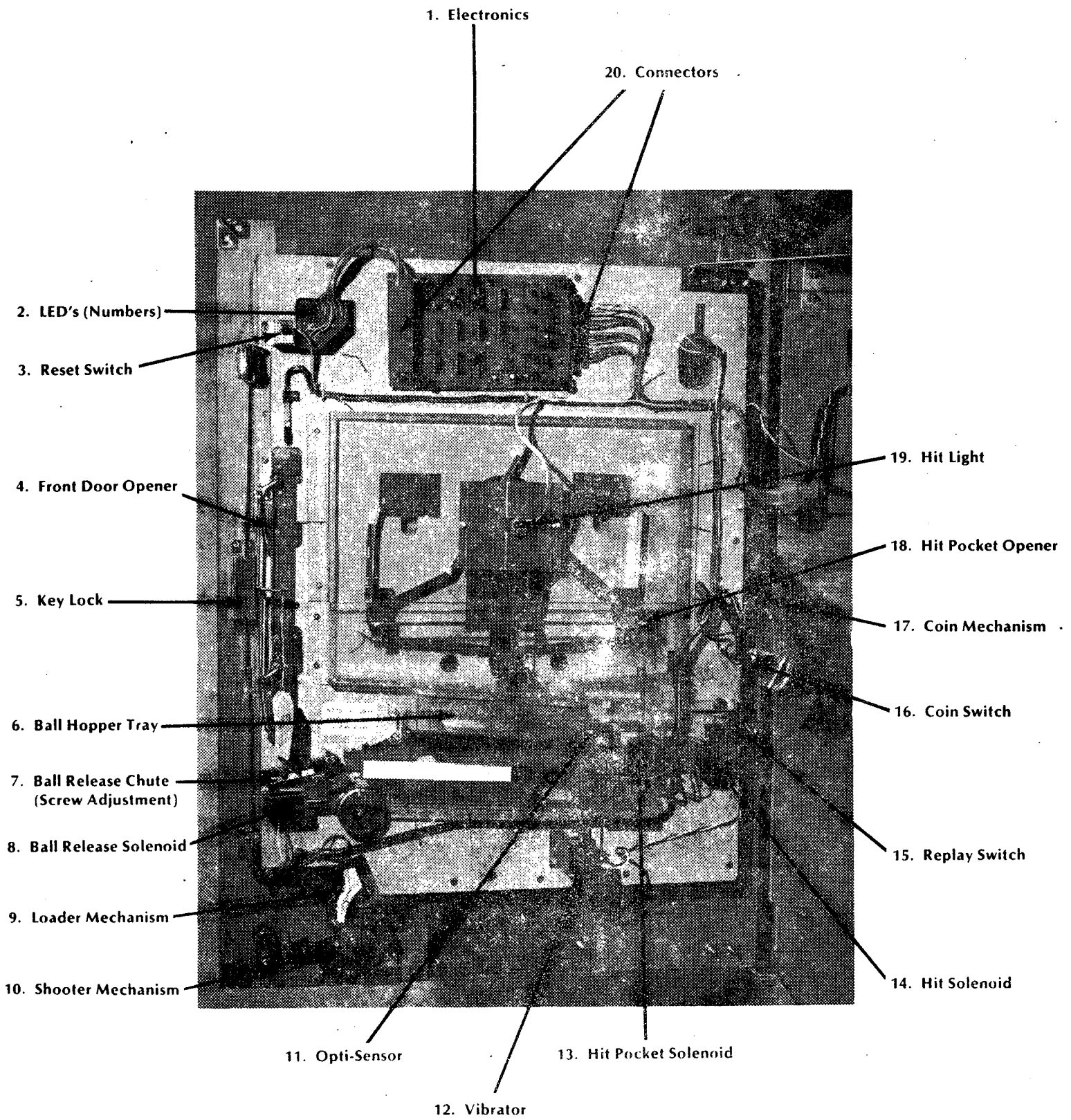
## TROUBLE SHOOTING

IF YOUR PACHINKO MACHINE IS NOT OPERATING AS IT SHOULD, PLEASE CHECK THE FOLLOWING AILMENTS FOR THE APPROPRIATE CURE. REFER TO NUMBERS IN PHOTOGRAPH OF INSTALLATION INSTRUCTION.

1. NO ELECTRICITY - THE LIGHTS WON'T LIGHT...
  - a. Is the cord plugged in?
  - b. Is the transformer switch on?
  - c. Is the circuit board connected?
  - d. Have you checked the fuse?
2. NO MORE HITS RECORDING ON FACE OF MACHINE...
  - a. Check balls in hit mechanism behind ball hooper. Balls may become jammed due to stacking if game is too easy to score. Pins on face of machine should be adjusted to make same more difficult to score. See pin adjustment diagram.
  - b. Make sure hit lever covers opti sensor eye.
  - c. Is tilt mechanism on? Game will not score hits if this is so.
  - d. Is ball release chute stuck in down position? Check to see if opti sensor lever is stuck over opti sensor and keeping solenoid energized. Check to see if solenoid plunger or ball release chute are binding on any part of the mounting. This takes close observation of entire perimeter of ball release chute to make sure it is not getting caught.
  - e. Is opti sensor caught on metal holder? You may have to bend bracket that holds spring down. This will increase the tension on the spring and pull it back down.
3. HITS RECORDING BUT TOO FEW BALLS DROPPING...
  - a. Check for foreign matter in the ball release chute. By observation you should be able to see if any material or object is obstructing the smooth flow of balls.

- b. Check to see if balls are stuck in hopper tray. Slight tapping should free balls.
  - c. Adjust vibrator wire to make sure hopper tray is being vibrated.
4. BALL SHOOTER MECHANISM WILL NOT WORK...
- a. Is the striker wire caught behind the rocker arm? (see picture for correct position) Simply move striker wire to other side of rocker arm.
  - b. Balls don't feed into shooter mechanism... Check that shooter spring is not caught or disconnected.
  - c. Make sure machine is level. Take one ball and put on top of cabinet. If ball rolls machine is not level.
  - d. Check for foreign matter in ball feed mechanism in front. Clean by opening front tray.
  - e. Ball feed arm does not depress enough to allow balls into shooter. Check ball feed arm so it is depressed enough to allow balls into shooter. Striker wire can be bent to come into contact with rocker arm sooner (bend slightly toward rocker arm). Don't bend too far.
5. TULIPS WON'T OPEN OR CLOSE EASILY...
- a. Check to see that wires in back of machine, which are depressed by hit pocket opener are operating free of contact with other parts of machine (should move up and down easily).
  - b. Check flanges inside of tulips. Tulips should open or close easily.
6. MACHINE WON'T TAKE QUARTERS OR TAKES QUARTERS BUT WON'T GIVE GAME...
- a. Check coin mech and make sure it is free of slugs, etc.
  - b. Check slug ejector.
  - c. Check switch wire to be sure it covers area where quarter drops from coin mech to bottom of cash box (weight of quarter makes switch wire activate switch). Is switch wire activating even though it depresses.





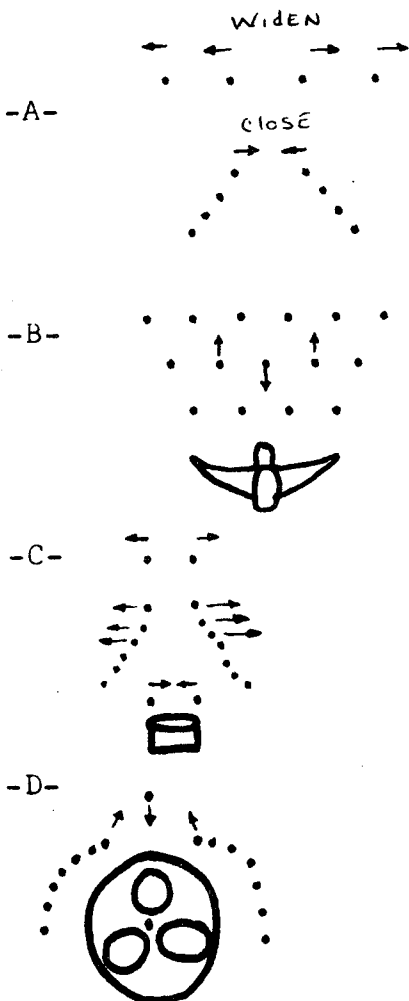
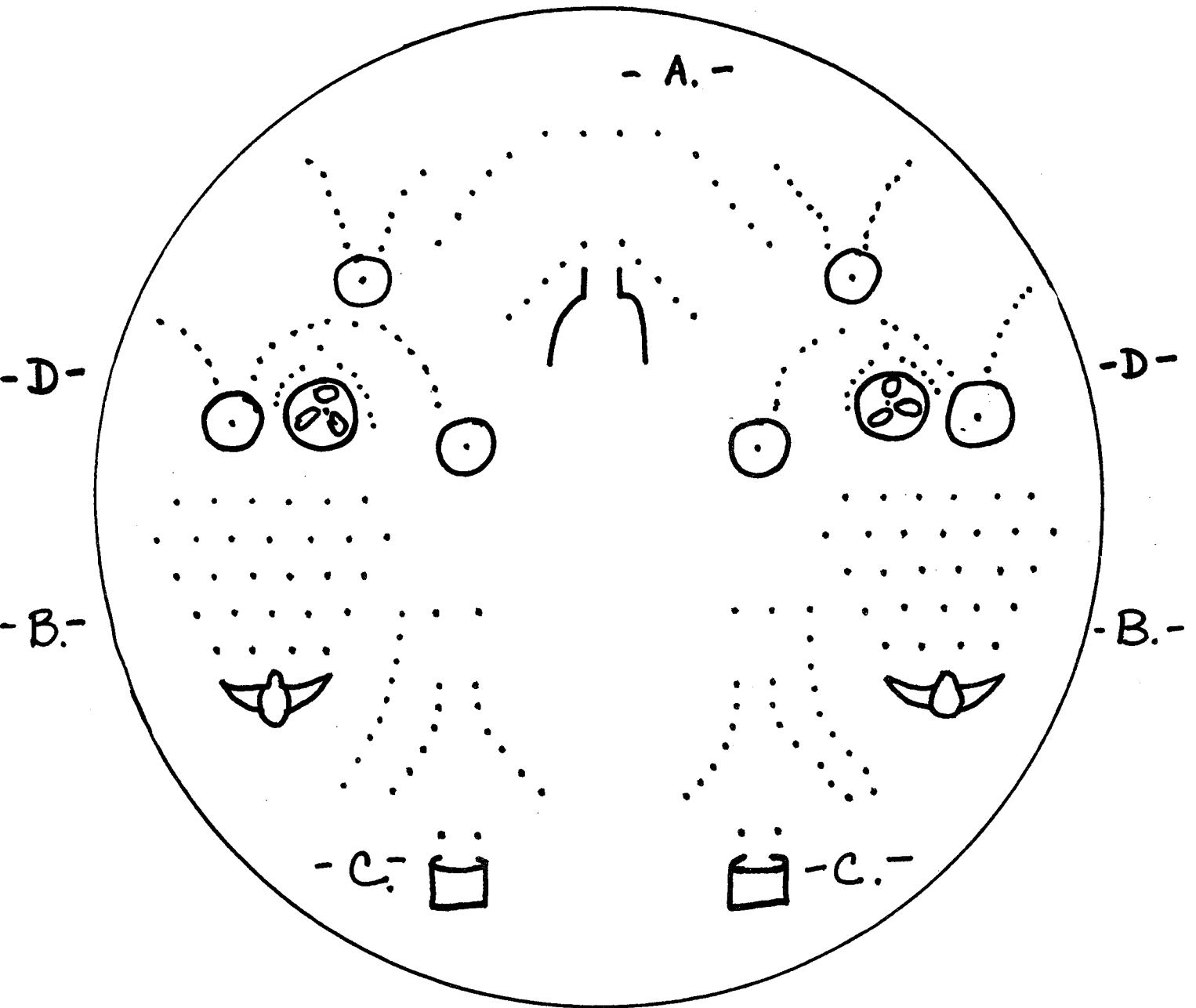
7. HIT MECHANISM SLUGGISH...

- a. Is hit mechanism rubbing on anything to keep it from moving freely  
Adjust accordingly.

TROUBLE SHOOTER

<u>PARTS</u>	<u>FUNCTIONS</u>
1. ELECTRONICS:	Solid State electronic parts should hold up in 99% of circumstances. Very reliable.
2. LED:	Numbers produced by circuit board to show score & replays.
3. RESET SWITCH:	Used to cancel score and replays, or to clear machine when first put on location.
4. FRONT DOOR RELEASE:	Latch holding front door shut. Open by lifting.
5. KEY LOCK:	Unlocks door to allow operator inside machine.
6. BALL HOPPER:	Ball storage area for game. Be sure nothing but balls are placed in this hopper. Any other material could cause machine to malfunction.
7. BALL RELEASE CHUTE:	Dumps balls into Ball Release tray after hit is scored. Adjustable for 4, 5, 6, and 8 balls.
8. BALL RELEASE SOLENOID:	Upon scoring hit, this solenoid is energized and causes balls to be released to front of game.
9. LOADER MECHANISM:	Drawing back the shooter handle activates this part of the shooter allowing a ball to be placed in position for shooter to strike ball.
10. BALL SHOOTER MECH:	This mechanism feeds, loads and shoots balls in same operation. (see diagram)
11. OPTI-SENSOR:	When balls roll into hit mechanism, opti-sensor turn on electricity for same. a) Hit light b) Ball release solenoid c) Changes number on circuit board
12. VIBRATOR:	Makes Ball Hopper tray vibrate so balls continue to flow easily into ball release chute.
13. HIT POCKET SOLENOID:	Activated on quarter deposit or replay. Manipulates hit pocket opener to open pockets on front of same.

