

**(7) Spindle alarms****QUESTIONS?**

Number	Meaning	Contents and remedy
408	SPINDLE SERIAL LINK START FAULT	This alarm is generated when the spindle control unit is not ready for starting correctly when the power is turned on in the system with the serial spindle. The four reasons can be considered as follows: 1) An improperly connected optic cable, or the spindle control unit's power is OFF. 2) When the NC power was turned on under alarm conditions other than SU-01 or AL-24 which are shown on the LED display of the spindle control unit. In this case, turn the spindle amplifier power off once and perform startup again. 3) Other reasons (improper combination of hardware) This alarm does not occur after the system including the spindle control unit is activated.
409	SPINDLE ALARM DETECTION	A spindle amplifier alarm occurred in a system with a serial spindle. The alarm is indicated as "AL-XX" (where XX is a number) on the display of the spindle amplifier. For details, see Maintenance Manual for AC SPINDLE (Serial Interface) (B-65145E). Setting bit 7 of parameter No. 0397 causes the spindle amplifier alarm number to appear on the screen.

**(8) Over travel alarms**

Number	Meaning	Contents and remedy
5n0	OVER TRAVEL : +n	Exceeded the n-th axis + side stored stroke check 1, 2.
5n1	OVER TRAVEL : -n	Exceeded the n-th axis - side stored stroke check 1, 2.
5n2	OVER TRAVEL : +n	Exceeded the n-th axis + side stored stroke check 3.
5n3	OVER TRAVEL : -n	Exceeded the n-th axis - side stored stroke check 3.
5n4	OVER TRAVEL : +n	A hardware overtravel occurred in the positive direction of the n-axis. (M series)
5n5	OVER TRAVEL : -n	A hardware overtravel occurred in the positive direction of the n-axis. (M series)
5n4	OVER TRAVEL : +n	Exceeded the n-th axis + side stored stroke check 4. (T series)
5n5	OVER TRAVEL : -n	Exceeded the n-th axis - side stored stroke check 4. (T series)
520	OVER TRAVEL : +Z	A hardware overtravel occurred in the positive direction of the Z-axis. (T series)
590	Tool post interference alarm:+X-axis	A tool post interference alarm occurred during traveling in the positive direction on the X-axis.
591	Tool post interference alarm:-X-axis	A tool post interference alarm occurred during traveling in the negative direction on the X-axis.
592	Tool post interference alarm:+Z-axis	A tool post interference alarm occurred during traveling in the positive direction on the Z-axis.
593	Tool post interference alarm:-Z-axis	A tool post interference alarm occurred during traveling in the negative direction on the Z-axis.