8.   Troubleshooting

8.1   Error Code Table

There are 18 types of errors as follows.

Events	Simulator	Points
Warnings	Interpreter	Fieldbus
Controller Main	Parser	Vision
Operator Panel	Motor control	GUI Builder
Teach Pendant	Servo	Hardware
PC	Vision Calibration	EPSON RC+

Events

No.	Message	Remedy	Note 1	Note 2
1	Controller control program started.			
2	Termination due to low voltage of the power supply.			
3	Controller control program has completed.	Stores this log when the controller is rebooted from EPSON RC+ or TP1.		
4	Preserve variables save area has been cleaned.			
5	Function Main started.			
6	Function Main started. Later same logs are skiped.	Skip the log "Function Main started." to prevent system history space run out.		
7	Serial number has been saved.			
8	System backup has been executed.			
9	System restore has been executed.			
10	Robot parameters have been initialized.			
11	Offset pulse value between the encoder origin and the home sensor (HOFS) is changed. Additional data is J1 value.		J1 value after change	J1 value before change
12	Offset pulse value between the encoder origin and the home sensor (HOFS) is changed. Additional data is J2 value.		J2 value after change	J2 value before change
13	Offset pulse value between the encoder origin and the home sensor (HOFS) is changed. Additional data is J3 value.		J3 value after change	J3 value before change
14	Offset pulse value between the encoder origin and the home sensor (HOFS) is changed. Additional data is J4 value.		J4 value after change	J4 value before change
15	Offset pulse value between the encoder origin and the home sensor (HOFS) is changed. Additional data is J5 value.		J5 value after change	J5 value before change
16	Offset pulse value between the encoder origin and the home sensor (HOFS) is changed. Additional data is J6 value.		J6 value after change	J6 value before change
17	Move to the message saving mode.			
18	Conversion of Robot Parameter file has been executed.			
20	Enable setting in Teach mode has been saved.			
21	Enable setting in Teach mode has been changed.			
100	Device connected to Controller.			
101	Console device has changed.		21:PC 22:Remote 23:OP1	
102	Display device has changed.			

No.	Message	Remedy	Note 1	Note 2
103	Working mode has changed.			
110	Controller firmware has been installed.		1:Setup 2:Initialize 3:Upgrade 4:Recover	
111	IP address has been restored.	May store this log when the controller firmware is installed.		
120	PC connected to the Controller.		1:Ethernet 2:USB	
121	TP connected to the Controller.			
122	OP connected to the Controller.			
123	PC disconnected from the Controller.			
124	TP disconnected from the Controller.			
125	OP disconnected from the Controller.			
126	Working mode changed to AUTO.			
127	Working mode changed to Program.			
128	Working mode changed to Teach.			
129	Remote Ethernet connected to the Controller.			
130	Remote Ethernet disconnected from the Controller.			
131	Remote RS232 connected to the Controller.			
132	Remote RS232 disconnected from the Controller.		LogoutStatus 0:Nomal 1:Abnormal (Timeout)	

Warnings

No.	Message	Remedy	Note 1	Note 2
501	Trace history is active.	Effects system performance if trace history is active.		
502	Memory has been initialized.	When this error occurs, the value of the Global Preserve variable will be initialized. Replace the CPU board battery. Replace the CPU board.		
505	Reboot the controller.			
511	Battery voltage of the CPU board backup is lower than the allowed voltage. Replace the CPU board battery.	Replace the CPU board battery immediately. Keep the power to the controller ON as far as possible until you replace the battery.	Current value	Boundary value
512	5V input voltage for the CPU board is lower than the allowed voltage.	If normal voltage is not generated by a 5V power supply alone, replace the power supply.	Current value	Boundary value
513	24 V input voltage for the motor brake, encoder and fan is lower than the specified voltage.	If normal voltage is not generated by a 24V power supply alone, replace the power supply.	Current value	Boundary value
514	Internal temperature of the Controller is higher than the allowed temperature.	Stop the controller as soon as possible and check whether the ambient temperature of the controller is not high. Check whether the filter is not clogged up.	Current value	Boundary value
515	Rotating speed of the controller fan is below the allowed speed. (FAN1)	Check whether the filter is not clogged up. If the warning is not cleared after the controller is rebooted, replace the fan.	Current value	Boundary value
516	Rotating speed of the controller fan is below the allowed speed. (FAN2)	Check whether the filter is not clogged up. If the warning is not cleared after the controller is rebooted, replace the fan.	Current value	Boundary value
517	Internal temperature of the Controller is higher than the allowed temperature.			
598	Robot stopped due to a collision detection. Move in a different direction to avoid the collision.			
599	Jogging attempted near singularity point.			
700	Motor driver type does not match the current robot model. Check the robot model. Replace the motor driver.	Check the robot model.		
736	Encoder has been reset. Reboot the controller.	Reboot the controller.		
737	Low voltage from the encoder battery. Replace the battery with the controller ON.	Replace the battery for the robot with the controller ON.		
752	Servo alarm D.			

Controller Main

No.	Message	Remedy	Note 1	Note 2
1001	Operation Failure. Command parameter is invalid.			
1002	Requested data cannot be accessed. The data is not set up or the range is invalid.	Check whether the target I/O, variables, and tasks exist.		
1003	The password is invalid	Enter the correct password.		
1004	Cannot execute with unsupported version.	Use the correct version file.		
1005	Cannot execute with invalid serial number.	Use the backup data for the same controller to restore the controller configuration.		
1006	Cannot execute with invalid Robot model.	Use the backup data for the same controller to restore the controller configuration.		
1007	Cannot execute with invalid Controller.	Controller connected with PC is not supported. Connect with a regular controller.		
1008	Initialization failure. Failed to initialize TP.			
1009	OP is not supported by the connected controller.			
1020	Cannot execute in recovery mode.	Boot the controller as normal.		
1021	Cannot execute due to controller initialization failure.	Restore the controller configuration.		
1022	Cannot execute without the project being open.	Open a project.		
1023	Cannot execute while the project is open.	Rebuild the project.		
1024	Cannot activate from remote.	Enable the remote input.		
1025	Execution in Teach mode is prohibited.	Change to the AUTO mode.		
1026	Cannot execute in Teach mode except from TP.	Change to the AUTO mode.		
1027	Cannot execute in Auto mode.	Change to the Program mode.		
1028	Cannot execute in Auto mode except from the main console.	Change to the Program mode.		
1029	Cannot execute from OP.	Enable the OP input.		
1030	Does not allow Operation mode to be changed.	Change to the Auto mode with a console in the Program mode.		
1031	Cannot execute while tasks are executing.	Stop the task and then execute.		
1032	Cannot execute while the maximum number of tasks are executing.	Stop the task and then execute.		
1033	Cannot execute during asynchronous motion command.	Execute after the motion ends.		
1034	Asynchronous command stopped during operation.	The asynchronous command already stopped when the controller received a stop command.		
1035	Cannot execute in Remote enable except from the Remote.			
1036	Cannot execute in OP enable except from the OP.			

No.	Message	Remedy	Note 1	Note 2
1037	Cannot execute in Remote Ethernet enable except from the Remote Ethernet.			
1040	Cannot execute in Remote RS232C enable except from the Remote RS232C.			
1041	Cannot execute during Emergency Stop status.	Cancel the Emergency Stop status.		
1042	Cannot execute while the safeguard is open.	Close the safeguard.		
1043	Cannot execute during error condition.	Cancel the error condition.		
1044	Cannot execute when the remote pause input is ON.	Change the remote pause input to OFF.		
1045	Input waiting condition is the only available condition to input.	The controller received an input while it was not in the Input waiting condition.		
1046	Cannot execute during file transfer.	Execute after the file transmission.		
1047	Cannot cancel the command executed from other devices.	Cancel the motion command from the device the command was issued from.		
1048	Cannot execute after after low voltage was detected.			
1049	Other devices are in program mode.			
1050	Password is too long.			
1051	Export Controller Status failed.			
1052	Export Controller Status busy.			
1100	File failure. Cannot access the file.			
1102	File failure. Read and write failure of the registry			
1103	File is not found.	Check whether the file exists.		
1104	Project file was not found.	Rebuild the project.		
1105	Object file was not found.	Rebuild the project.		
1106	Point files were not found.	Rebuild the project.		
1107	The program is using a feature that is not supported by the current controller firmware version.			
1108	One or more source files are updated. Please build the project.	Rebuild the project.		
1109	Not enough storage capacity.	Increase free space of the USB memory.		
1110	File is not found.			
1120	File failure. Setting file is corrupt.	Restore the controller configuration.		
1121	File failure. Project file is corrupt.	Rebuild the project.		
1122	File failure. Point file is corrupt.	Rebuild the project.		
1123	File failure. I/O label file is corrupt.	Rebuild the project.		
1124	File failure. User error file is corrupt.	Rebuild the project.		
1125	File failure. Error message file is corrupt.			
1126	File failure. Software option infomation is corrupt.			
1127	File failure. Vision file is corrupt.	Rebuild the project.		
1128	File failure. Backup information file is corrupt.			
1130	Error message failure. No item is found in the error history.			

No.	Message	Remedy	Note 1	Note 2
1131	Cannot access the USB memory.	Insert the USB memory properly. When this error still occurs after the USB memory is inserted properly, the memory may be unrecognizable to controller. Insert another memory to check the operation.		
1132	File failure. Failed to copy the file.			
1133	File failure. Failed to delete the file.			
1135	File failure. The name of Playback is invalid.			
1140	File failure. Failed to open the object file.			
1141	File failure. Failed to open the project file.			
1142	File failure. Failed to read the project file.			
1143	File failure. Failed to open the condition save file.			
1144	File failure. Failed to write the condition save file.			
1150	File failure. Error history is invalid.			
1151	File failure. Failed to map the error history.			
1152	File failure. Failed to open the error history file.			
1153	File failure. Failed to write the error history file.			
1155	File failure. Failed to open the settings file.	Restore the controller configuration.		
1156	File failure. Failed to save the settings file.	Restore the controller configuration.		
1157	File failure. Failed to read the settings file.	Restore the controller configuration.		
1158	File failure. Failed to write the settings file.	Restore the controller configuration.		
1160	MCD failure. Failed to open the MCD file.	Restore the controller configuration.		
1161	MCD failure. Failed to read the MCD file.	Restore the controller configuration.		
1162	MCD failure. Failed to write the MCD file.	Restore the controller configuration.		
1163	MCD failure. Failed to save the MCD file.	Restore the controller configuration.		
1165	MPD failure. Failed to open the MPD file.			
1166	MPD failure. Failed to read the MPD file.			
1167	MPD failure. Failed to write the MPD file.			
1168	MPD failure. Failed to save the MPD file.			
1170	MPL failure. Failed to open the MPL file.			
1171	MPL failure. Failed to read the MPL file.			

