

Troubleshooting

Power On Self Test

When first powered-on, all LEDs are on and a self test automatically begins. Tests are run in reverse numerical order. While a test is running, the column of Personal Ethernet port LEDs with that test number will be off. When the test passes, its LEDs are turned back on and the next test is performed.

Each test lasts only a few seconds, with the exceptions of tests 8 and 9, which last approximately 30 seconds each.

If a test fails, the associated LED column remains off during the remainder of the tests and upon completion of all tests the LED display will remain fixed with the column of LEDs for each passed test turned on and each failed test turned off. When all tests pass, all LEDs are turned off.

Note If tests 13 or 14 fail, the Power-On Self Tests stop immediately. Call your support representative for service.

Table 7-1 displays the tests and the associated port LEDs.

Power On Self Test

Table 7-1 Power On Self Tests

Test/Port No.	Description	Functionality Lost If Failed
14	EPROM	All
13	SRAM	All
12	NVRAM	All
11	Forwarding Engine	All
10	Forwarding Engine	All
9	DRAM	All
8	DRAM	All
7	Port Control/ Status	All
6	System Timer Interrupt	Statistics, LEDs, upgrades, line status
5	Real Time Clock	None
4	RS-232 Port	Serial interface
3	Watchdog Interrupt	None
2	Station Address PROM	Unique global MAC address
1	Ports	Individual failing ports

The Catalyst 1700 LEDs also facilitate troubleshooting during ongoing operation. Table 7-2 displays the potential problem symptoms, possible causes, and corrective actions.

Table 7-2 Troubleshooting

Symptom	Possible Cause	Corrective Action(s)
Link LED does not come on	No cable inserted	Insert both ends of cable into a device
	Device(s) not powered	Ensure both devices have power
	Wrong cable type	Verify cable selection (crossover vs. non-crossover)
	Bad cable	Replace cable with known good one
	LED broken	Try another port. Observe LED during Power On Self Test
(General Ethernet port only)	Not using RJ-45 connector	None, Link LED does not come on when using AUI or BNC connector
(General Ethernet port only)	Uplink switch in wrong position	Verify correct position for cable used
Power LED does not come on	Power switch off	Turn on switch
	Power cord not connected	Plug in both ends of power cord
	Fuse blown	Replace fuse. If this problem reoccurs, contact Cisco or your authorized reseller

Power On Self Test
