

THE COMMODORE DIAGNOSTICIAN II™

A Newly Revised Symptomatic Chart for Diagnosing Faulty IC Components on Commodore Computers and Peripherals

(Included are the Latest Commodore Combination Chips / ROM Changes and Upgrades)

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SERIAL NUMBER

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COMMODORE C-64 (ALL MODELS INCLUDING C-128)

Reference Aid # 6

By IAN PERRY, MA, PO Box 48, Kyneton
Victoria 3444, Australia

SYMPTOMS

SYMPTOMS	COMPONENTS											
	6510 MICROPROCESSOR	6526 COMPLEX INTERFACE ADP	6581 SOUND INTERFACE DEVICE	6567 VIC NTSC. (6569 PAL)	82S100 PROGRAMMABLE LOGIC ARRAY	901226 BASIC ROM	901227 KERNAL ROM	901225 CHARACTER ROM	8701 IC CLOCK GENERATOR	2114 COLOR RAM	4164 MEMORY RAM	POWER SUPPLY
Cursor jumps back to home position.	•						•					
Abnormal colors appear in the letters.					•				•			
Different characters are displayed, cursor is locked when turned on & off.	•			•	•							
The 'RESTORE' key does not work.	•						•					
Cursor stops blinking when system warms up.		•										
Keyboard does not operate correctly when system warms up.		•					•					•
Syntax error.						•					•	
Cursor disappears when cassette is plugged in.	•											
Cassette runs extremely slow, the program seems to load but will not run.	•											
Blank screen on power up.	•				•	•	•		•		•	•
Intermittent blank screen or graphics.	•			•	•						•	•
Powers up when 'PRESS PLAY ON TAPE' message and the display blanks.	•						•					
When 'RETURN' is pressed after a run command, cursor returns to home position.	•				•	•	•				•	
Poke command does not work.						•						
Joystick does not operate correctly.		•										
Unreadable letters appear on screen.				•				•				
Keyboard is unresponsive.		•										
Graphic characters instead of letters displayed.				•	•			•				
'DEVICE NOT PRESENT' error is displayed, when disk is used.	•	•										
Disk drive continues to search when trying to load.	•	•										
Incorrect screen color or no color at all.				•	•					•		
Cassette does not save.	•											
Flashing colors or blocks.					•				•			
Game cartridge does not function.					•		•					
User port does not function (eg. modem).		•										
No sound.			•									
Missing notes.			•									
Game paddles do not function.			•									
Long programs do not load.	•				•						•	
Unit completely dead (30-40% possibility PLA).	•			•	•			•			•	•
Wavy screen after system warms up.				•								
'OUT OF MEMORY' error on power up.											•	
After a few minutes, characters all over screen.		•		•	•							•

★ CROSS REFERENCE ★

★★ FIND FAULTY COMPONENTS ABOVE, MATCH TO CROSS REFERENCE BELOW USING YOUR MODEL PC BOARD ★★

COMMODORE C64/64C COMPONENTS	PC BOARD LOCATION	COMMODORE C64E COMPONENTS	PC BOARD LOCATION	COMMODORE C128 COMPONENTS	PC BOARD LOCATION	COMMODORE C128D COMPONENTS	PC BOARD LOCATION
6510	U7	8500	U6	8502	U6	8502	U6
6526	U1, U2	6526	U1, U2	6526	U1, U4	6526	U1, U4
6581	U18	6581	U9	6581	U5	8580	U5
6567	U19	8562	U7	8563 (80 COL)	U22	8564	U21
82S100	U17	251715	U8	8564	U21	8568 (80 COL)	U22
901226	U3	251913	U4	8721, 8722	U11, U7	8721, 8722	U11, U7
901227	U4	251913	U4	251913	U32	251913	U32
901225	U5	901225	U5	251913	U32	251913	U32
8701	U31	8701	U20	390059	U18	390059	U18
2114	U6	2114	U19	8701	U28	8701	U28
4164	U9, U12, U21, U24	4164	U9, U10	2016	U19	2016	U19
				4164	U38, U45, U46, U53	4164	U23, U25, U38, U40

Note — ROM chips are 901226-01 (Basic), 901227-03 (Kernal), 901225-01 (Character). PCB Assy. 32629801 & 250407. Do not use 8701 IC.