No.	Message	Remedy	Note 1	Note 2
1172	MPL failure. Failed to write the MPL file.			
1173	MPL failure. Failed to save the MPL file.			
1175	MAL failure. Failed to open the MAL file.			
1176	MAL failure. Failed to read the MAL file.			
1177	MAL failure. Failed to write the MAL file.			
1178	MAL failure. Failed to save the MAL file.			
1180	MTR failure. Failed to create the MTR file.			
1181	PRM failure. Failed to replace the PRM file.			
1185	File failure. Failed to open the backup information file.			
1186	File failure. Failed to read the backup information file.			
1187	File failure. Failed to write the backup information file.			
1188	File failure. Failed to save the backup information file.			
1189	The backup data was created by an old version.	Cannot restore the controller configuration in the specified procedure for using old backup data. Check the backup data.		
1190	The backup data was created by a newer version.			
1191	There is no project in the backup data.			
1200	Compile failure. Check the compile message.	This error occurs during compilation from TP. Correct where the error occurred.		
1201	Link failure. Check the link message.	This error occurs during compilation from TP. Correct where the error occurred.		
1500	Communication error.			
1501	Command did not complete in time.	Execute the command again after a while. Check the connection between the PC and controller.		
1502	Communication disconnection between PC and Controller. Re-establish communication.	Check the connection between the PC and controller.		
1503	Disconnection while executing a task.			
1510	Out of IP Address range.			
1521	Vision communication. Failed to initialize Ethernet.			
1522	Vision communication. Failed to terminate Ethernet.			
1523	Vision communication. Failed to create the socket handle.			
1524	Vision communication. Failed to connect.			

No.	Message	Remedy	Note 1	Note 2
1526	Vision communication. Failed to send to the server.	Check the connection of the camera and controller.		
1527	Vision communication. Failed to read from the server.	Check the connection of the camera and controller.		
1528	Vision communication. Failed to set option.			
1529	Vision communication. Ethernet has not been initialized yet.			
1530	Vision communication. Connection is not completed.	Check the connection of the camera and controller.		
1531	Vision communication. All sockets are used.			
1532	Vision communication. Send timeout.	Check the connection of the camera and controller.		
1533	Vision communication. Read timeout.	Check the connection of the camera and controller.		
1534	Vision communication. Communication error.	Check the connection of the camera and controller.		
1550	Communication failure. Ethernet initialization error.			
1551	Communication failure. USB initialization error.			
1552	Communication failure. Controller internal communication error.			
1553	Communication failure. Invalid data is detected.			
1555	Ethernet transmission error.	Check the connection between the PC and controller.		
1556	Ethernet reception error.	Check the connection between the PC and controller.		
1557	USB transmission error.	Check the connection between the PC and controller.		
1558	USB reception error.	Check the connection between the PC and controller.		
1559	Communication failure. Failed to allocate memory.			
1580	Parser communication error.			
1581	Parser communication failure. Timeout error occurred during communication with parser.			
1582	Parser communication failure. Parser transmission error.			
1583	Parser communication failure. Parser initialization error.			
1584	Parser communication failure. Connection error.			
1585	Parser communication failure. Parameter is invalid.			
1586	Parser communication failure. Busy.			
1587	Parser communication failure. Invalid data is detected.			
1901	Unsupported. Unsupported command was attempted.			
1902	Unsupported. Unsupported parameter was specified.			

No.	Message	Remedy	Note 1	Note 2
1903	System error.			

Operator Panel

No.	Message	Remedy	Note 1	Note 2
1600	Initialization failure. Failed to initialize OP.			
1603	Timeout error occurred during communication with OP.	Check whether the cable is firmly connected. Replace the cable.		
1604	Parity error occurred during communication with OP.	Check whether the cable is firmly connected. Replace the cable.		
1605	Framing error occurred during communication with OP.	Check whether the cable is firmly connected. Replace the cable.		
1606	Overrun error occurred during communication with OP.	Check whether the cable is firmly connected. Replace the cable.		
1607	Checksum error occurred during communication with OP.	Check whether the cable is firmly connected. Replace the cable.		
1608	Retry error occurred during communication with OP.	Check whether the cable is firmly connected. Replace the cable.		
1609	OP cannot be connected.	Upgrade the controller software. Upgrade the OP firmware.		

Teach Pendant

No.	Message	Remedy	Note 1	Note 2
1700	Initialization failure. Failed to initialize TP.			
1701	Initialization failure. Failed to initialize TP.			
1702	Initialization failure. Failed to initialize TP.			
1703	File failure. Failed to read the screen data file.			
1704	Failed to read the setting file.			
1706	Failed to open the TP port.			
1708	Failed to read the key table for TP.			
1709	Failed to change the language.			
1710	Failed to make the screen.			

PC

No.	Message	Remedy	Note 1	Note 2
1800	The controller is already connected to a PC.	Only one PC can be connected to the controller.		
1802	The command was attempted without being connected to a controller.			
1803	Failed to read or write the file on the PC.			
1804	Initialization failure. Failed to allocate memory on the PC.			
1805	Connection failure. Check the controller startup and connection of the communication cable.			
1806	Timeout during connection via Ethernet.			
1807	Timeout during connection via USB.			
1808	USB driver is not installed.	Failed to install EPSON RC+ 5.0. Install EPSON RC+ 5.0 again.		
1851	Unsupported. Unsupported command was attempted.			
1852	System error. Uncommon error.			

Simulator

No.	Message	Remedy	Note 1	Note 2
1861	Initialization failure. Failed to initialize SimulatorMNG.			
1862	Initialization failure. Failed to initialize WBProxy.			
1863	The parameter is invalid.			
1864	Initialization failure. Virtual controller does not exist.	Installation of EPSON RC+ 5.0 was failed. Reinstall EPSON RC+ 5.0.		
1865	Initialization failure. Failed to start virtual controller.	Try again after a while.		
1866	Termination failure. Failed to terminate virtual controller.			
1867	Cannot execute because it is not dry run mode.			
1868	Initialization failure. Directory cannot be found.			
1869	Initialization failure. File cannot be found.			
1870	Pallet failure. Number of point is beyond the maximum value.			
1871	Connection failure. Virtual controller version is old.			
1872	Connection failure. Files for simulator that used real controller cannot be found.			
1873	Connection failure. Files for simulator that used virtual controller cannot be found.	Register the virtual controller again in the connection setting.		
1874	Virtual Controller cannot be added.	Installation of EPSON RC+ 5.0 was failed. Reinstall EPSON RC+ 5.0.		
1875	Simulator Object failure. Cannot register data of the simulator object.			
1876	Simulator Object failure. Cannot register data of the simulator object.			
1877	Simulator Object failure. Cannot remove data of the simulator object.			
1878	Simulator Object failure. Cannot update data of the simulator object.			
1879	Other virtual controllers are starting.	Start another EPSON RC+5.0 and check if it connects with the virtual controller.		
1880	Cannot execute during controller reset.			

No.	Message	Remedy	Note 1	Note 2
7750	Initialization failure.	Reboot RC+.		
7751	Failed to save the objects.	Reboot RC+.		
7752	Failed to load the objects.	Reboot RC+.		
7753	Failed to mapping of memory.	Reboot RC+.		
7754	The virtual controller already exists.	Name of the virtual controller may be duplicated. Check the virtual controller name.		
7755	Failed to create the virtual controller connection information.	Reboot RC+.		
7756	The copy source of the virtual controller does not exist.	Check the virtual controller name.		
7757	The copy destination of the virtual controller already exists.	Name of the virtual controller may be duplicated. Check the virtual controller name.		
7758	Failed to copy the virtual controller connection information.	Reboot RC+.		
7759	Failed to delete the virtual controller connection information.	Reboot RC+.		
7760	Failed to delete the controller connection information.	Reboot RC+.		
7761	Failed to rename the controller connection information.	Check the virtual controller name.		
7762	The rename source of the virtual controller does not exist.	Check the virtual controller name.		
7763	The rename destination of the virtual controller already exists.	Check the virtual controller name.		
7764	Invalid Robot number.	Reboot RC+.		
7765	Failed to read the Robot definition file.	Check whether the definition file exists.		
7766	Failed to copy the layout objects.	Reboot RC+		
7767	Failed to cut the layout objects.	Reboot RC+		
7768	Failed to paste the layout objects.	Reboot RC+		
7769	Failed to remove the Robot.	Reboot RC+		
7770	Cannot execute with unsupported version.	Update RC+ to the latest version		

Interpreter

No.	Message	Remedy	Note 1	Note 2
2000	Unsupported. Unsupported command was attempted.	Rebuild the project.		
2001	Unsupported. Unsupported motion command was attempted.	Rebuild the project.		
2002	Unsupported. Unsupported conveyer command was attempted.	Rebuild the project.		
2003	Unsupported. Unsupported Function argument was specified.	Rebuild the project.		
2004	Unsupported. Unsupported Function return value was specified.	Rebuild the project.		
2005	Unsupported. Unsupported condition was specified.	Rebuild the project.		
2006	Unsupported. Unsupported I/O command was specified.	Rebuild the project.		
2007	Unsupported condition was specified.			
2008	Unsupported. Unknown error number.			
2009	Unsupported. Invalid Task number.			
2010	Object file error. Build the project. Out of internal code range.	Rebuild the project.		
2011	Object file error. Build the project. Function argument error.	Rebuild the project.		
2012	Object file error. Build the project. Command argument error.	Rebuild the project.		
2013	Object file error. Build the project. Cannot process the code.	Rebuild the project.		
2014	Object file error. Build the project. Cannot process the variable type code.	Rebuild the project.		
2015	Object file error. Build the project. Cannot process the string type code.	Rebuild the project.		
2016	Object file error. Build the project. Cannot process the variable category code.	Rebuild the project.		
2017	Object file error. Build the project. Cannot process because of improper code.	Rebuild the project.		
2018	Object file error. Build the project. Failed to calculate the variable size.	Rebuild the project.		
2019	Object file error. Cannot process the variable wait. Build the project.	Rebuild the project.		
2020	Stack table number exceeded. Function call or local variable is out of range.	Check whether no function is called infinitely. Reduce the Call function depth.		
2021	Stack area size exceeded. Stack error. Function call or local variable is out of range.	If using many local variables, especially String type, replace them to global variables.		

