

# TROUBLESHOOTING OKUMA BL2D, BLIID, BL4D AXIS DRIVES

Use camera to document drives (especially all the dip switches!) before you start. Make sure you leave machine configured as original after troubleshooting. Do not swap control cards, only swap whole drives for troubleshooting purposes. Generally, you can swap up or down one drive size ([30A](#) for a [50A](#) etc.). Exercise caution when troubleshooting. Lethal voltages are present in drive cabinets and on the drives. Make sure the DC bus is discharged and machine is powered off at source before swapping any drive.

## *BL2-D Axis Servo Drive Troubleshooting:*

- Main machine power on, CNC control NOT on. Some BL2-D drives have Green LED lit.
  - Suspect Drive has no lit LED. Replace drive.
  - Any Red Alarm LED lit on BL2-D drive. Replace drive.
- After CNC control started, machine runs, other axis move OK. Moving suspect axis causes alarm. Check alarm LED on drive!
  - LOSS LED lit: Internal drive power supply defective. Replace drive.
  - IOCS, IOCM LED lit. Over current alarm. Alarms only on RAPIDS & ALARM Resets. May not be drive problem. Call for troubleshooting.
  - IOCS, IOCM LED lit. Usually fatal. Megger motor, possibly motor toasted drive. Swap entire drive to known good axis to verify. Replace drive.
  - LV Low Voltage LED lit. Check circuit breaker, swap drive to known good axis.
  - HV High Voltage LED lit. Usually on rapids de-acceleration. Swap drive to known good axis of exact same size. Replace drive.

This guide is appropriate for the following:

CNC part number	Okuma part number	1006 number	Okuma U number	Description
<a href="#">BL2-D15A</a>	BLII-D15A	1006-0610		Single 15 amp
<a href="#">BL2-D30A</a>	BLII-D30A	1006-0611		Single 30 amp
<a href="#">BL2-D50A</a>	BLII-D50A	1006-0612		Single 50 amp
<a href="#">BL2-D75A</a>	BLII-D75A	1006-0613		Single 75 amp
<a href="#">BL2-D100A</a>	BLII-D100A	1006-0614		Single 100 amp
<a href="#">BL2-D150A</a>	BLII-D150A	1006-0615/ 1006-0645		Single 150 amp
<a href="#">BL2-D200A</a>	BLII-D200A	1006-0616		
<a href="#">BL2-D1515</a>	BLII-D15-15A	1006--0620		Dual 15-15 amp
<a href="#">BL2-D3030A</a>	BLII-D30-30A	1006-0625		Dual 30-30 amp
<a href="#">BL2-D5015A</a>	BLII-D50-15A	1006-0622		Dual 50-15 amp
<a href="#">BL2-D5030A</a>	BLII-D50-30A	1006-0626		Dual 30-30 amp
<a href="#">BL2-D7530A</a>	BLII-D75-30A	1006-0627		Dual 30-30 amp
<a href="#">BL2-D5050A</a>	BLII-D50-50A	1006-0629		Dual 30-30 amp
<a href="#">BL2-D7550A</a>	BLII-D 75-50A	1006-0630		Dual 30-30 amp
<a href="#">BL2-D7575A</a>	BLII-D 75-75A	1006-0632		Dual 75-75 amp
<a href="#">BL4-D200A</a>	BLIV-D		U0213-0006	Universal Single
<a href="#">BL4-D7575A</a>	BLIV D		U0632-0006	Universal Dual