14. HIT SOLENOID: Activates on quarter drop and on ball score. Solenoid plunger depresses on opti-sensor activation and causes flange to hold opti-sensor lever up. Upon deenergization, opti-sensor flange should return to normal position.
15. REPLAY BUTTON: Upon accumulation of a replay, this activates game as if quarter is dropped into coin slot. Will not move counter forward.
16. COIN SWITCH: Activated by quarter to make board dump three times.
17. COIN MECHANISM: Device that routes coins to activate game.
18. HIT POCKET OPENER: Works on quarter deposit or replay. Opens three front hit pockets for beginning of game.
19. HIT LIGHT: Activates everytime ball release solenoid dumps balls.
20. CONNECTOR: All wires from same come into circuit board at proper place here. Should be tight on circuit board.
21. TILT MECHANISM: Variable sensitivity by thumb screw.
22. TILT: When same tilted, this activates tilt light and suspends action of game. Voids all replays.



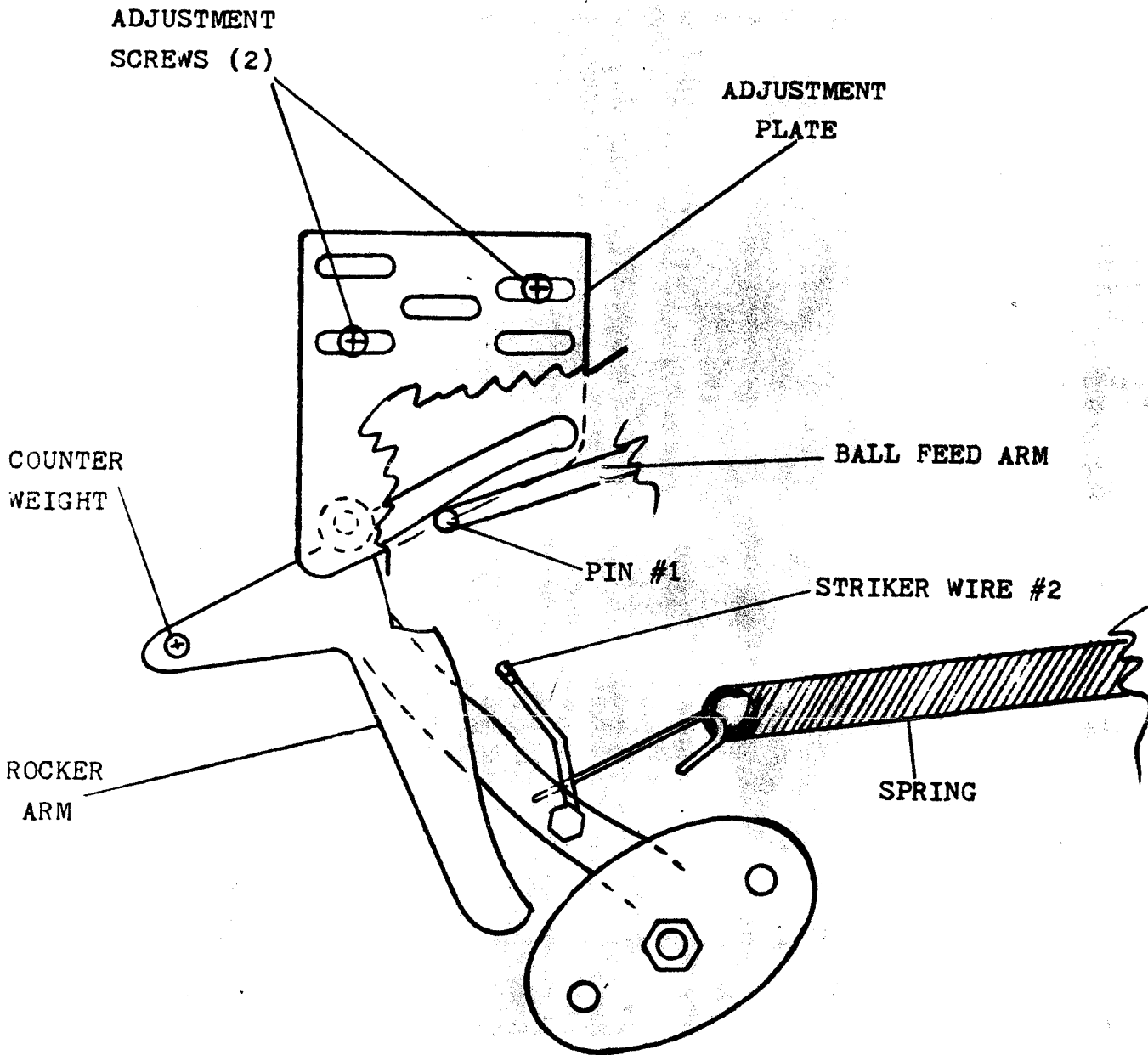
Widen the top nails to make balls go through easier  
Close nails at opening to just allow the ball to go through

Lower center nail 2nd row,  
raise 2 nails next to center  
2nd row.  
2nd

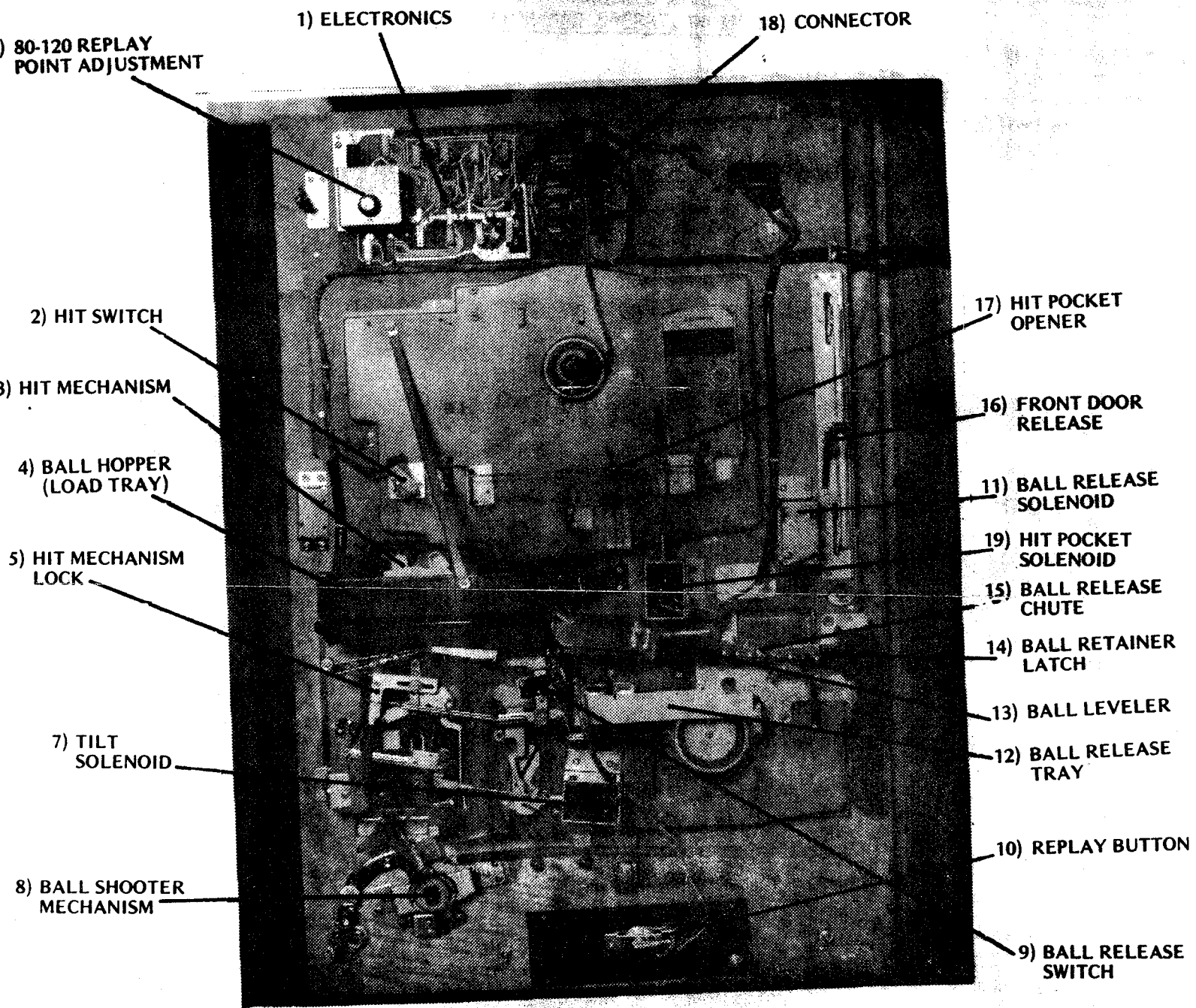
Widen the top entrance nails,  
and widen the nails three nails  
down. Close nails on rim of hit  
pocket.

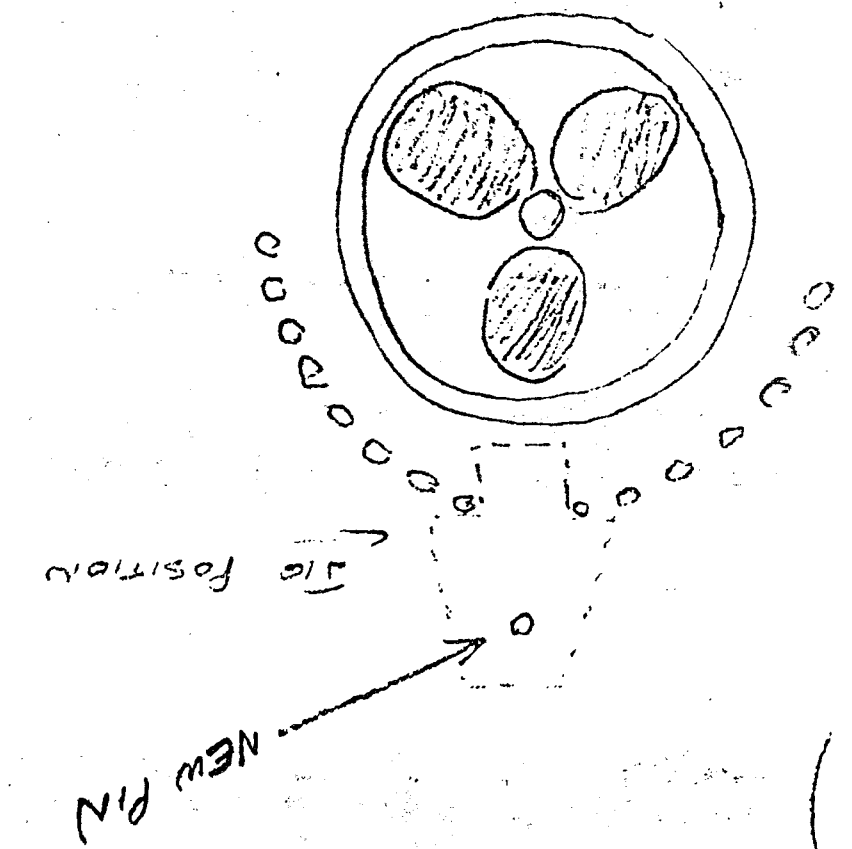
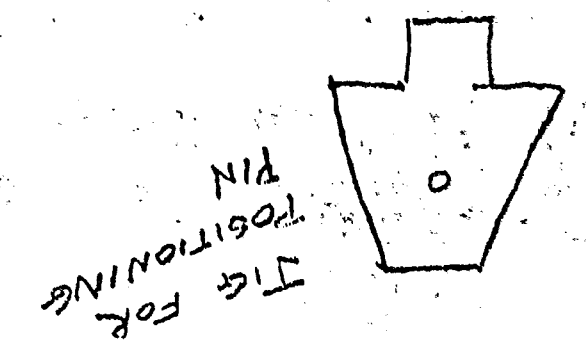
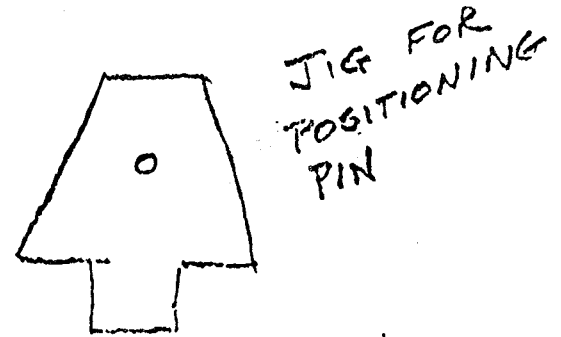
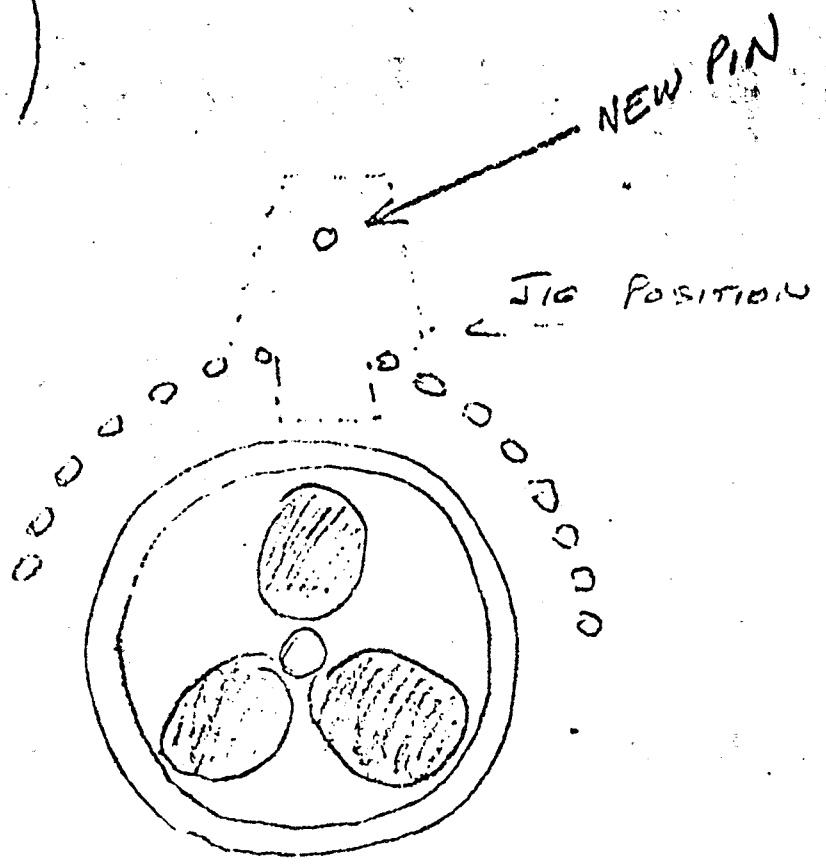
Lower nail above entrance hole  
raise nails on sides of entrance  
hole.

**\*BALLS SHOULD  
GO THROUGH NAILS**



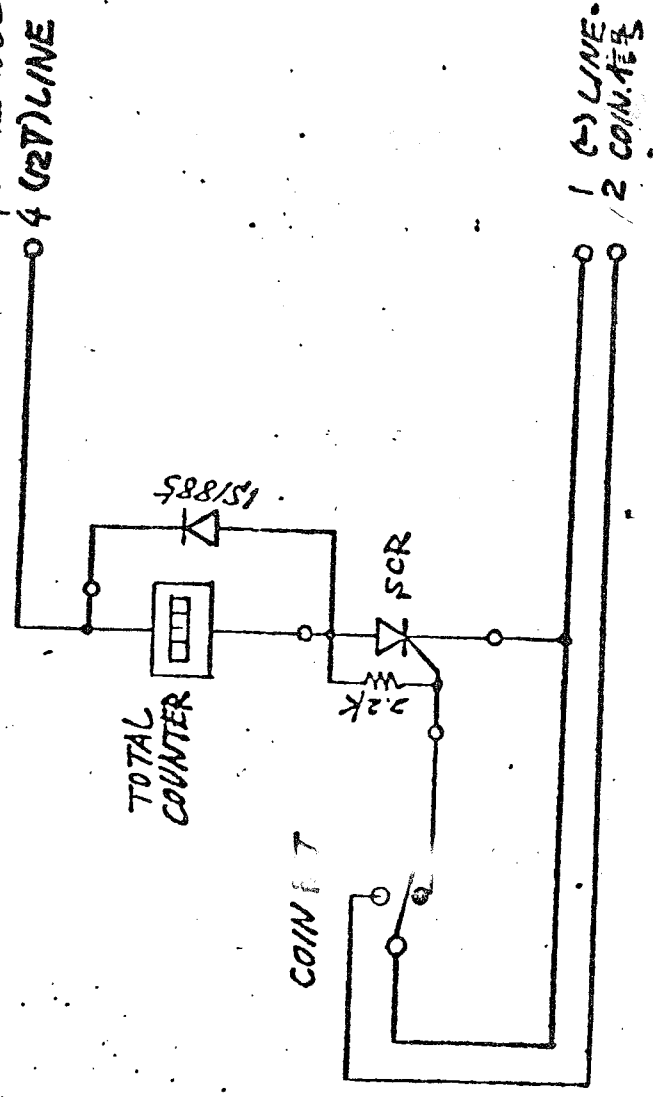
BALL SHOOTER MECHANISM





NO	MATERIAL	QTY	FINISH
1			
2			
3			

コ779-PM.NO  
connector pin number



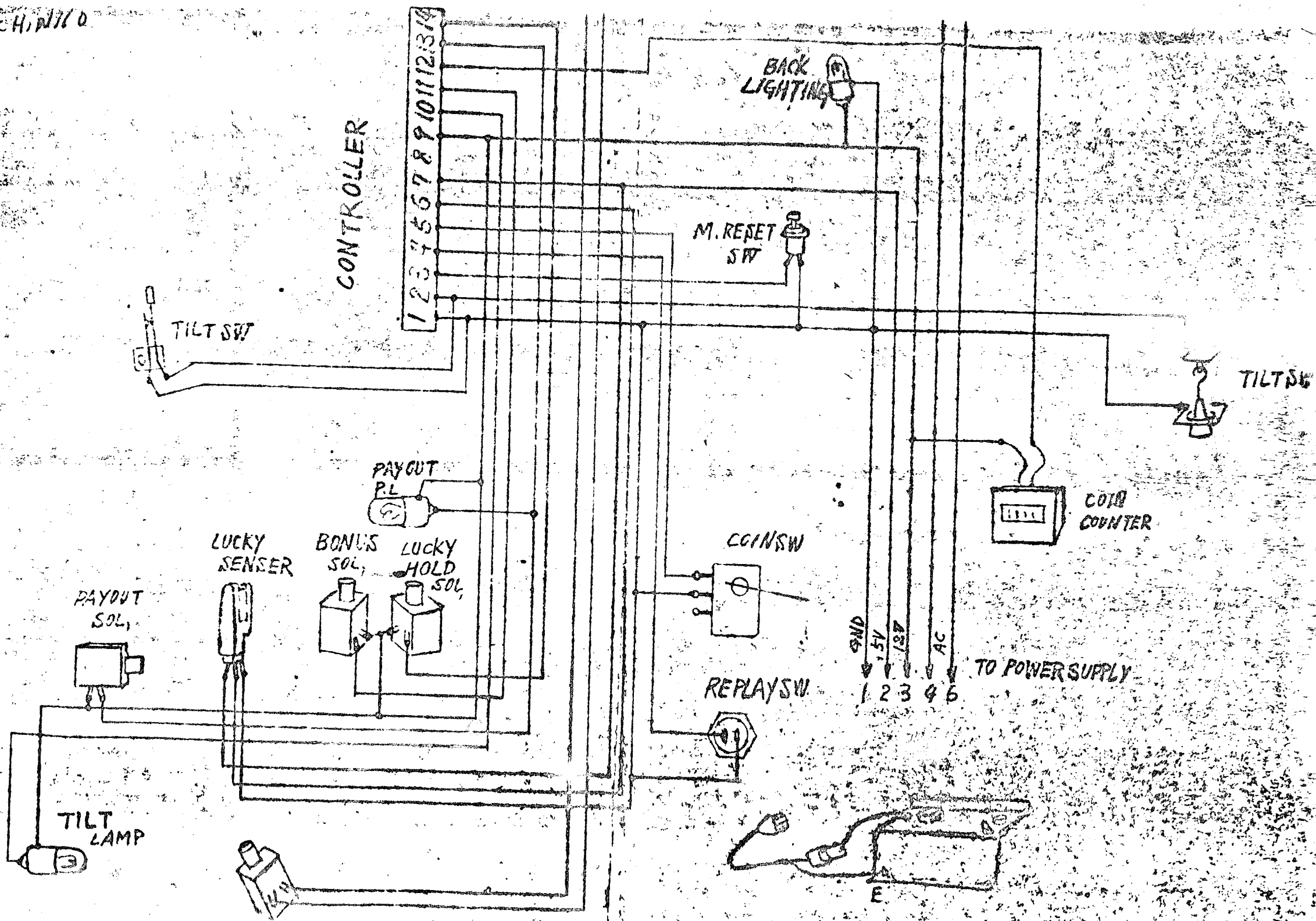
PARTS NAME	coin mechanism	MATERIAL	QTY	FINISH
MACHINE NAME	CON X0 特線機			
CHECK	PACHINKO			PM-1
DESIGN	Am			
DATE	5.50.11.12			
DRAW NO.	4ST031-0013			Satomi Co., Ltd.

BL

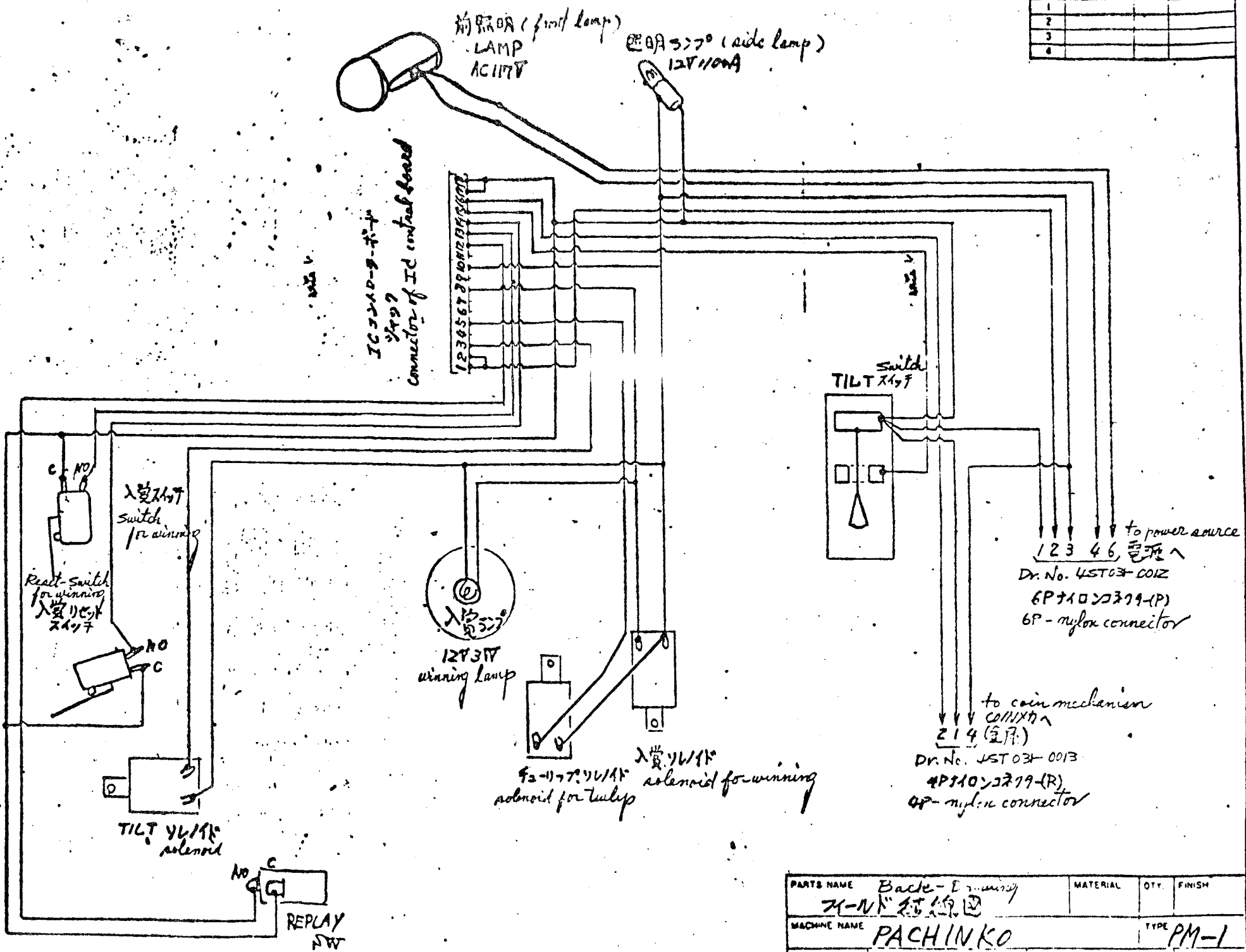
A



PACHINKO



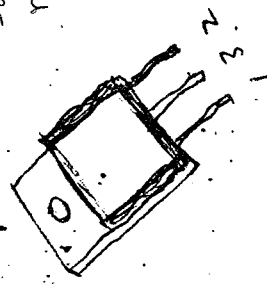
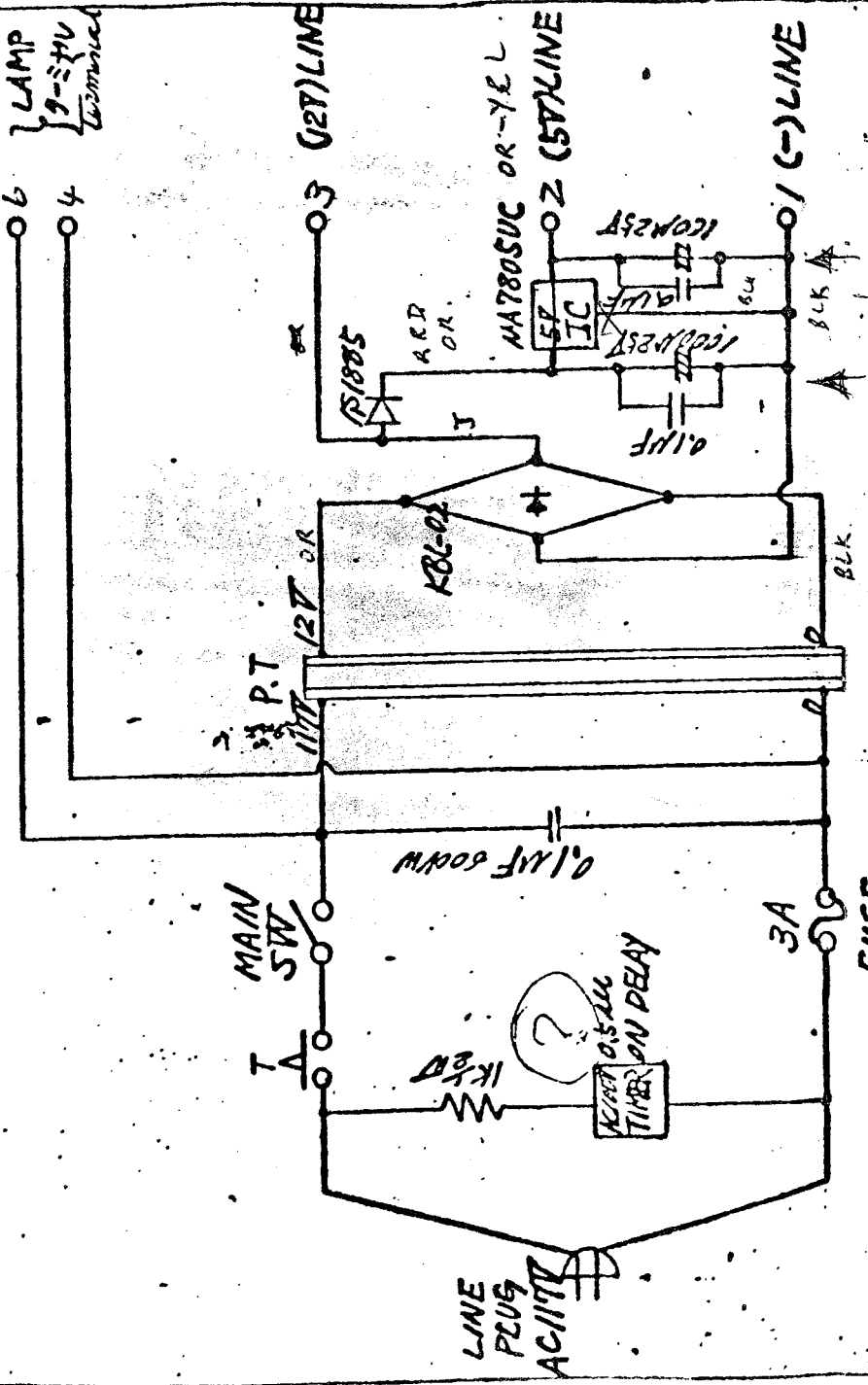
1			
2			
3			
4			



PARTS NAME		Back-End wiring	MATERIAL	QTY	FINISH
MACHINE NAME		PACHINKO	TYPE PM-1		
CHECK	DESIGN	DATE	SCALE		
	Hm	1950.11.12	/		
DRAW NO		Sagami Co Ltd			

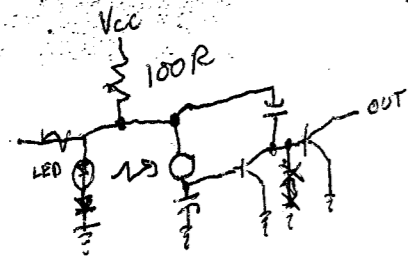
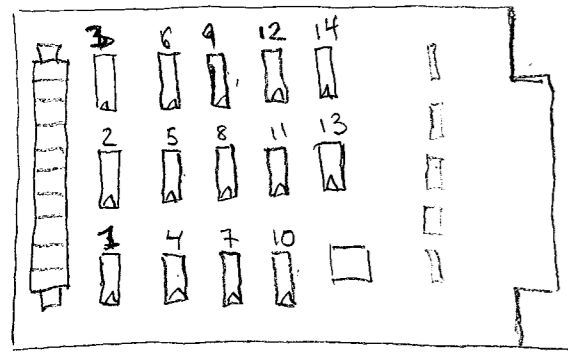
NO	MATERIAL	QTY.	FINISH
1			
2			
3			

3P19-PIN NO.  
connector pin number  
LAMP  
19-25V  
terminated

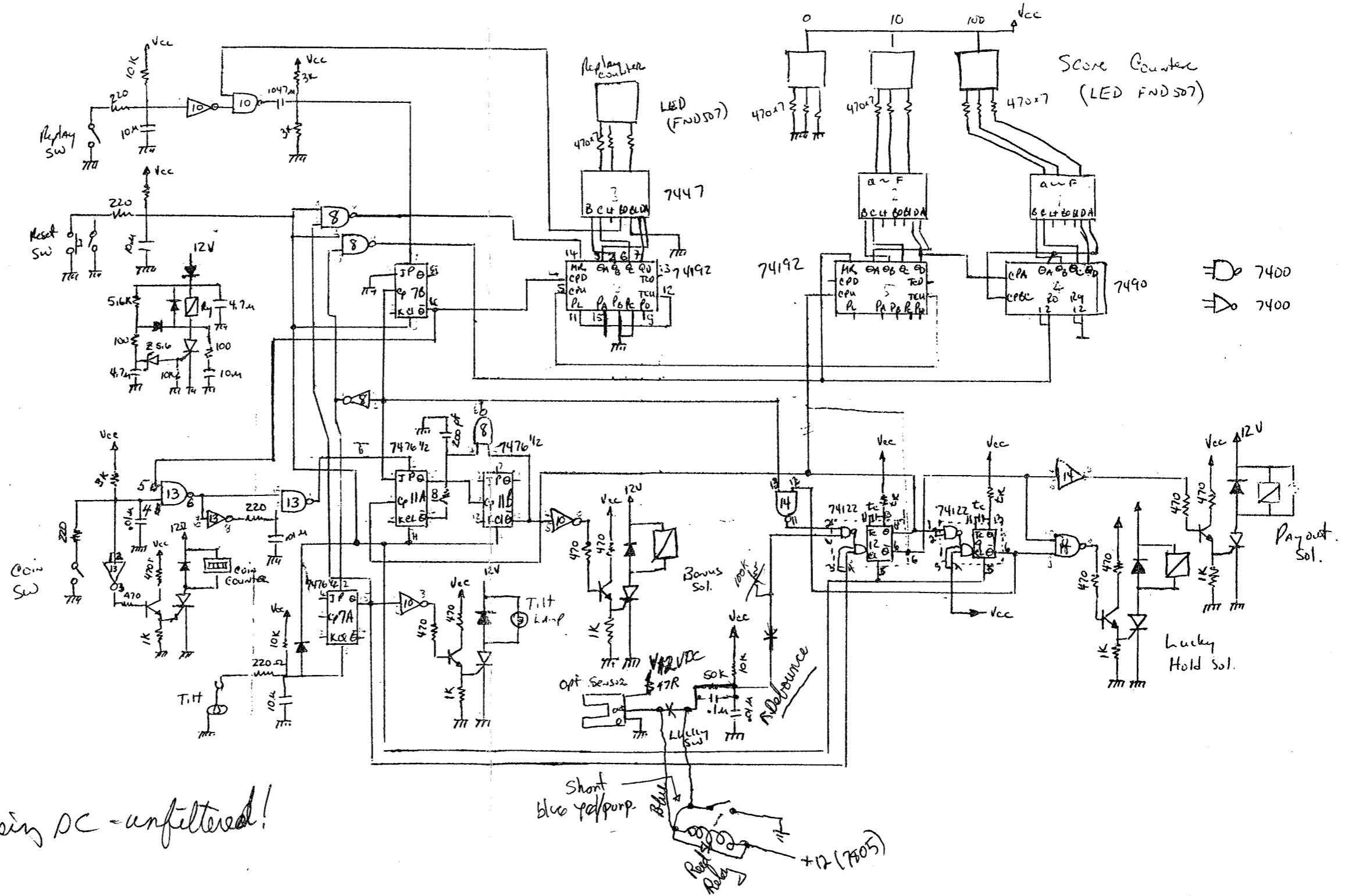


- 1 INPUT.
- 2 OUTPUT
- 3. Com mod.

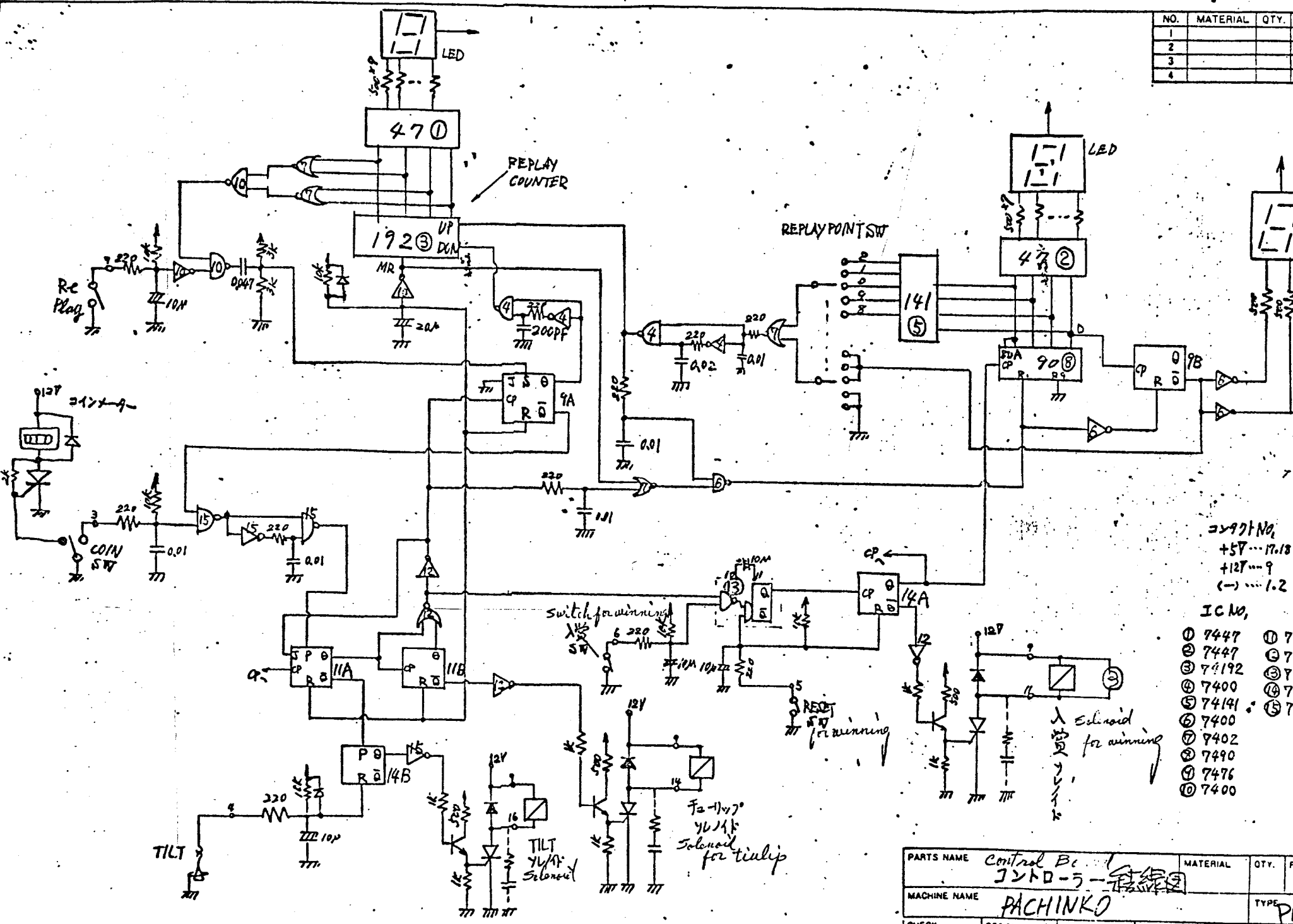
PARTS NAME	Power Source circuit	MATERIAL	QTY.	FINISH
MACHINE NAME	電源部回路図			
CHECK	DESIGN	DATE	TYPE	SCALE
		ATM	PM-1	
DRAW NO.	4ST031-0012	P	50.10.27	
Satomi Co., Ltd.				



note +12 is pulsing DC - unfiltered!



NO.	MATERIAL	QTY.
1		
2		
3		
4		



コナリノ,  
 +5V --- 17.18  
 +12V --- 9  
 (-) --- 1.2

- IC NO,  
 ① 7447    ⑪ 74  
 ② 7447    ⑫ 74  
 ③ 74192    ⑬ 74  
 ④ 7400    ⑭ 74  
 ⑤ 74141    ⑮ 74  
 ⑥ 7400  
 ⑦ 7402  
 ⑧ 7490  
 ⑨ 7476  
 ⑩ 7400

PARTS NAME		Control Board		MATERIAL	QTY.	FILE
MACHINE NAME		パチンコ				
CHECK		DESIGN	DATE	TYPE		
		DATE	DATE	PK		
DRAW NO.		50.10.21		SC		
3ST031-0011		Satomi Co.,L				