



Kurz-Kasch, Inc.

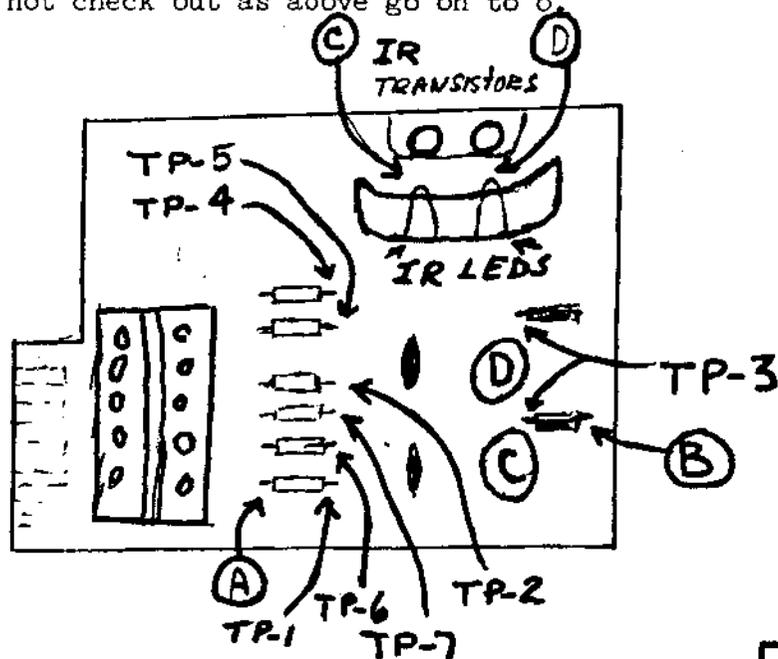
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Operating Instructions

For Model 188 B
 Atari Steering Board

	SL2			START 2			SR2			5 V		
LLP	SL1	X	SL3	LRP	X	X	SR1	X	SR3	RRP	ON	OFF
		SL5			START 1		SR6	SR4				
X	X	X	X	X	X	X	X	X	X	X		
		SL4										
	SL6	X	SL7	COIN			SR6		SR7		POWER	
	X		X	X	X	X	X	X	X	X	ON	OFF

1. Insert 188 B Card into "B" Program Slot, number side up.
2. Insert steering board into 25 pin connector at far left end.
3. Turn on 5 V switch.
4. Turn on power switch.
5. If both red LEDs on program cards come on go to step 6, if not go to 8.
6. Place a piece of cardboard in slot between IR transistor and IR LED at point C. "B" LED on card should go out. Do same for transistor and LED at point D. "A" LED on card should go out.
7. If board does not check out as above go on to 8.
- 8.



Connect LP-520 - Red to A (5 volts)
Black to B (ground)

TP-1 (use LP-520) - low until "C" LED is blocked - then high while blocked.

TP-2 Same as TP-1 for "D" LED.

TP-3 (use DC voltmeter) Low at all times on LP-520 + 0.7 volts when C & D not obstructed less than 0.3 V when C & D are obstructed.

TP-4 (use DC voltmeter) +1.0 to + 1.5 volts.

TP-5 (use DC voltmeter) +1.0 to + 1.5 volts.

TP-6 & 7 (use DC voltmeter) +5.0 volts when C & D LEDs are obstructed - approximately +1.5 volts when obstruction removed.

CORRECTIVE ACTION IF NECESSARY:

9. TP-1 & 2 - Board OK if these check.

TP-4 & 5 - If no check REPLACE IR LED

TP-6 & 7 - If no check REPLACE IR TRANSISTOR

TP-1 & 2 - If no check replace 2N 3643 TRANSISTOR "C" is C channel, "D" is D channel.