MELDAS MDS Series

Master Alarm List

USA-E99351 -004A

MITSUBISHI ELECTRIC AUTOMATION

USA

List of Past Revisions

Suffix	Date of Revision	Detail
*	2/21/99	First edition created
A	8/6/99	Added master list of T-Alarms and M-Alarms.

S-Code Alarms (Servo/Spindle/Power Supply)

	Abbr.	SV	SP	CV	Alarm Name	Remarks
10		x	x		Under voltage	The PN bus wire voltage is 200V or less
11	ASE	x			Axis selection error	The axis setting rotary switch was set illegal in the 2 axis integrated amp.
12	ME1	x	x		Memory error 1	The memory IC (SRAM or FROM) check sum was illegal.
13	SWE	x	x		Software process error	The software data processing was not completed within the normal time. The amp unit is bad.
14						
15	ME2	x			Memory error 2	Memory error on the servo drive.
16	RD1	x			Pole position detection error	The differential input of the U, V or W phase of the pole position detection signal of the OHE type detector were both "H" or "L".
17	ADE	x	x		A/D converter error	The A/D converter for current detection did not function correctly during initialization.
18	WAT	x			Initial communication error	The absolute position or pole position data from the OHA type detector was not correctly sent.
19						
1A	STE1	x			Serial detector comm. Error (SUB)	The initial comm. with the serial encoder installed on the ball screw end was not possible
1B	SCPU	x			CPU error (SUB)	An error was detected in the data stored in the EEROM of the serial pulse encoder installed on the ball screw end.
1C	SLED	x			LED error (SUB)	Deterioration of the LEDs in the serial pulse encoder installed on the ball screw end was detected.
1D	SDAT	x			Data error (SUB)	An error was detected in the per rotation position data of the serial pulse encoder installed on the ball end screw end.
1E	SOHE	x			Serial detector thermal relay error(SUB)	The thermal protector built in the detector operated in the serial pulse encoder installed on the ball screw end.
1F	STRE	x			Serial detector, comm. error (SUB)	Communication with the detector in the serial pulse encoder installed on the ball screw end was cut off.
20	NS1	x			No signal detected 1	The differential input of the A, B or Z phase signal from the motor end installed detector were both "H" or "L".
21	NS2	x	x		No signal detected 2	The differential input of the A, B or Z phase signal from the machine end installed detector were both "H" or "L".
22	NS3	x			No signal detected 3	The serial input of the A, B or Z phase signal from the motor end installed detector were both "H" or "L".
23	OSE		x		Speed deflection excessive	The speed command and motor speed deflection exceeded the specified value and the state continued for a specified time.
24		x	x		Ground fault	A motor cable ground fault was detected.
25	ABSE	x			Absolute position lost	A serial data counter error received form the absolute value detector (excluding scale) was detected during creation of the absolute position after the NC power was turned ON.

	Abbr.	SV	SP	CV	Alarm Name	Remarks
26	NAE	x			Not-Used axis error	The rotary switch was set to "F" and an IPM error occurred in an axis not being controlled.
27	SCCPU	x			Absolute position detection scale CPU error	An error was detected in the CPU of the absolute position linear scale. (Alarm output by the detector)
28	SOSP	x			Absolute position over speed	The scale moved at 45mm/sec or higher when the NC power was turned ON for the absolute position linear scale. Or the detector rotated at 500rpm or higher when the drive power was OFF with the HA-FH motor.
29	SABS	x			Absolute position detector circuit error	An error occurred in the absolute position detection circuit of the absolute position linear scale or HA-FH motor built-in detector.
2A	SINC	x			Incremental position detector circuit error	The movement speed exceeded 60m/min in the absolute position linear scale.
2B	SCPU	x			CUP error	The CPU for the absolute position linear scale or HA-FH motor built-in detector did not operate correctly.
2C	SLED	x			LED error	An LED error was detected by the HA-FH motor built-in detector.
2D	SDAT	x			Data error	An error was detected in the per rotation position data of the serial pulse encoder installed on the motor end.
2E						
2F	STRE	x			Serial detector, communication error	Communication error with the high speed serial detector.
30	OR	x	x		Over-regeneration	Over heating of the regenerative resistor was detected.
31	OS	x	x		Over speed	Motor speed exceeded the tolerable speed.
32	PME	x	x		Power Module Error (IOC)	The IPM used in the amp detected over current.
33		x	x		Over voltage	The PN bus wire voltage exceeded 400V
34	DP	x	x		CRC Error	There was a error in the communication data from the NC
35	DE	x	x		CNC communication, data error	The movement command data sent from NC was excessive
36	TE	x	x		CNC communication, comm. error	There was an error in the communication data from the NC
37	PE	x	x		Initial parameter error	Parameter error
38	TP1	x	x		CNC communication, protocol error 1	A protocol error occurred in the communication with the NC. (Frame error)
39	TP2	x	x		CNC communication, protocol error 2	A protocol error occurred in the communication with the NC. (Information error)
3A	OC	x			Over current	The current (detection value) for motor drive is excessive.
3B	PMOH	x	x		Power Module Error (overheat)	The IPM overheat detection functioned.
3C			x		Regenerative circuit error	An error was detected in the regenerative transistor or resistor.
3D						
3E						
3F						