No.	Message	Remedy	Note 1	Note 2
2022	Stack failure. Required data not found on the stack.	Rebuild the project.		
2023	Stack failure. Unexpected tag found on the stack.	Rebuild the project.		
2030	System failure. Drive unit quantity is beyond the maximum count.	Restore the controller configuration.		
2031	System failure. Robot number is beyond the maximum count.	Restore the controller configuration.		
2032	System failure. Task number compliance error.	Rebuild the project.		
2033	System failure. Too many errors.	Remedy the errors occurring frequently.		
2040	Thread failure. Failed to create the thread.			
2041	Thread failure. Thread creation timeout.			
2042	Thread failure. Thread termination timeout.			
2043	Thread failure. Thread termination timeout.			
2044	Thread failure. Daemon process timeout.			
2045	Thread failure. Task continuance wait timeout.			
2046	Thread failure. Task stop wait timeout.			
2047	Thread failure. Task startup wait timeout.			
2050	Object file operation failure. Object file size is beyond the allowable size.	Rebuild the project.		
2051	Object file operation failure. Cannot delete the object file during execution.	Reboot the controller.		
2052	Object file operation failure. Cannot allocate the memory for the object file.	Reboot the controller.		
2053	Object file update. Updating the object file.	Perform the same processing after a while. Rebuild the project.		
2054	Object file operation failure. Synchronize the project. Function ID failure.	Synchronize the files of the project. Rebuild the project.		
2055	Object file operation failure. Synchronize the project. Local variable ID failure.	Synchronize the files of the project. Rebuild the project.		
2056	Object file operation failure. Synchronize the project. Global variable ID failure.	Synchronize the files of the project. Rebuild the project.		
2057	Object file operation failure. Synchronize the project. Global Preserve variable ID failure.	Synchronize the files of the project. Rebuild the project.		
2058	Object file operation failure. Failed to calculate the variable size.	Synchronize the files of the project. Rebuild the project.		

No.	Message	Remedy	Note 1	Note 2
2059	Exceed the global variable area. Cannot assign the Global variable area.	Reduce the number of Global variables to be used.		
2070	SRAM failure. SRAM is not mapped.	Replace the CPU board.		
2071	SRAM failure. Cannot delete when Global Preserve variable is in use.	Perform the same processing after a while. Rebuild the project.		
2072	Exceed the backup variable area. Cannot assign the Global Preserve variable area.	Reduce the number of Global Preserve variables to be used.	Maximum size	The size you attempted to use
2073	SRAM failure. Failed to clear the Global Preserve variable area.	Rebuild the project.		
2074	SRAM failure. Failed to clean up the Global Preserve variable save area.	Reboot the controller.		
2100	Initialization failure. Failed to open the initialization file.	Restore the controller configuration.		
2101	Initialization failure. Duplicated initialization.			
2102	Initialization failure. Failed to initialize MNG.			
2103	Initialization failure. Failed to create an event.			
2104	Initialization failure. Failed to setup a priority.			
2105	Initialization failure. Failed to setup the stack size.			
2106	Initialization failure. Failed to setup an interrupt process.			
2107	Initialization failure. Failed to start an interrupt process.			
2108	Initialization failure. Failed to stop an interrupt process.			
2109	Initialization failure. Failed to terminate MNG.	Reboot the controller.		
2110	Initialization failure. Failed to allocate memory.	Reboot the controller.		
2111	Initialization failure. Failed to initialize motion.	Restore the controller configuration.		
2112	Initialization failure. Failed to terminate motion.	Reboot the controller.		
2113	Initialization failure. Failed to map SRAM.	Replace the CPU board.		
2114	Initialization failure. Failed to register SRAM.	Replace the CPU board.		
2115	Initialization failure. Fieldbus board is beyond the maximum count.			
2116	Initialization failure. Failed to initialize fieldbus.			
2117	Initialization failure. Failed to terminate fieldbus.			

No.	Message	Remedy	Note 1	Note 2
2118	Initialization failure. Failed to open motion.	Restore the controller configuration.		
2119	Initialization failure. Failed to initialize conveyor tracking.	Make sure the settings of conveyor and encoder are correct.		
2120	Initialization failure. Failed to allocate the system area.	Reboot the controller.		
2121	Initialization failure. Failed to allocate the object file area.	Reboot the controller.		
2122	Initialization failure. Failed to allocate the robot area.	Reboot the controller.		
2123	Initialization failure. Failed to create event.	Reboot the controller.		
2124	Initialization failure. Failed to create the simulator data file.			
2130	MCD failure. Failed to open the MCD file.	Restore the controller configuration.		
2131	MCD failure. Failed to map the MCD file.	Restore the controller configuration.		
2132	PRM failure. PRM file cannot be found.	Restore the controller configuration.		
2133	PRM failure. Failed to map the PRM file.	Restore the controller configuration.		
2134	PRM failure. PRM file contents error.	Restore the controller configuration.		
2135	PRM failure. Failed to convert the PRM file.			
2136	PRM failure. Failed to convert the PRM file.			
2137	PRM failure. Failed to convert the PRM file.			
2150	Operation failure. Task number cannot be found.			
2151	Operation failure. Executing the task.			
2152	Operation failure. Object code size failure.			
2153	Operation failure. Jog parameter failure.			
2154	Operation failure. Executing jog.			
2155	Operation failure. Cannot execute the jog function.			
2156	Operation failure. Jog data is not configured.			
2157	Operation failure. Failed to change the jog parameter.			
2158	Operation failure. Failed to allocate the area for the break point.			
2159	Operation failure. Break point number is beyond the allowable setup count.			
2160	Operation failure. Failed to allocate the function ID.			
2161	Operation failure. Failed to allocate the local variable address.			

No.	Message	Remedy	Note 1	Note 2
2162	Operation failure. Not enough buffer to store the local variable.			
2163	Operation failure. Value change is available only when the task is halted.			
2164	Operation failure. Failed to allocate the global variable address.			
2165	Operation failure. Not enough buffer to store the global variable.			
2166	Operation failure. Failed to obtain the Global Preserve variable address.			
2167	Operation failure. Not enough buffer to store the Global Preserve variable.			
2168	Operation failure. SRAM is not mapped.			
2169	Operation failure. Cannot clear the Global Preserve variable when loading the object file.			
2170	Operation failure. Not enough buffer to store the string.			
2171	Operation failure. Cannot start the task after low voltage was detected.			
2172	Operation failure. Duplicated remote I/O configuration.			
2173	Remote setup error. Cannot assign non-existing input number to remote function.			
2174	Remote setup error. Cannot assign non-existing output number to remote function.			
2175	Operation failure. Remote function is not configured.			
2176	Operation failure. Event wait error.			
2177	Operation failure. System backup failed.			
2178	Operation failure. System restore failed.			
2179	Remote setup error. Cannot assign same input number to some remote functions.			
2180	Remote setup error. Cannot assign same output number to some remote functions.			
2190	Cannot calculate because it was queue data.	Check the program.		
2192	Cannot execute AbortMotion because robot task is already finished.			
2193	Cannot execute Recover without motion because AbortMotion was not executed.	Execute AbortMotion in advance to execute Recover WithoutMove.		
2194	Conveyor setting error.	Make sure the settings of conveyor and encoder are correct.		
2195	Conveyor setting error.	Make sure the settings of conveyor and encoder are correct.		

No.	Message	Remedy	Note 1	Note 2
2196	Conveyor number is out of range.	Make sure the settings of conveyor and encoder are correct.		
2200	Robot in use. Cannot execute the motion command when other tasks are using the robot.	The motion command for the robot cannot be simultaneously executed from more than one task. Review the program.		
2201	Robot does not exist.	Check whether the robot setting is performed properly. Restore the controller configuration.		
2202	Motion control module status failure. Unknown error was returned.			
2203	Cannot clear local number ' 0 '.	The Local number 0 cannot be cleared. Review the program.		
2204	Cannot clear an arm while in use.	The Arm cannot be cleared while it is in use. Check whether the Arm is not used.	The Arm number you attempted to clear	
2205	Cannot clear arm number ' 0 '.	The Arm number 0 cannot be cleared. Review the program.		
2206	Cannot clear a tool while in use.	The Tool cannot be cleared while it is in use. Check whether the Tool is not used.	The Tool number you attempted to clear	
2207	Cannot clear tool number ' 0 '.	The Tool number 0 cannot be cleared. Review the program.		
2208	Cannot clear ECP ' 0 '.	The ECP number 0 cannot be cleared. Review the program.		
2209	Cannot clear an ECP while in use.	The ECP cannot be cleared while it is in use. Check whether the ECP is not used.	The ECP number you attempted to clear	
2210	Cannot specify ' 0 ' as the local number.	The command processing the Local cannot specify the Local number 0. Review the program.		
2216	Box number is out of range.			
2217	Box number is not defined.			
2218	Plane number is out of range.			
2219	Plane number is not defined.			
2220	PRM failure. No PRM file data is found.	Reboot the controller. Restore the controller configuration.		
2221	PRM failure. Failed to flash the PRM file.	Reboot the controller. Restore the controller configuration.		
2222	Local number is not defined.	Check the Local setting. Review the program.	The specified Local number	
2223	Local number is out of range.	Available Local number is from 1 to 15. Review the program.	The specified Local number	
2224	Unsupported. MCOFS is not defined			
2225	CalPls is not defined.	Check the CalPls setting.		

