INTRODUCTION

Fanuc Servo Errors

Alarm Number	Alarm Message	Description
400	Servo Alarm: the n-th Axis overload	N-th Axis (axis 1 or 2) The overload signal is on. Refer to diagnostic address number 201 for alarm details.
401	Servo Alarm: the n-th Axis VRDY off	N-th Axis (axis 1 or 2) The servo amplifier READY signal (DRDY) is not on.
404	Servo Alarm: the n-th Axis	Even though the N-th Axis (axis 1 or 2) READY signal (MCON) went off, the servo amplifier READY signal (DRDY) is still on. Or, when the power was turned on, DRDY went on even though MCON was off.
405	Servo Alarm: Zero Point Return Fault	Position control system fault. Due to a NC or servo system fault in the reference return position, there is the possibility that the reference return could not be executed properly. Try to reference return again by performing the manual reference position point return.
407	Servo Alarm: Excess Error	The difference in synchronous axis position deviation exceeds the set value.
410	Servo Alarm: the n-th Axis	The position deviation value when the n-th Axis (axis 1 or 2) is stopped is larger than the set value in parameter 1829
411	Servo Alarm: the n-th Axis	The position deviation value when the n-th Axis (axis 1 or 2) is moving is larger than the set value in parameter 1828
413	Servo Alarm: the n-th Axis	The contents of the error register for the n-th axis (axis1 or 2) exceeds +/- 2 **31 power. This is usually occurs as a result of an improperly set servo parameter.
414	Servo Alarm: the n-th Axis – Detection related error.	N-th Axis (axis 1 or 2) has a digital system fault. Check Diagnostic address 200 for details of type of fault.
415	Servo Alarm: the n-th Axis – Excess Shift	A speed higher than 511875 units/s was attempted to be set in the n-th axis (axis 1 or 2). This error occurs as the result of an improperly set CMR parameter
416	Servo Alarm: the n-th Axis	Position detection system fault in the n-th axis (axis 1 or 2) pulse encoder (a disconnection alarm). Refer to diagnostic address number 201 for details
417	Servo Alarm: the n-th Axis	This alarm occurs when the n-th axis (axis 1 to 8) is in one of the conditions listed below. (incorrect digital servo system alarm) 1) The value set in parameter No. 2020 (motor form) is out of the specific limit. 2) An improper value is set in parameter 2022 (motor revolution direction) should be 111 or –111 3) Illegal data was set in parameter 2023 (The number of speed feedback pulses per motor revolution). 4) Illegal data was set in parameter 2024 (The number of position feedback pulses per motor revolution). 5) Parameter No. 2084 and No. 2085 (flexible feed gear rate) have not been set. 6) A value outside the limit of (1 to the n-th number of controlled axis) or a non-continuous value was set in parameter No. 1023 (servo axis number)
		Where "N" equals the number of the axis 1 or 2. (I. E. "Y" or "Z")

FANUC 700 and 900 series ALARMS LIST

Alarm Number	Alarm Message	Description
		700 series Alarms
700	**Overheat alarm: the control unit.**	Master printed circuit board is over heated.
701	**Overheat alarm: the servo amp unit.**	The servo amp has over heated, could be fan not turning, or the amp is bad
		900 series Alarms
900	**ROM parity alarm**	ROM parity error (CNC/OMM/Servo)
910	**RAM parity alarm**	RAM parity error in the program memory RAM module. Clear RAM or replace module.
911	**RAM parity alarm**	RAM parity error in the program memory RAM module. Clear RAM or replace module.
912	**RAM parity alarm**	RAM parity error in the program memory RAM module. Clear RAM or replace module.
913	**RAM parity alarm**	RAM parity error in the program memory RAM module. Clear RAM or replace module
920	**Servo Alarm: 1st or 2nd axis**	Servo alarm (1st or 2nd axis) A watch dog or a RAM parity error has occurred in the servo module.
921	**Servo Alarm: 3rd or 4th axis**	Servo Alarm (3rd or 4th axis) A watch dog or a RAM parity error has occurred in the servo module.
922	**Servo Alarm: 5th or 6th axis**	Servo Alarm (5th or 6th axis) A watch dog or a RAM parity error has occurred in the servo module.
923	**Servo Alarm: 7th or 8th axis**	Servo alarm (7th or 8th axis) A watch dog or a RAM parity error has occurred in the servo module.
924	**Servo module setting error**	The digital servo module is not installed
930	**CPU interrupt**	CPU ERROR (ABNORMAL INTERRUPTION)