	Abbr.	SV	SP	CV	Alarm Name	Remarks
40	KE		x		A-TK unit, changeover error	Detected when the changeover input sequence was mistaken during use of the TK unit with the 1amplifier 2 motor function.
41	KE2		x		A-TK unit, communication error	Detected when an error occurs in the data communication during use of the TK unit with the 1 amplifier 2 motor function.
42	FE1	x			Feedback error 1	A skip of the detector feedback signal pulse occurred in the OHE type or OHA type detector used in the semi-closed loop system and ball screw end closed loop system. A skip of the detector feedback signal pulse in the low-speed serial type absolute position linear scale.
43	FE2	x			Feedback error 2	A deviation occurred in the feedback amount from the motor end detector and machine end detector in the closed loop system.
44	CAXC		x		C axis changeover alarm	When using the coil changeover motor, C axis control was carried out with the H coil.
45						
46	OHM	x	x		Motor overheat	Check motor temperature, check overheat sensor.
47						
48						
49						
4A						
4B						
4C						
4D						
4E						
4F		x	x		Instantaneous stop	The power was cut off for 50 msec or more.
50	OL1	x	x		Overload detection 1	The time that motor current exceeded the parameter OLL (overload detection level) in the stall ration conversion was longer than parameter OLT (overload level).
51	OL2	x	x		Overload detection 2	A current command exceeding 95% of the amplifier's maximum current continued for one second or more.
52	OD1	x	x		Excessive error 1 (during servo ON)	The actual position droop for the ideal droop exceeded the parameter setting value OD1 (excessive error width during servo OFF)
53	OD2	x	x		Excessive error 2 (during servo OFF)	The actual position droop for the ideal droop exceeded the parameter setting value OD2 (excessive error width during servo OFF)
54	OD3	x			Excessive error 3	The motor current did not flow when the excessive error 1 alarm was detected. (added with the B series)
55						
56						
57						
58	CLE0	x			Collision detection 0	A collision detection type 1 error was detected during the G0 modal (rapid traverse)
59	CLE1	x			Collision detection 1	A collision detection type 1 error was detected during the G1 modal (cutting feed)

	Abbr.	SV	SP	CV	Alarm Name	Remarks
5A	CLT2	x			Collision detection 2	A collision detection type 2 error was detected.
5B						
5C	ORFE		x		Orient, feedback error	The pules miss value was higher than the parameter set value (SP114: OPER) when orientation positioning was completed.
5D						
5E						
5F						
60	0			x	Resistor regeneration 24V voltage drop	The resistor regeneration unit's DC24V voltage dropped.
61	1			x	Power module over current	An over current was detected with the power supply unit's IPM.
62	2			x	Not used	
63	3			x	Auxiliary regeneration error	The auxiliary regeneration transistor in the power supply unit is short circuited.
64	4			x	Grounding 2	Regeneration actuated immediately after the ready ON.
65	5			x	Rush current error	The rush relay in the power supply unit is excited but not turned ON.
66	6			x	Not used	
67	7			x	Open phase	The R, S or T input power of the power supply unit is open.
68	8			x	Watch dog	The power supply software process did not end within the designated time.
69	9			x	Ground fault	A ground fault occurred in the motor.
6A	A			x	Contactor fuse	Welding of the power supply unit external contactor was detected.
6B	B			x	Rush relay fuse	Welding of the rush relay in the power supply unit was detected.
6C	C			x	Main circuit error	The main circuit capacitor in the power supply could not be charged correctly.
6D	D			x	Parameter error	When NC power is turned on
6E	E			x	Memory error	An error occurred in the power supply unit's memory circuit.
6F	F		x	x	AD error (PS error)	An error occurred in the power supply unit's AD converter section.
70	G					
71	H			x	Power supply instantaneous power failure	An instantaneous power failure exceeding 25ms was detected in the power supply unit.
72	I					
73	J			x	Over-regeneration	The regenerative load in the resistor regeneration unit exceeded the standard value.
74	K			x	Regenerative resistor overheat	The regenerative resistor's thermal protector functioned.
75	L			x	Over voltage	The power supply units PN bus-line voltage exceeded 410V.
76	M			x	External emergency stop setting error	When NC power is turned on
77	N			x	Power module (V)/fin (R) overheat	The IPM in the power supply unit detected an overheat.
78						