No.	Message	Remedy	Note 1	Note 2
2226	Arm number is out of range.	Available Arm number is from 0 to 3. Depending on commands, the Arm number 0 is not available. Review the program.	The specified Arm number	
2227	Arm number is not defined.	Check the Arm setting. Review the program.	The specified Arm number	
2228	Pulse for the home position is not defined.	Check the HomeSet setting.		
2229	Tool number is out of range.	Available Tool number is from 0 to 3. Depending on commands, the Tool number 0 is not available. Review the program.	The specified Tool number	
2230	Tool number is not defined.	Check the Tool setting. Review the program.	The specified Tool number	
2231	ECP number is out of range.	Available Tool number is from 0 to 15. Depending on commands, the Tool number 0 is not available. Review the program.	The specified ECP number	
2232	ECP number is not defined.	Check the ECP setting. Review the program.	The specified ECP number	
2233	Axis to reset the encoder was not specified.	Be sure to specify the axis for encoder reset.		
2234	Cannot reset the encoder with motor in the on state.	Turn the motor power OFF before reset.		
2235	XYLIM is not defined.	Check the XYLim setting. Review the program.		
2236	PRM failure. Failed to set up the PRM file contents to the motion control status module.	Reboot the controller. Restore the controller configuration.		
2240	Array subscript is out of user defined range. Cannot access or update beyond array bounds.	Check the array subscript. Review the program.	The dimensions exceeding the definition	The specified subscript
2241	Dimensions of array do not match the declaration.	Check the array's dimensions. Review the program.		
2242	Zero '0' was used as a divisor.	Review the program.		
2243	Variable overflow. Specified variable was beyond the maximum allowed value.	Check the variable type and calculation result. Review the program.		
2244	Variable underflow. Specified variable was below the minimum allowed value.	Check the variable type and calculation result. Review the program.		
2245	Cannot execute this command with a floating point number.	This command cannot be executed for Real or Double type. Review the program.		
2246	Cannot calculate the specified value using the Tan function.	Check the specified value. Review the program.	The specified value	
2247	Specified array subscript is less than ' 0 '.	Check the specified value. Review the program.	The specified value	
2248	Array failure. Redim can only be executed for an array variable.	You attempted to redimension the variable that is not array. Rebuild the project.		
2249	Array failure. Cannot specify Preserve for other than a single dimension array.	Other than a single dimension array was specified as Preserve for Redim. Rebuild the project.		

No.	Message	Remedy	Note 1	Note 2
2250	Array failure. Failed to calculate the size of the variable area.	Rebuild the project.		
2251	Cannot allocate enough memory for Redim statement.	Reduce the number of subscripts to be specified for Redim. Perform Redim modestly.		
2252	Cannot allocate enough memory for ByRef.	Reduce the number of array's subscripts to be seen by ByRef.		
2253	Cannot compare characters with values.	Check whether the string type and the numeric data type are not compared. Review the program.		
2254	Specified data is beyond the array bounds. Cannot refer or update beyond the array bounds.	Check the number of array's subscripts and data. Review the program.	The number of array subscripts	The number of data to be referred or updated
2255	Variable overflow or underflow. Specified variable is out of value range.	The value that exceeds the range of Double type is specified. Review the program.		
2256	Specified array subscript is beyond the maximum allowed range.	Reduce the number of subscripts to be specified. For available subscripts, see the online help.		
2260	Task number is out of the available range.	For available task number, see the online help. Review the program.	The specified task number	
2261	Specified task number does not exist.	Review the program.	The specified task number	
2262	Robot number is out of the available range.	The available Robot number is 1. Review the program.	The specified robot number	
2263	Output number is out of the available range. The Port No. or the Device No. is out of the available range.	For available output number, see the online help. Review the program.	The specified output number	
2264	Command argument is out of the available range. Check the validation. Added data 1: Passed value. Added data 2: argument order.	For available range of argument, see the online help. Review the program.	The specified value	What number argument?
2265	Joint number is out of the available range.	Available Joint number is from 1 to 6. Review the program.	The specified joint number	
2266	Wait time is out of available range.	Available wait time is from 0 to 2147483. Review the program.	The specified wait time	
2267	Timer number is out of available range.	Available timer number is from 0 to 15. Review the program.	The specified timer number	
2268	Trap number is out of available range.	Available trap number is from 1 to 4. Review the program.	The specified trap number	
2269	Language ID is out of available range.	For available language ID, see the online help. Review the program.	The specified language ID	
2270	Specified D parameter value at the parallel process is out of available range.	Available D parameter value is from 0 to 100. Review the program.	The specified D parameter value	
2271	Arch number is out of available range.	Available arch number is from 0 to 7. Review the program.	The specified arch number	
2272	Device No. is out of available range.	The specified number representing a control device or display device is out of available range. For available device number, see the online help. Review the program.	The specified device number	

No.	Message	Remedy	Note 1	Note 2
2273	Output data is out of available range.	Available output data value is from 0 to 255. Review the program.	Output data	What number byte data is out of range?
2274	Asin argument is out of available range. Range is from -1 to 1.	Review the program.		
2275	Acos argument is out of available range. Range is from -1 to 1.	Review the program.		
2276	Sqr argument is out of available range.	Review the program.		
2277	Randomize argument is out of available range.	Review the program.		
2278	Sin, Cos, Tan argument is out of available range.	Review the program.		
2280	Timeout period set by the TMOut statement expired before the wait condition was completed in the WAIT statement.	Investigate the cause of timeout. Check whether the set timeout period is proper.	Timeout period	
2281	Timeout period set by TMOut statement in WaitSig statement or SyncLock statement expired.	Investigate the cause of timeout. Check whether the set timeout period is proper.	Signal number	Timeout period
2282	Timeout period set by TMOut statement in WaitNet statement expired.	Investigate the cause of timeout. Check whether the set timeout period is proper.	Port number	Timeout period
2283	Timeout. Timeout at display device setting.	Reboot the controller.		
2290	Cannot execute a motion command.	Cannot execut the motion command after using the user function in the motion command. Review the program.		
2291	Cannot execute the OnErr command.	Cannot execute OnErr in the motiion command when using user function in the motion command. Review the program.		
2292	Cannot execute an I/O command while the safeguard is open. Need Forced.			
2293	Cannot execute an I/O command during emergency stop condition. Need Forced.			
2294	Cannot execute an I/O command when an error has been detected. Need Forced.			
2295	Cannot execute this command from a NoEmgAbort Task.			
2296	One or more source files are updated. Please build the project.	Rebuild the project.		
2297	Cannot execute an I/O command in TEACH mode without the Forced parameter.	-		
2298	Cannot continue execution in Trap SGClose process.	You cannot execute Cont and Recover statements with processing task of Trap SGClose.		
2299	Cannot execute this command. Need the setting.	Enable the [enable the advance taskcontrol commands] from RC+ to execute the command.		

No.	Message	Remedy	Note 1	Note 2
2300	Robot in use. Cannot execute the motion command when other task is using the robot.	The motion command for the robot cannot be simultaneously executed from more than one task. Review the program.	Task number that is using the robot	
2301	Cannot execute the motion command when the Enable Switch is OFF.			
2302	Cannot execute a Call statement in a Trap Call process.	Another function cannot be called from the function called by Trap Call. Review the program.		
2303	Cannot execute a Call statement in a parallel process.	Review the program.		
2304	Cannot execute an Xqt statement in a parallel process.	Review the program.		
2305	Cannot execute a Call statement from the command window.			
2306	Cannot execute an Xqt statement from the task started by Trap Xqt.	Review the program.		
2307	Cannot execute this command while tasks are executing.	Check whether all tasks are completed.		
2308	Cannot turn on the motor because of a critical error.	Find the previously occurring error in the error history and resolve its cause. Then, reboot the controller.		
2309	Cannot execute a motion command while the safeguard is open.	Check the safeguard status.		
2310	Cannot execute a motion command while waiting for continue.	Execute the Continue or Stop and then execute the motion command.		
2311	Cannot execute a motion command during the continue process.	Wait until the Continue is complete and then execute the motion command.		
2312	Cannot execute a task during emergency stop condition.	Check the emergency stop status.		
2313	Cannot continue execution immediately after closing the safeguard.	Wait 1.5 seconds after the safeguard is open, and then execute the Continue.		
2314	Cannot continue execution while the safeguard is open.	Check the safeguard status.		
2315	Duplicate execution continue.	Wait until the Continue is completed.		
2316	Cannot continue execution after an error has been detected.	Check the error status.		
2317	Cannot execute the task when an error has been detected.	Reset the error by Reset and then execute the task.		
2318	Cannot execute a motion command when an error has been detected.			
2319	Cannot execute a I/O command during emergency stop condition.			
2320	Function failure. Argument type does not match.	Rebuild the project.		
2321	Function failure. Return value does not match to the function.	Rebuild the project.		
2322	Function failure. ByRef type does not match.	Rebuild the project.		
2323	Function failure. Failed to process the ByRef parameter.	Rebuild the project.		

No.	Message	Remedy	Note 1	Note 2
2324	Function failure. Dimension of the ByRef parameter does not match.	Rebuild the project.		
2325	Function failure. Cannot use ByRef in an Xqt statement.	Rebuild the project.		
2326	Cannot execute a Dll Call statement from the command window.	-		
2327	Failed to execute a Dll Call.	-		
2328	Cannot execute the task before connect with RC+.	You need to connect with RC+ before executing the task.		
2329	Cannot execute a Eval statement in a Trap Call process.	Check the program.		
2330	Trap failure. Cannot use the argument in Trap Call or Xqt statement.	Check the program.		
2331	Trap failure. Failed to process Trap Goto statement.	Rebuild the project.		
2332	Trap failure. Failed to process Trap Goto statement.	Rebuild the project.		
2333	Trap failure. Trap is already in process.	Rebuild the project.		
2334	Cannot execute a Eval statement in a Trap Finsh and Trap Abort process.	Check the program.		
2335	Cannot continue execution and Reset Error in TEACH mode.	Check the program.		
2336	Cannot use Here statement with a parallel process.	Go Here :Z(0) ! D10; MemOn(1) ! is not executable. Change the program to: P999 = Here Go P999 Here :Z(0) ! D10; MemOn(1) !		
2337	Cannot execute except from the event handler function of GUI Builder	Check the program.		
2340	Value allocated in InBCD function is an invalid BCD value.	Review the program.	Tens digit	Units digit
2341	Specified value in the OpBCD statement is an invalid BCD value.	Review the program.	The specified value	
2342	Cannot change the status for output bit configured as remote output.	Check the remote I/O setting.	I/O number	1: bit, 2: byte, 3: word
2343	Output time for asynchronous output commanded by On or Off statement is out of the available range.	Review the program.	The specified time	
2344	I/O input/output bit number. is out of available range or the board is not installed.	Review the program. Check whether the expansion I/O board and Fieldbus I/O board are correctly detected.	Bit number	
2345	I/O input/output byte number is out of available range or the board is not installed.	Review the program. Check whether the expansion I/O board and Fieldbus I/O board are correctly detected.	Byte number	
2346	I/O input/output word No. is out of available range or the board is not installed.	Review the program. Check whether the expansion I/O board and Fieldbus I/O board are correctly detected.	Word number	
2347	Memory I/O bit number is out of available range.	Review the program.	Bit number	

No.	Message	Remedy	Note 1	Note 2
2348	Memory I/O byte number is out of available range.	Review the program.	Byte number	
2349	Memory I/O word number is out of available range.	Review the program.	Word number	
2350	Command allowed only when virtual I/O mode is active.	The command can be executed only for virtual I/O mode.		
2351	Cannot change the status for CC-Link system area.			
2352	Remote setup error. Cannot assign CC-Link system area to remote function.			
2360	File failure. Failed to open the configuration file.	Restore the controller configuration.		
2361	File failure. Failed to close the configuration file.	Restore the controller configuration.		
2362	File failure. Failed to open the key of the configuration file.	Restore the controller configuration.		
2363	File failure. Failed to obtain the string from the configuration file.	Restore the controller configuration.		
2364	File failure. Failed to write in the configuration file.	Restore the controller configuration.		
2365	File failure. Failed to update the configuration file.	Restore the controller configuration.		
2370	The string combination exceeds the maximum string length.	The maximum string length is 255. Review the program.	Combined string length	
2371	String length is out of range.	The maximum string length is 255. Review the program.	The specified length	
2372	Invalid character is specified after the ampersand in the Val function.	Review the program.		
2373	Illegal string specified for the Val function.	Review the program.		
2374	String Failure. Invalid character code in the string.	Review the program.		
2380	Cannot use ' 0 ' for Step value in For...Next.	Check the Step value.		
2381	Relation between For...Next and GoSub is invalid. Going in or out of a For...Next using a Goto statement.	Review the program.		
2382	Cannot execute Return while executing OnErr.	Review the program.		
2383	Return was used without GoSub. Review the program.	Review the program.		
2384	Case or Send was used without Select. Review the program.	Review the program.		
2385	Cannot execute EResume while executing GoSub.	Review the program.		
2386	EResume was used without OnErr. Review the program.	Review the program.		
2400	Curve failure. Failed to open the Curve file.	Reboot the controller. Create a Curve file again.		
2401	Curve failure. Failed to allocate the header data of the curve file.	Reboot the controller. Create a Curve file again.		
2402	Curve failure. Failed to write the curve file.	Reboot the controller. Create a Curve file again.		

No.	Message	Remedy	Note 1	Note 2
2403	Curve failure. Failed to open the curve file.	Reboot the controller. Create a Curve file again.		
2404	Curve failure. Failed to update the curve file.	Reboot the controller. Create a Curve file again.		
2405	Curve failure. Failed to read the curve file.	Reboot the controller. Create a Curve file again.		
2406	Curve failure. Curve file is corrupt.	Reboot the controller. Create a Curve file again.		
2407	Curve failure. Specified a file other than the curve file.	Reboot the controller. Create a Curve file again.		
2408	Curve failure. Version of the curve file is invalid.	Reboot the controller. Create a Curve file again.		
2409	Curve failure. Robot number in the curve file is invalid.	Reboot the controller. Create a Curve file again.		
2410	Curve failure. Cannot allocate enough memory for the CVMove statement.	Reboot the controller.		
2411	Specified point data in the Curve statement is beyond the maximum count.	The maximum number of points specified in the Curve statement is 200. Review the program.		
2412	Specified number of output commands in the Curve statement is beyond the maximum count.	The maximum number of output commands specified in the Curve statement is 16. Review the program.		
2413	Curve failure. Specified internal code is beyond the allowable size in Curve statement.	Reboot the controller.		
2414	Specified continue point data P(:) is beyond the maximum count.	The maximum number of points specified continuously is 200. Review the program.	Start point	End point
2415	Curve failure. Cannot create the curve file.	Reboot the controller. Create a Curve file again.		
2416	Curve file does not exist.	Check whether the specified Curve file name is correct.		
2417	Curve failure. Output command is specified before the point data.	Check whether no output command is specified before the point data.		
2418	Curve file name is too long.	Check whether the specified Curve file name is correct. The maximum string length of the file name is 32.		
2419	Curve failure. Curve file path is too long.	Check whether the specified Curve file name is correct.		
2420	Curve file name is invalid.			
2430	Error message failure. Error message file does not exist.	Reboot the controller.		
2431	Error message failure. Failed to open the error message file.	Reboot the controller.		
2432	Error message failure. Failed to obtain the header data of the error message file.	Reboot the controller.		
2433	Error message failure. Error message file is corrupted.	Reboot the controller.		
2434	Error message failure. Specified a file other than the error message file.	Reboot the controller.		
2435	Error message failure. Version of the error message file is invalid.	Reboot the controller.		

No.	Message	Remedy	Note 1	Note 2
2440	File Error. File number is used.	Check the file number.		
2441	File Error. Failed to open the file.	Make sure the file exists and you specified the file correctly.		
2442	File Error. The file is not open.	Open the file in advance.		
2443	File Error. The file number is being used by another task.	Check the program.		
2444	File Error. Failed to close the file.			
2445	File Error. File seek failed.			
2446	File Error. All file numbers are being used.			
2447	File Error. No read permision.	Use ROpen or UOpen that has read access to the file.		
2448	File Error. No write permision.	Use WOpen or UOpen that has write access to the file.		
2449	File Error. No binary permision.	Use BOpen that has binary access to the file.		
2450	File Error. Failed to access the file.			
2451	File Error. Failed to write the file.			
2452	File Error. Failed to read the file.			
2453	File Error. Cannot execute the commnad for current disk.	The specified command is not available in the current disk (ChDisk).		
2454	File Error. Invalid disk.			
2455	File Error. Invalid drive.			
2456	File Error. Invalid folder.			
2460	Database Error. The database number is already being used.			
2461	Database Error. The database is not open.			
2462	Database Error. The database number is being used by another task.			
2470	Windows Communication Error. Invalid status.			
2471	Windows Communication Error. Invalid answer.			
2472	Windows Communication Error. Already initialized.			
2473	Windows Communication Error. Busy.			
2474	Windows Communication Error. No request.			
2475	Windows Communication Error. Data buffer overflow.			
2476	Windows Communication Error. Failed to wait for event.			

No.	Message	Remedy	Note 1	Note 2
2477	Windows Communication Error. Invalid folder.	Make sure the specified folder is correct.		
2478	Windows Communication Error. Invalid error code.			
2500	Specified event condition for Wait is beyond the maximum count.	The maximum number of event conditions is 8. Review the program.		
2501	Specified bit number in the Ctr function was not setup with a CTReset statement.	Review the program.	The specified bit number	
2502	Task number is beyond the maximum count to execute.	The available number of the tasks that can be executed simultaneously is 16. Review the program.		
2503	Cannot execute Xqt when the specified task number is already executing.	Review the program.	The specified task number	
2504	Task failure. Specified manipulator is already executing a parallel process.	Rebuild the project.		
2505	Not enough data for Input statement variable assignment.	Check the content of communication data. Review the program.		
2506	Specified variable for the Input statement is beyond the maximum count.	For OP, only one variable can be specified. For other devices, up to 32 variables can be specified.		
2507	All counters are in use and cannot setup a new counter with CTReset.	The available number of the counters that can be set simultaneously is 16. Review the program.		
2508	OnErr failure. Failed to process the OnErr statement.	Rebuild the project.		
2509	OnErr failure. Failed to process the OnErr statement.	Rebuild the project.		
2510	Specified I/O label is not defined.	The specified I/O label is not registered. Check the I/O label file.		
2511	SyncUnlock statement is used without executing a previous SyncLock statement. Review the program.	Review the program.	Signal number	
2512	SyncLock statement was already executed.	The SyncLock statement cannot be executed for the second time in a row. Review the program.	Signal number	
2513	Specified point label is not defined.	The specified point label is not registered. Check the point file.		
2514	Failed to obtain the motor on time of the robot.	Reboot the controller.		
2515	Failed to configure the date or the time.	Check whether a date and time is set correctly.		
2516	Failed to obtain the debug data or to initialize.	Reboot the controller.		
2517	Failed to convert into date or time.	Check the time set on the controller. Reboot the controller.		
2518	Larger number was specified for the start point data than the end point data .	Specify a larger number for the end point data than that for the start point data.	Start point	End point
2519	Specified the format for FmtStr$ can not understand.	Check the format.		
2520	Point file name is too long.	Check whether the specified point file name is correct. The maximum string length of the file name is 32.		

No.	Message	Remedy	Note 1	Note 2
2521	Point failure. Point file path is too long.	Check whether the specified point file name is correct.		
2522	Point file name is invalid.			
2523	The continue process was already executed.			
2524	Cannot execute Xqt when the specified trap number is already executing.			
2525	Password is invalid.	Check whether a password is set correctly.		
2526	No wait terms.			
2527	Too many variables used for global valiable wait.			
2528	The variables cannot use global valiable wait.			
2529	Cannot use Byref if the variables used for global variable wait.			
2530	Too many point files.			
2531	The point file is used by another robot.			
2532	Cannot calculate the point position because there is undefined data.			
2533	Error on INP or OUTP.			
2534	No main function to start on Restart statement.	Without executing main function, Restart is called.		
2535	Does not allow Enable setting in Teach mode to be changed.			
2536	Failed to change Enable setting in Teach mode.			
2539	Password is invalid.	Check whether a password is set correctly.		
2900	Failed to open as server to the Ethernet port.	Check whether the Ethernet port is set properly. Check whether the Ethernet cable is connected properly.		
2901	Failed to open as client to the Ethernet port.	Check whether the Ethernet port is set properly. Check whether the Ethernet cable is connected properly.		
2902	Failed to read from the Ethernet port.	Check whether the port of communication recipient is not close.		
2904	Invalid IP Address was specified.			
2905	Ethernet failure. No specification of Server/Client.			
2906	Ethernet port was not configured.	Check whether the Ethernet port is set properly.	Port number	
2907	Ethernet pot was already in use by another task.	A single port cannot be used by more than one task.	Port number	
2908	Cannot change the port parameters while the Ethernet port is open.	The port parameters cannot be changed while the port is open.	Port number	
2909	Ethernet port is not open.	To use the Ethernet port, execute the OpenNet statement.	Port number	
2910	Timeout reading from an Ethernet port.	Check the communication.	Timeout value	
2911	Failed to read from an Ethernet port.	Check the communication.		
2912	Ethernet port was already open by another task.	A single port cannot be used by more than one task.	Port number	

No.	Message	Remedy	Note 1	Note 2
2913	Failed to write to the Ethernet port.	Check whether the Ethernet port is set properly. Check whether the Ethernet cable is connected properly.	Port number	
2914	Ethernet port connection was not completed.	Check whether the port of communication recipient is open.	Port number	
2915	Data received from the Ethernet port is beyond the limit of one line.	The maximum length of a line is 255 bytes.	The number of bytes in a received line	
2920	RS-232C failure. RS-232C port process error.	Check whether the RS-232C board is correctly detected.		
2921	RS-232C failure. Uncommon error. RS-232C port read process error.			
2926	The RS-232C port hardware is not installed.	Check whether the RS-232C board is correctly detected.	Port number	
2927	RS-232C port is already open by another task.	A single port cannot be used by more than one task.	Port number	
2928	Cannot change the port parameters while the RS-232C port is open.	The port parameters cannot be changed while the port is open.	Port number	
2929	RS-232C port is not open.	To use the RS-232C port, execute the OpenCom statement.	Port number	
2930	Timeout reading from the RS-232C port.	Check the communication.	Timeout value	
2931	Failed to read from the RS-232C port.	Check the communication.		
2932	RS-232C port is already open by another task.	A single port cannot be used by more than one task.	Port number	
2933	Failed to write to the RS-232C port.	Check the communication.	Port number	
2934	RS-232C port connection not completed.			
2935	Data received from the RS-232C port is beyond the limit of one line.	The maximum length of a line is 255 bytes.	The number of bytes in a received line	
2937	Cannot execute while Remote RS-232C are useing.			
2950	Daemon failure. Failed to create the daemon thread.			
2951	Daemon failure. Timeout while creating the daemon thread.			
2952	TEACH/AUTO switching key input signal failure was detected.	Set the TP key switch to TEACH or AUTO properly. Check whether the TP is connected properly.		
2953	ENABLE key input signal failure was detected.	Check whether the TP is connected properly.		
2954	Relay weld was detected.	Overcurrent probably occurred due to short-circuit failure. Investigate the cause of the problem and take necessary measures and then replace the DPB.		
2955	Temperature of regeneration resistor was higher than the specified temperature.	Check whether the filter is not clogged up and the fan does not stop. If there is no problem on the filter and fan, replace the regenerative module.		
2970	MNG failure. Area allocate error.			
2971	MNG failure. Real time check error.			
2972	MNG failure. Standard priority error.			

No.	Message	Remedy	Note 1	Note 2
2973	MNG failure. Boost priority error.			
2974	MNG failure. Down priority error.			
2975	MNG failure. Event wait error.			
2976	MNG failure. Map close error.			
2977	MNG failure. Area free error.			
2978	MNG failure. AddIOMem error.			
2979	MNG failure. AddInPort error.			
2980	MNG failure. AddOutPort error.			
2981	MNG failure. AddInMemPort error.			
2982	MNG failure. AddOutMemPort error.			
2983	MNG failure. IntervalOutBit error.			
2984	MNG failure. CtrReset error.			
2997	Collision was detenced.			
2998	AbortMotion attempted when robot was not moving	See Help for AbortMotion.		
2999	AbortMotion attempted when robot was moving	See Help for AbortMotion.		

Parser

No.	Message	Remedy	Note 1	Note 2
3000	OBJ file size is large. TP1 may not be able to build this project.			
3050	Main function is not defined.	Declare a Main function.		
3051	Function does not exist.	Declare an unresolved function.		
3052	Variable does not exist.	Declare an unresolved variable.		
3100	Syntax error.	Correct the syntax error.		
3101	Parameter count error.	The number of parameters is excess or deficiency. Correct the parameters.		
3102	File name length is beyond the maximum allowed.	Shorten the file name.		
3103	Duplicate function definition.	Change the function name.		
3104	Duplicate variable definition ' ** '.	Change the variable name.		
3105	Global and Global Preserve variables cannot be defined inside a function block.	Declare the Global and Global Preserve variables outside the function block.		
3106	An undefined function was specified.	Specify a valid function name.		
3107	Both While and Until for Do...Loop was specified.	The While/Until statement is specified for both Do statement and Loop statement. Delete either While/Until statement.		
3108	Specified line number or label ' ** ' does not exist.	Set the line label.		
3109	Overflow error.	The direct numerical specification overflows. Reduce the numeric value.		
3110	An undefined variable was specified ' ** '.	There is an undefined variable. Declare the variable.		
3111	Specified variable is not an array variable.	Specify the array variable.		
3112	Cannot change the dimensions of the array variable.			
3114	Specified Next variable does not match the specified For variable.	Correct the variable name.		
3115	Cannot use a point expression in the first argument.	Specify a single point for the point flag setting. Do not specify a point expression.		
3116	Array number of dimensions does not match the declaration.	Check the number of array dimensions.		
3117	File cannot be found.			
3118	Corresponding EndIf cannot be found.	The number of EndIf statements is not enough. Add the EndIf.		
3119	Corresponding Loop cannot be found.	The number of Loop statements is not enough. Add the Loop.		
3120	Corresponding Next cannot be found.	The number of Next statements is not enough. Add the Next.		
3121	Corresponding Send cannot be found.	The number of Send statements is not enough. Add the Send.		
3123	On/Off statements are beyond the maximum count.	An upper limit is set on the number of On/Off statements. Check the upper limit and correct the program.		
3124	Point number is beyond the maximum count.	An upper limit is set on the available number of points. Check the upper limit and correct the program.		

No.	Message	Remedy	Note 1	Note 2
3125	Corresponding If cannot be found.	The number of EndIf statements is too many.　Delete the unnecessary EndIf.		
3126	Corresponding Do cannot be found.	The number of Loop statements is too many.　Delete the unnecessary Loop.		
3127	Corresponding Select cannot be found.	The number of Send statements is too many.　Delete the unnecessary Send.		
3128	Corresponding For cannot be found.	The number of Next statements is too many.　Delete the unnecessary Next.		
3129	'_' cannot be used as the first character of an identifier.	Change the first character of the identifier to an alphabetic character.		
3130	Cannot specify Rot parameter.			
3131	Cannot specify Ecp parameter.			
3132	Cannot specify Arch parameter.			
3133	Cannot specify LimZ parameter.			
3134	Cannot specify Sense parameter.			
3135	Invalid parameter is specified.			
3136	Cannot use #include.			
3137	Cannot specify the array variable subscript.	The array variable subscript cannot be specified.		
3138	ByRef was not specified on Function declaration.			
3139	Cannot execute the Xqt statement for a function that needs a ByRef parameter.	The Xqt statement cannot be executed for a function needing a ByRef parameter.　Delete the ByRef parameter.		
3140	Cannot execute the Redim statement for a ByRef variable.			
3141	OBJ file is corrupt.			
3142	OBJ file size is beyond the available size after compiling.	The compilation result exceeds the limit value.　Divide the program.		
3143	Ident length is beyond the available size.			
3144	' ** ' already used for a function name.			
3145	' ** ' already used for a Global Preserve variable.			
3146	' ** ' already used for a Global variable.			
3147	' ** ' already used for a Module variable.			
3148	' ** ' already used for a Local variable.			
3149	' ** ' already used for a I/O label.			
3150	' ** ' already used for a User Error label.			
3151	Cannot use a function parameter.	Argument cannot be specified for the function that is executed by the Trap statement.		
3152	Over elements value.			
3153	Parameter type mismatch.			
3154	' ** ' is not Input Bit label.			
3155	' ** ' is not Input Byte label.			
3156	' ** ' is not Input Word label.			

No.	Message	Remedy	Note 1	Note 2
3157	' ** ' is not Output Bit label.			
3158	' ** ' is not Output Byte label.			
3159	' ** ' is not Output Word label.			
3160	' ** ' is not Memory Bit label.			
3161	' ** ' is not Memory Byte label.			
3162	' ** ' is not Memory Word label.			
3163	Too many function arguments.			
3164	Cannot compare Boolean value.			
3165	Cannot use Boolean value in the expression.			
3166	Cannot compare between Boolean and expression.			
3167	Cannot store Boolean value to the numeric variable.			
3168	Cannot store numeric value to the Boolean variable.			
3169	Undefined I/O label was specified.			
3170	Invalid condition expression was specified.			
3171	Cannot compare between numeric value and string.			
3172	Cannot use keyword for the variable name.			
3172	' ** ' already used for a line label.			
3173	Duplicate line number or label (**).			
3175	Undefined Point label was specified.			
3176	An undefined variable was specified.			
3177	' ** ' already used for a Point label.			
3178	Cannot use the result number.			
3179	String literal is beyond the available length.			
3180	Cannot change a calibration property value with the VSet command.			
3181	Array variable should be used with ByRef.			
3182	Subscription was not specified.			
3187	Invalid Point flag value was specified.			
3188	Call command cannot be used in parallel processing.			
3189	Local variables cannot be used with the Wait command.			
3190	Array variables cannot be used with the Wait command.			
3191	Real variables cannot be used with the Wait command.			
3192	String variables cannot be used with the Wait command.			
3194	Cannot use Boolean value for the timeout value.			
3196	Fend is not there.			
3197	Numeric variable name cannot use '$'.			
3198	String variable should has '$'.			
3199	Invalid object is specified.			
3200	Value is missing.			

No.	Message	Remedy	Note 1	Note 2
3201	Expected ' , '.			
3202	Expected ' ('.			
3203	Expected ') '.			
3204	Identifier is missing.			
3205	Point is not specified.			
3206	Event condition expression is missing.			
3207	Formula is missing.			
3208	String formula is missing.			
3209	Point formula is missing.			
3210	Line label was not specified.			
3211	Variable was not specified.			
3212	Corresponding Fend cannot be found.			
3213	Expected ' : '.			
3214	True/False was not specified.			
3215	On/Off was not specified.			
3216	High/Low was not specified.			
3217	Input bit label was not specified.			
3218	Input byte label was not specified.			
3219	Input word label was not specified.			
3220	Output bit label was not specified.			
3221	Output byte label was not specified.			
3222	Output word label was not specified.			
3223	Memory bit label was not specified.			
3224	Memory byte label was not specified.			
3225	Memory word label was not specified.			
3226	User error label was not specified.			
3227	Function name was not specified.			
3228	Variable type was not specified.			
3229	Invalid Trap statement parameter. Use Goto, Call, or Xqt.			
3230	Expected For/Do/Function.			
3231	Above/Below was not specified.			
3232	Righty/lefty was not specified.			
3233	NoFlip/Flip was specified.			
3234	Port number was not specified.			
3235	String type variable was not specified.			
3236	RS-232C port number was not specified.			
3237	Network communication port number was not specified.			
3238	Communication speed was not specified.			
3239	Data bit number was not specified.			
3240	Stop bit number was not specified.			
3241	Parity was not specified.			
3242	Terminator was not specified.			
3243	Hardware flow was not specified.			
3244	Software flow was not specified.			

No.	Message	Remedy	Note 1	Note 2
3245	None was not specified.			
3246	Parameter ' O ' or ' C ' was not specified.			
3247	NumAxes parameter was not specified.			
3248	J4Flag value (0-1) was not specified.			
3249	J6Flag value (0-127) was not specified.			
3250	Array variable was not specified.			
3251	String Array variable was not specified.			
3252	Device ID was not specified.			
3253	I/O type was not specified.			
3254	I/O bit width was not specified.			
3255	ByRef was not specified.	Although the ByRef is specified in the function declaration, no ByRef is specified for calling.		
3256	Variable type was not specified.			
3257	Condition expression does not return Boolean value.			
3258	RS232C port number was not specified.			
3259	Network communication port number was not specified.			
3260	Language ID was not specified.			
3261	Expected '.'.			
3262	Vision Sequence Name was not specified.			
3263	Vision Sequence Name or Calibration Name was not specified.			
3264	Vision Property Name or Result Name was not specified.			
3265	Vision Property Name, Result Name or Object Name was not specified.			
3266	Vision Calibration Property Name was not specified.			
3267	Task type was not specified.			
3268	Form name was not specified.			
3269	Property Name or Control Name was not specified.			
3270	Property Name was not specified.			
3271	BackColorMode was not specified.			
3272	BorderStyle was not specified.			
3273	DropDownStyle was not specified.			
3274	EventTaskType was not specified.			
3275	ImageAlign was not specified.			
3276	IOType was not specified.			
3277	FormBorderStyle was not specified.			
3278	ScrollBars was not specified.			
3279	SizeMode was not specified.			
3280	StartPosition was not specified.			

No.	Message	Remedy	Note 1	Note 2
3281	TextAlign was not specified.			
3282	TextAlign was not specified.			
3283	TextAlign was not specified.			
3284	WindowState was not specified.			
3285	J1FLAG was not specified.			
3286	J2FLAG was not specified.			
3289	areaID was not specified.			
3300	External definition symbol was included. (Not in use)			
3301	Version of linked OBJ file does not match.	Not all project files are complied in the same version. Perform the rebuild.		
3302	Linked OBJ file does not match the compiled I/O label.	The project configuration has been changed. Perform the rebuild.		
3303	Linked OBJ file does not match the compiled user error label.	The project configuration has been changed. Perform the rebuild.		
3304	Linked OBJ file does not match the compiled compile option.	The project configuration has been changed. Perform the rebuild.		
3305	Linked OBJ file does not match the compiled link option.	The project configuration has been changed. Perform the rebuild.		
3306	Linked OBJ file does not match the compiled SPEL option.	The project configuration has been changed. Perform the rebuild.		
3307	Duplicate function.	The same function name is used for more than one file.		
3308	Duplicate global preserve variable.	The same global preserve variable name is used for more than one file.		
3309	Duplicate global variable.	The same global variable name is used for more than one file.		
3310	Duplicate module variable.	The same module variable name is used for more than one file.		
3311	File cannot be found.			
3312	OBJ file is corrupt.			
3313	The specified file name includes character(s) that cannot be used.			
3314	Cannot open the file.	The file is used for other application. Quit the other application.		
3315	' ** ' is already used for the function name.			
3316	' ** ' is already used for the global preserve variable.			
3317	' ** ' is already used for the global variable.			
3318	' ** ' is already used for the module variable.			
3319	Dimension of the array variable does not match the declaration.			
3320	Return value type of the function does not match the declaration.			
3321	' ** ' is already used with function name.			

No.	Message	Remedy	Note 1	Note 2
3322	' ** ' is already used with Global Preserve name.			
3323	' ** ' is already used with Global name.			
3324	' ** 'is already used with Module name.			
3325	' ** ' is already used with Local name.			
3326	The number of parameters does not match the declaration.			
3327	ByRef was not specified on Function declaration on parameter **.			
3328	ByRef was not specified on parameter **.			
3329	Parameter ** type mismatch.			
3330	Linked OBJ file does not match the compiled Vision Project.			
3331	OBJ file size is beyond the available size after linking.	The OBJ file size exceeds the limit value. Reduce the program.		
3332	Variable '%s' is redefined.	Variable '%s' is redefined with the different variable type. Review the definition.		
3333	Linked OBJ file does not match the compiled GUI Builder Project.			
3334	The number of variable which is using Wait command are beyond the maximum allowed.			
3335	Call cannot use in the parallel processing.			
3336	Variable was redefined.			
3405	DialogResult was not specified.			
3406	MsgBox_Type was not specified.			
3408	Single array variable was not specified.			
3409	Point list was not specified.			
3411	EdgeType was not specified.			
3414	Point was not specified.			
3415	Reference was not specified.			
3500	Duplicate macro in #define statement.	Another macro with the same name has been defined. Change the macro name.		
3501	Macro name was not specified.			
3502	Include file name cannot be found.			
3503	Specified include file is not in the project.	The include file that is not registered in the project configuration is specified. Add the include file to the project configuration.		
3504	Parameter of the macro function does not match to the declared.			
3505	Macro has a circular reference.	The macro has a circular reference. Correct the circular reference.		
3506	#define, #ifdef, #ifndef, #else, #endif, #undef and variable declaration statements are only valid in an include file.			

No.	Message	Remedy	Note 1	Note 2
3507	Over #ifdef or #ifndef nesting level.	Reduce the nesting level to under the limited value.		
3508	Cannot find corresponding #ifdef or #ifndef.			
3509	No #endif found for #ifdef or #ifndef.			
3510	Cannot obtain the macro buffer.			
3550	Parameter for the macro function was not specified.	The macro declared as a macro function is called without argument.		
3601	Parameter type is mismatch for the external function '%s'. Confirm all place which are using this function, in this file.			
3602	The specified motion command cannot use LJM parameter.			
3603	InReal function cannot use with Wait statement.			
3800	Compile process aborted.			
3801	Link process aborted.			
3802	Compile process aborted. Compile errors reached the maximum count.			
3803	Link process aborted. Link errors reached the maximum count.			
3804	Specified command cannot be executed from the Command window.			
3805	Specified command can only be executed from the Command window.			
3806	Specified function cannot be executed from the Command window.			
3808	Specified parameter cannot be used with the current version.			
3809	Module variable cannot be used from the Command window.			
3810	The number of point file is beyond the limit.	There are too many point files. Reduce some point files that are registered to project.		
3811	The number of points is beyond the limit.	There are too many points defined by registered point files. Reduce some points.		
3850	File not found.			
3900	Uncommon error. Cannot obtain the internal communication buffer.			
3901	Buffer size is not enough.			
3910	Undefined command was specified.			
3911	Cannot enter the file name in the file name buffer.			
3912	Cannot obtain the internal buffer.			
3913	Cannot set priority.			
3914	Invalid ICode.			
3915	Invalid ICode.			
3916	Invalid ICode.			
3917	Invalid ICode.			

No.	Message	Remedy	Note 1	Note 2
3918	Invalid ICode.			
3919	Invalid ICode.			
3920	Invalid ICode.			
3921	Invalid ICode.			

Motor Control

No.	Message	Remedy	Note 1	Note 2
4001	Arm reached the limit of motion range.	Check the point to move, current point, and Range setting.		
4002	Specified value is out of allowable range.	Review the setting parameters.		The parameter causing the error
4003	Motion device driver failure. Communication error within the motion control module.	Reboot the controller. Initialize the controller firmware. Replace the controller.		
4004	Motion device driver failure. Event waiting error within the motion control module.	Reboot the controller. Initialize the controller firmware. Replace the controller.		
4005	Current point position is above the specified LimZ value.	Lower the Z axis. Increase the specified LimZ value.		
4006	Target point position is above the specified LimZ value.	Lower the Z coordinate position of the target point. Increase the specified LimZ value.		
4007	Coordinates conversion error. The end/mid point is out of the motion area. Jogging to the out of the motion area.	Check whether the coordinate out of the motion range is not specified.		
4008	Current point position or specified LimZ value is out of motion range.	Change the specified LimZ value.		
4009	Motion device driver failure. Timeout error within motion control module.	Reboot the controller. Initialize the controller firmware. Replace the controller.		
4010	Specified Local coordinate was not defined.	Define the Local coordinate system.		Local number
4011	Arm reached the limit of XY motion range specified by XYLim statement.	Check the area limited by the XYLim statement.		
4013	Motion control module internal calculation error.			
4016	SFree statement was attempted for prohibited joint(s).	Due to robot mechanistic limitation, setting some joint(s) to servo free status is prohibited. Check the robot specifications.		
4018	Communication error within the motion control module. Check sum error.	Reboot the controller. Initialize the controller firmware. Replace the controller.		
4021	Point positions used to define the Local are too close.	Set the distance between points more than 1μm.		
4022	Point coordinate data used to define the Local is invalid.	Match the coordinate data for the points to be specified.		
4023	Cannot execute when the motor is in the off state.	Turn the motor power ON and then execute.		
4024	Cannot complete the arm positioning using the current Fine specification.	Check whether the robot does not generate vibration or all parts and screws are secured firmly. Increase the Fine setting value.		
4025	Cannot execute a motion command during emergency stop condition.	Clear the emergency stop condition and execute the motion command.		
4026	Communication error within the motion control module. Servo I/F failure.	Reboot the controller. Initialize the controller firmware. Replace the controller.		

No.	Message	Remedy	Note 1	Note 2
4028	Communication error within the motion control module. Device driver status failure.	Reboot the controller. Initialize the controller firmware. Replace the controller.		
4030	Buffer for the average torque calculation has overflowed. Shorten the time interval from Atclr to Atrq.	Shorten the time interval from Atclr to Atrq less than about two minutes.		
4031	Cannot execute a motion command when the motor is in the off state.	Turn the motor power ON and then execute the motion command.		
4032	Cannot execute a motion command when one or more joints are in SFree state.	Set all joints to the SLock state and execute the motion command.		
4034	Specified command is not supported for this manipulator model.	Use the Jump3 and Jump3CP statements.		
4035	Only the tool orientation was attempted to be changed by the CP statement.	Set a move distance between points. Use the ROT modifier, SpeedR statement, and AccelR statement.		
4036	Rotation speed of tool orientation by the CP statement is too fast.	Decrease the setting values for the SpeedS and AccelS statements. Use the ROT modifier, SpeedR statement, and AccelR statement.		
4037	The point attribute of the current and target point positions differ for executing a CP control command.	Match the point attribute.		
4038	Two point positions are too close to execute the Arc statement.	Set the distance between points more than 1μm.		
4039	Three point positions specified by the Arc statement are on a straight line.	Use the Move statement.		
4041	Motion command was attempted to the prohibited area at the backside of the robot.	Check the robot motion range.		
4042	Motion device driver failure. Cannot detect the circular format interruption.	Reboot the controller. Initialize the controller firmware. Replace the controller.		
4043	Specified command is not supported for this manipulator model or this joint type.			
4044	Curve failure. Specified curve form is not supported.	Create a Curve file again with the Curve statement.		
4045	Curve failure. Specified mode is not supported.	Specify the Curve mode properly. Create a Curve file again with the Curve statement.		
4046	Curve failure. Specified coordinate number is out of the allowable range.	The number of the available coordinate axes is 2, 3, 4, and 6. Create a Curve file again with the Curve statement.		
4047	Curve failure. Point data was not specified.	Create a Curve file again with the Curve statement.		
4048	Curve failure. Parallel process was specified before the point designation.	Create a Curve file again with the Curve statement.		
4049	Curve failure. Number of parallel processes is out of the allowable range.	Create a Curve file again with the Curve statement.		
4050	Curve failure. Number of points is out of the allowable range.	The number of available point numbers differs according to the curve form. Check the number of points again.		

No.	Message	Remedy	Note 1	Note 2
4051	Curve failure. Local attribute and the point attribute of all specified points do not match.	Match the local and point flag for all the specified points.		
4052	Curve failure. Not enough memory to format the curve file.			
4053	Curve failure. Failed to format the curve file.	Review the point data. Check whether adjacent two points do not overlap on the specified point line.		
4054	Curve failure. Curve file error	The Curve file is broken. Create a Curve file again with the Curve statement.		
4055	Curve failure. No distance for curve file movement.	Review the point data.		
4056	Curve failure. Point positions for the Curve statement are too close.	Set the distance between two points adjacent to the specified point more than 0.001 mm.		
4059	Executed encoder reset command while the motor is in the on state.	Turn the motor power OFF.		
4060	Executed an invalid command while the motor is in the on state.	Turn the motor power OFF.		
4061	Specified parameter is in use.	You attempted to clear the currently specified Arm and Tool. Select other Arm and Tool and execute.		
4062	Orientation variation is over 360 degrees.	You attempted to rotate the joint #J6 more than 360 degrees with a CP motion command.		
4063	Orientation variation of adjacent point is over 90 degrees.	On the specified point line by the Curve statement, set the orientation variation of U, V, and W coordinate values between two adjacent points to under 90 degrees.		
4064	Cannot execute the orientation correction automatically.	On the specified point line, a curve cannot be created by automatic orientation correction. Change the specified point line so that the joint #J6 orientation variation decreases.		
4065	Attempt to revolve J6 one rotation with the same orientation in CP statement.	You attempted to rotate the joint #J6 more than 360 degrees with a CP motion command. You attempted to revolve the joint 6 one rotation with the same as motion start orientation. Change the target point so that the joint #J6 revolves less than one rotation.		
4066	Motion command was attempted in the prohibited area depended on joint combination.	You attempted to move the joints to the robot's interference limited area.		
4068	ROT modifier parameter was specified for the CP motion command without orientation rotation.	Delete the ROT from the CP motion command.		
4069	Specified ECP without selecting ECP in CP statement.	Specify a valid ECP.		
4070	Specified ECP number does not match the ECP number used in curve file creation.	Specify a valid ECP.		

No.	Message	Remedy	Note 1	Note 2
4071	Attempted motion command during electronic brake lock condition.			
4072	Initialization failure. Hardware monitor was not initialized.			
4074	Motor type does not match the current robot setting.	Check whether the specified robot model is connected.		
4075	ECP Option is not active.	Enable the ECP option.		
4076	Point positions used to define the Plane are too close.	Set the distance between points more than 1 μm.		
4077	Point coordinate data used to define the Plane is invalid.	Match the coordinate data for the points to be specified.		
4080	Cannot execute when the Enable Switch is OFF.	Turn the Enable Switch ON and then execute.		
4085	Failed to change to specified location.			
4086	Cannot execute because it is not dry run mode.			
4099	Servo error was detected during operation.			
4100	Communication error in motion control module. Cannot calculate the current point or pulse.	Reboot the controller. Initialize the controller firmware. Replace the controller.		
4101	Communication error in the motion control module. Cannot calculate the current point or pulse.	Reboot the controller. Initialize the controller firmware. Replace the controller.		
4103	Initialization failure. Motion control module initialization error.	Reboot the controller. Initialize the controller firmware. Replace the controller.		
4105	EMERGENCY connector connection failure.			
4106	Drive unit failure.			
4150	Redundant input signal failure of the emergency stop.	The input status of the redundant emergency stop input continuously differs for more than two seconds. Check whether no disconnection, earth fault, or short-circuit of the emergency stop input signal exits. Then reboot the controller.		
4151	Redundant input signal failure of the safeguard.	The input status of the redundant emergency stop input continuously differs for more than two seconds. Check whether no disconnection, earth fault, or short-circuit of the emergency stop input signal exits. Then reboot the controller.		
4152	Relay welding error of the main circuit.	A relay welding error was detected due to power system over current. Replace the controller. Replace the robot.		
4153	Redundant input signal failure of the enable switch.	The input status of the redundant enable signal differs continuously for more than two seconds. Check the TP connector connection. Replace the TP. Replace the controller.		

No.	Message	Remedy	Note 1	Note 2
4154	Temperature of regeneration resistor was higher than the specified temperature.			
4180	Manipulator initialization failure. Specified manipulator was is not found.			
4181	Manipulator initialization failure. Specified manipulator was in use by another task.			
4182	Manipulator initialization failure. Manipulator name is too long.			
4183	Manipulator initialization failure. Manipulator data version error.			
4184	Manipulator initialization failure. Duplication of single axis joint is assigned.			
4185	Manipulator initialization failure. Specified axis is in use by the other manipulator.			
4186	Manipulator initialization failure. Necessary hardware resource is not defined.			
4187	Manipulator initialization failure. Communication error with the module : VSRCMNPK.			
4188	Manipulator initialization failure. Joint angle interference matrix is invalid.			
4189	Manipulator initialization failure. Communication error with the module : VSRCMC.			
4191	Manipulator initialization failure. Physical-logical pulse transformation matrix is invalid.			
4192	Manipulator initialization failure. Communication error with the servo module.			
4210	RAS circuit detected the servo system malfunction. Reboot the controller. Measure the noise. Replace the controller.			
4211	Servo CPU internal RAM failure. Reboot the controller. Measure the noise. Replace the DMB.			
4212	RAM for the main and servo CPU communication failure. Reboot the controller. Measure the noise. Replace the DMB.			
4213	Servo CPU internal RAM failure. Reboot the controller. Measure the noise. Replace the DMB.			
4214	Initialization communication of main CPU and servo CPU failure. Reboot the Controller. Measure the noise. Replace DMB.			

No.	Message	Remedy	Note 1	Note 2
4215	Initialization communication of the main and servo CPU failure. Reboot the controller. