

NOTE: SLAM SWITCH MUST BE OFF



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## Operating Instructions

For Model 311ADEF

GOTTLIEB PIN BALL - MPU

GOTTLIEB

		SL2				START 2			SR2				5V
		X				X	X		X				
LLP	SL1	SL5	SL3	LRP		START1	RLP	SR1	SR5	SR3	RRP	ON	OFF
	X	X	X					X	X	X			
		SL4		X	X	X	X		SR4		X		
		X							X				
	SL6		SL7			COIN		SR6		SR7		POWER	
	X		X			X		X		X	X	ON	OFF

1. Insert 311A card into program "A" connector, number side up.
2. Connect 311A 6-pin cable connector to MPU edgeboard J1.
3. Plug in 311D card into MPU edgeboard J2 and J3.
4. ~~Plug in 311F card into MPU edgeboard J5.~~
5. Plug in 311E card into MPU edgeboard J6 and J7.
6. Plug in Test Prom into MPU board.
7. Push 5 volt switch to ON.
8. Push POWER switch to ON. MPU board should be in PLAY MODE.
9. Refer to Service Manual for tests.
10. Black switches on 311E card are Strobes and White switches are Returns. Refer to service manual for switch numbers.
11. When in DISPLAY test 11, all digits in 1st and 3rd player steps "0" thru "9". Move two slide switches for proper PLAYER readout on 311D card.
12. When in DISPLAY test 12, all digits in 2nd and 4th player steps "0" thru "9". Move two slide switches for proper PLAYER readout on 311D card.
13. When in step 13 of BOOKKEEPING FUNCTION, 311F card can read all CPU CONTROLLED LAMPS in increments of 4 at a time. Push reset button for zero.

CONTINUED-----SEE THE FOLLOWING CHART FOR LAMP NO.

LAMP SELECT #	LED'S			
	A	B	C	D
0	1	2	3	4
1	5	6	7	8
2	9	10	11	12
3	13	14	15	16
4	17	18	19	20
5	21	22	23	24
6	25	26	27	28
7	29	30	31	32
8	33	34	35	36
9	NOT USED			

Lamp No.

NOTE: Lamps are on for 5 sec. only....