	Abbr.	SV	SP	CV	Alarm Name	Remarks
79						
7A						
7B						
7C						
7D						
7E						
7F						
80						
81						
82	NSP	x	x	x	Power supply no signal	A no signal was detected in the communication line with the power supply.
83						
84						
85						
86						
87						
88	WD	x			Watch dog	The servo amplifier software process did not end within the designated time.
89			x			No signal from PJEX unit.
8A			x			Communication error from PJEX
8B			x			Automaticadjustment error.
8C			x			Detector Error
8D			x			PJEX watch dog error.
8E						
8F						
90	WAT	x			Low speed serial, initial comm. error	Communication with the absolute position linear scale was not possible when the NC power was turned ON.
91	WAS	x			Low speed serial, comm. Error	During normal operation, the absolute position data was not transmitted from the low speed serial detector.
92	WAF	x			Low speed serial, protocol error	During normal operation, the absolute position data transmitted from the low speed serial detector.
93	WAM	x			Absolute position fluctuation	The absolute value counter could not be set when the power was turned ON because the absolute position had fluctuated.
94						
95						
96	MPE	x			MP scale, feedback error	In the MP scale absolute detection system, an excessive deviation in the motor end installation detector and MP scale feedback amount was detected.
97	MPO	x			MP scale, offset fluctuation	In the MP scale absolute position detection system, an error was detected in the offset data read when the NC power was turned ON.
98						
99						
9A						
9B						
9C						

	Abbr.	SV	SP	CV	Alarm Name	Remarks
9D						
9E	WAN	x			High speed serial detector error	An error was detected in the multi-rotation counter in the serial pulse encoder installed on the motor end or ball screw end.
9F	WAB	x			Battery voltage drop	The voltage of the battery supplying to the absolute position detector dropped.
A0						
A1						
A2						
A3						
A4						
A5						
A6						
A7						
A8	WTW		x		Turret index command error warning	
A9						
AA		x	x		CNC initial comm. phase 1 wait(CNC OFF)	Waiting for NC power ON after power OFF
AB		x	x		CNC initial comm. phase 1 wait	Waiting for NC power ON for the fist time
AC		x	x		CNC initial comm. phase 2 wait	Initializing. Requisition parameter transmission
AD		x	x		CNC initial comm. phase 3 wait	Initializing. Requisition parameter conversion
AE		x	x		CNC initial comm. phase 4 wait	Initializing, Standby for main servo IT start
AF					Reserved	
B0		x	x		In ready OFF	During servo initialization
B1		x	x		In ready OFF	During servo initialization
B2		x	x		In ready OFF	During servo initialization
B3		x	x		In ready OFF	During servo initialization
B4		x	x		In ready OFF	During servo initialization
B5		x	x		In ready OFF	During servo initialization
B6		x	x		In ready OFF	During servo initialization
B7		x	x		In ready OFF	During servo initialization
B8		x	x		In ready OFF	During servo initialization
B9		x	x		In ready OFF	During servo initialization
BA		x	x		In ready OFF	During servo initialization
BB		x	x		In ready OFF	During servo initialization
BC		x	x		In ready OFF	During servo initialization
BD		x	x		In ready OFF	During servo initialization
BE		x	x		In ready OFF	During servo initialization
BF		x	x		In ready OFF	During servo initialization
C0		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
C1		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
C2		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
C3		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
C4		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
C5		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
C6		x	x		Ready ON and servo OFF	Machine and control ready but servo not running

	Abbr.	SV	SP	CV	Alarm Name	Remarks
C7		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
C8		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
C9		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
CA		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
CB		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
CC		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
CD		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
CE		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
CF		x	x		Ready ON and servo OFF	Machine and control ready but servo not running
D0		x	x		In servo ON	Drive in ready state
D1		x	x		In servo ON	Drive in ready state
D2		x	x		In servo ON	Drive in ready state
D3		x	x		In servo ON	Drive in ready state
D4		x	x		In servo ON	Drive in ready state
D5		x	x		In servo ON	Drive in ready state
D6		x	x		In servo ON	Drive in ready state
D7		x	x		In servo ON	Drive in ready state
D8		x	x		In servo ON	Drive in ready state
D9		x	x		In servo ON	Drive in ready state
DA		x	x		In servo ON	Drive in ready state
DB		x	x		In servo ON	Drive in ready state
DC		x	x		In servo ON	Drive in ready state
DE		x	x		In servo ON	Drive in ready state
DF		x	x		In servo ON	Drive in ready state
E0	WOR	x	x		Over-regeneration warning	The regeneration level reached 80% or more.
E1	WOL	x	x		Overload warning	A level 80% of the overload 1 alarm was detected. This is not an alarm so servo OFF will not occur, but if operation is continued, the overload 1 alarm may occur.
E2						
E3	WAC	x			Absolute position counter warning	The absolute position counter value is illegal. An error will not occur in this state, but zero point return will be required when the NC power is turned ON again.
E4	WPE	x			Parameter error warning	A parameter exceeding the setting range was set. The illegal parameter will be ignored and the value set before the illegal value will be retained
E5						
E6	AXE	x			Control axis exchange warning	A control axis removal command was issued from the NC during normal operation.
E7	NCE	x	x		CNC Emergency stop	The emergency stop command is input from the CNC
E8	O			x	Over regeneration warning	Regeneration of the power supply regeneration capacity limit is occurring frequently.
E9	P			x	Instantaneous stop warning	An instantaneous power failure exceeding 25ms occurred in the power supply.
EA	Q			x	External emergency stop input	When NC power is turned on
EB	R			x	Over-regeneration warning	During ready on
EC	S					
ED	T					

	Abbr.	SV	SP	CV	Alarm Name	Remarks
EF	V					
F0						
F1		x	x		Reserved for axis number indication	Axis number
F2		x	x		Reserved for axis number indication	Axis number
F3		x	x		Reserved for axis number indication	Axis number
F4		x	x		Reserved for axis number indication	Axis number
F5		x	x		Reserved for axis number indication	Axis number
F6		x	x		Reserved for axis number indication	Axis number
F7		x	x		Reserved for axis number indication	Axis number
F8		x	x		Reserved for axis number indication	Axis number
F9		x	x		Reserved for axis number indication	Axis number
FA						
FB						
FC						
FD						
FE						
FF						
0						
1		x	x		Flash, programming error	During rewriting of software
2		x	x		Flash, erase error	During rewriting of software
3		x	x		VPP error	During rewriting of software
4		x	x		Check sum error	During rewriting of software
5		x	x		Compare error	During rewriting of software
6						
7						
8		x	x		Bank designation error	During rewriting of software
9		x	x		Initial address error	During rewriting of software
A		x	x		Bank changeover error	During rewriting of software
B		x	x		Address error	During rewriting of software
C		x	x		Reception time error	During rewriting of software
D						
E						
F		x	x		Command sequence error	During rewriting of software

STOP CODE	ERROR NO	DETAILS	POSSIBLE REMEDY.
T01 CAN'T CYCLE START: IN THIS STATE AUTO OP NOT POSSIBLE.			
	101	AX IN MOTION (AXSIS IN MOTION)	Try automatic start again after all axis have stopped.
	102	READY OFF	Another alarm has been issued and so this should be checked out and remidial action taken.
	103	RESET ON	Set the reset input signal to "off". The reset switch is at "on" position at all times. Check the sequence program.
	104	A-OP stp SGL (Automatic operation stop signal "on".)	Take another look at the FED HOLD switch. This switch is B- contact. Check for a breakage or disconection in the feed hold signal line. Check the sequence progrm.
	105	H/W STRK END(H/W stroke end ax)	If the stroke end has been reached by the axis end, move the axis by operating it manually. Check for breakage or disconection in the stroke end signal line. Check for a failure or malfunction in the stroke end limit switch.
	106	S/W STRK END(S/W stroke end ax)	Move the axis manually. Check the contents of the parameters unless the axis end is at the stored end.
	107	NO OP MODE(No operation mode)	Select the automatic operating mode. Check for breakage or disconection in the automatic operating mode (memory, Tape, MDI) signal line.
	108	OPERATING MODE DUPLICATED	Check for a short circuit in the mode selection signal line.(memory, Tape, MDI). Check for a failure or a mlfunction in the switch. Check the sequnce program.
	109	OP MODE SHIFT	Return to the orignal automatic operating mode and initiate an automatic start.
	110	TAPE SEARCHING. Automatic start not possible because a tape search is being conducted	Conduct automatic start upon completion of the tape search.
	111	PROGRAM SEARCH INCOMPLETE. Automatic staert is not possible because the program	Conduct automatic start upon completion of the program restart search.
	112	PROGRAM RESTART POSITION NON-RETURN	Perform the restart position return manually. Set the automatic restart valid parameter to ON and conduct automatic start.
	113	THERMAL ALARM. (The temperature in the CPU card or operation board exceeds the specified temperature.	Turn the NC unit power off and let the unit cool down for 5min or more
	138	Disabled start during absolute position detection alarm. An automatic start signal was input while an absolute position detection alarm was given	Reset the absolute position detection alarm, then input an automatic start signal.
	139	Disabled start during ZERO-POINT initialization. A start signal was input while the absolute position detection system was being initialized for the zero-point.	Aftercompletion of the initialization, input an automatic start signal.

STOP CODE	ERROR NO	DETAILS	POSSIBLE REMEDY.
T02 FEED HOLD		The feed hopld status has been establihed due to some condition or other automatic operation.	
	201	H/W STROKE END AXIS	Move the axis manually from the stroke end limit switch. The machining program must be corrected.
	202	S/W STROKE END AXIS	Move the axis manually. The machining program must be revised.
	203	RESET SIGNAL ON	The position at which the program is executed has returned to the head and so automatic operation is performed from the start point of the machining program.
	204	AUTO OP STOP	Automatic operation can be resumed by operating the **cycle start switch.**
	205	AUTO MODE CHANGE	First return to the orignal automatic mode and automatic operation can then be resumed by means of the **CYCLE START** switch.
	206	INTERFERENCE. A comand wher two object will interface has been issued, or the axis is in the interference range.	Cancel the alarm alarm reset. To move the interfereing object in the interfereing direction, invalidate the interference check first. Refer to the instruction manual issued by the machine maker for
	215	Absolute Position Detection Alarm Stop. An absolute position detection alarm	Reset the absolute position detection alarm.
	301	SINGLE BLOCK ON . Single block switch on the machine control panel is at the "on" position.	Automatic operation can be resumed by operating the cycle start switch to "on".
	302	MACRO BLOCK STOP. Block stop command is given in user macro program.	Automatic operation can be resumed by turning on the CYCLE START switch.
	303	Auto Mode Change. A change is made to another	Automatic operation can be restarted by using CYCLE START switch when the former automatic operation
	304	MDI TERMINATION. All MDI programs terminated.	After MDI setting is complete, operation can be made at the cursor block by turning the CYCLE START switch.
T03 BLOCK STOP.		Operation stops after single block in the program has been executed during automatic operation.	
	301	SINGLE BLOCK ON .	Automatic operation can be resumed by establishing the
	302	MACRO BLOCK STOP.	Automatic operation can be resumed by turning on the CYCLE START switch.
	303	AUTO MODE CHANGE	

STOP CODE	ERROR NO	DETAILS	POSSIBLE REMEDY.
	304	MDI END BLOCK STOP	After the setting have been completed, operation starts from the block with the cursor when the CYCLE START
	304(M500)	MDI completion. The last block of	MDI opereration can be resumed by setting MDI again
	305	TEACHING BLOCK STOP.	Tuturn the cycle start switch on to restart automatic
T04 COLLATION STOP		The collation stop mode is established during automatic operation.	
	401	COLLATION STOP	Automatic operation can be resumed by establishing the
T10 COMPLETION STANDBY		It displays the condition of frozen system during the operation without alarm.	
	T10	NC FIN WAIT	These are displayed during the execution ofd each finish
	8	WAITING FOR SPINDEL TO ORIENT	

M01 OPERATION ERROR	Alarms resulting from incorrect operation by th operator during NC operation and alarms resulting from a breakage or malfunction on the machine side are displayed.

ERROR NO	DETAILS	REMEDY
1	DOG OVERRUN when the axis returned to the refrence point. The near-point detection limit switch did not stop above the dog but overrun the dog	Increase the length of the near-point dog. Reduce the speed at which the axis returns to the the refrence point.
2	Z AXIS NOT CROSSED. One of the axis did not cross the Z-axis of the detector on the initial return of the machine to the refrence point after the power was switched on.	Move the axis by an amount equivalent to one or more rotations of the detector in the reverse direction to that of the refrence point, and proceed with refrence point return again
3	INVALID RETURN	An [Axis Select] key corresponding to the wrong direction has been selected. The error is released by selecting the correct key to feed the axis in the correct direction.
4	EXTERNAL INTERLOCK. Has been activated.	Since the interlock function has been activated, it must first be released before operation is continued. Check the sequence on the machine side. Check for the a break or disconnection in the interlock signal line.
5	SERVO OFF AXIS	Since the servo "off" function has been activated, it must first be released before operation is possible. An axis which is to be removed was assigned. Perform the correct operation. The axis was assigned in the same direction as that in which the manual skip function was set ON. perform the correct operation.
6	H/W STROKE END. The stroke end function is activated and one of the axis is in stroke end status.	Since the stroke end limit switch has been activated, move the machine by operating it manually. Check for an bbreak or disconection in the stroke end signal line. Check for a failure or malfunction in the limit switch.
7	S/W STROKE END. The stored stroke limit I orII function has been activated.	Since the machine is in the stroke end status, move it by operating it manually. Incorrect setting of stored stroke limit in parameter.
101	NOT OPERATING MODE.	check for a break or disconnection in the input mode signal line. Check for a failure or malfunction in the mode selector switch. Check the sequence program.
102	OVERRIDE ZERO. The feed rate override switch on the machine operation boardis at zero.	The error is released by setting the switch to any position except zero. If the switch is set to position other than zero then check whether the signal line has been shorted. Check the sequence program.
103	EXTERNAL FEED SPEED ZERO. The MANUAL FEED RATE switch on the machine operation board has been set to zero when the machine was in the JOG modeand automatic dry run mode.	The error is released by setting the switch to any position except zero. If the switch is set to position other than zero then check whether the signal line has been shorted. Check the sequence program.
104	F1-DIGIT SPINDLE ZERO. The F1- digit feed rate is zero when the F1-digit feed command is executed.	Set F1 digit feed rate on the user parameter screen. Increase the speed using the spindle manual handle.
105	SPINDLE STOP. The spindle was at a stand still when the synchronous feed command was assigned.	Rotate the spindle. Establish the dry run mode except when a workpiece is being cut. Check for a break or disconnection in the spindle encoder cable. Check the conection of the spindle encoder connectors. Check the spindle encoder pulses.
106	HANDLE FEED NUMBER WRONG. An axis which does not exist in the specification has been assigned for handle feed or the handle feed axis has not been selected.	Check for a break or disconnection in the handle feed axis selection signal line. Reconsider the sequence program. Check the number of the axis listed in the specification.

ERROR NO	DETAILS	REMEDY
107	SPINDLE SPEED EXCESSIVE. The spindle speed has exceeded the clamp speed of the axiswhen a thread cutting command wa assigned.	Reduce the assigned spindle speed.
109	BLOCK START INTERLOCK. An interlock signal for locking the block start has been input.	Check the sequence program.check Y19B and Y31B in the PLC program ladder. Interlock is valid when Y19B (1st system) is "0". Interlock is valid when Y31B (2nd system is "0"
110	CUTTING BLOCK INTERLOCK. The CT ST INTLK is valid during the start of the C01, G02, g03, G31 or G33 cutting command block.	Check the sequence program. Check Y19c and Y31c in the PLC program. Interlock is valid when Y19C or Y31C is "0"
111	RESTART SEARCH ON	Search for the block to be restarted. Set the restart switch to OFF>
112	PROGRAM CHECK MODE. The automatic start button has been pressed during a program check or in the program check mode.	The program check mode is released by resetting.
113	BUFFER CORRECTING. Automatic start button is benn pressed during buffer correction.	The buffer correction is released by resetting or screen selection. Buffer correction is completed by pressing the [INPUT] key.
114	AUTO PROGRAM LOADING	press the automatic program button after the automatic program ing system has been loaded.
115	RESET PROCESSING. The automatic start button has been pressed during the reset processing or tape rewinding.	During tape rewinding , wait for the rewinding to be completed or press RESET button to pause the process, and then press automatic start button. During resetting, wait for the resetting to be completed and then press the automatic start button.
116	CYCLE TIME COUNT. The automatic start button pressed while the cycle time was being counted or in the cycle time counting mode.	Wait for the counting to be completed or suspend it by resetting and then press the automatic start button.
117	NO PLAYBACK, The playback switch was set On during editing or in the full size mode(9 inch).	During editing, use the [INPUT] or [PREVIOUS PAGE] key to release the editing mode and then set the PLAYBACK switch on. First set the 9inch editing screen to the half size mode and then set the PLAYBACK switch to on.
118		
119		
120	INTERLOCK MALFUNCTION. The CT BLK INTLK is valid during the start of the G01, G02, G03, G31 or G33 cutting command block.	Check Y1d8 and Y358 in the PLC program. Interlock is valid when Y1d8 (1st system) or Y358 (2nd system) is "1".
121		
122		
160	Ther is an axis that the max speed of the out of the soft limit has not set.	Set th maximum speed for out of the soft limitrange. Change the range of soft limit.
1001	The feed axis selected in manual operation is being used by the cross machining command issued by a different system	Return the selected feed axis to the basic definition axis by resetting or with the cross machining command.
1005	G114.n command error. The G114.n command was issued in g114.n mode.	Review the program.
1006	Thread cutting spindle speed not reached. In automatic change of the thread cutting spindle speed, the actual speed does not reach the commanded speed.	Check the spindle parameter. Check the command applied to the spindle is recived.

ERROR NO	DETAILS	REMEDY
1007	Spindle synchronization command during synchronized tapping mode. Operation error (M01 1007) occurs. If a spindle synchronization command (G114.1, G114.2, G114.3, G114.4) is executed for the tapping spindle during the synchronized tapping mode.	Review the program.
1008	Teaching speed error. The feedrate calculated during teaching in intersystem synchronous mode is invalid.	Follow the teaching procedure againg from the beginning.
1009	Teaching data setting. A set number command (TGSET[]) was executed while the position control variables were being define on the screen.	Stop defining the position control variables on the screen.
1010	No teaching specification. The teaching mode signal was turned on though it was not included in the specification.	Check and verify specification for this mode. Turn the teaching mode signal OFF if not specified.
M03 COLLISION ALARM		
	The issued command caused an interference between two devices such as tool resets.	Release the alarm by a reset operation. To move the interfering device further in the interfering direction, invalidate an interference check before doing it. Refer to the instruction manual issued by the machine maker for the procedure to invalidate an interference check.
M04 COLLISION AREA		
	two interfering device such as tool resets entered and interference area.	Invalidate an interference check, and then move the device. Refer to the instruction manual issued by the machine maker for the procedure to invalidate an interference check.
M02 NEED R.P.RTN		When an absolute position detection system is used, this alarm appears when the absolute position data has been lost or when the detector is defective.
1	ABSOLUTE POSITION DATA LOST. When power is turned on, an error is detected in an absolute position data check sum or parity.	An error has arrisen as a result of checking the absolute position data as bellow when the power was switched on. Check sum check: Obtain the total sum of the data. parity check in vertical direction: Exclusive OR the total data.
2	ABSOLUTE POSITION DATA ERROR. The machine moves exceeding requirment distance when power is OFF.	The machine moved more than the allowable distance with power OFF. Allowable distance> (Absolute position when power is switched ON-Absolute position when power is switched OFF.) The allowable distance is set in #20 abslmt on the axis specification parameter screen. The setting range is from 0.001 to 99999.999mm. A zero setting is treated as : ball screw pitch * 0.9.
3	EXCESSIVE DETECTOR ERROR. The detector error range at machine zero exceeds the given range.	Absloute valllue 1X at the refrence point in dog-type zero point return has execeeded the regulated range. Check the machine parameter (return to machine datum) and perform refrence position return in the dog mode.
4		Dog-type zero point return (refrenc point setting) incomplete state.
	NOTE 1: Return operation when alarm has occurred. Since automatic operation cannot be performed when the M02 NED R.P.RTN alarm has occurred, perform dog-type zero point return. Automatic operation is enabled when the alarm is released.	
	NOTE 2: when alarm 0003 has occurred, first check the paramter (grspc=RNG), turn the power OFF/ON, and perform dog-type zero return again. If th alarm still occurs, the detector may be defective and the MELDAS service center should therfore be contacted.	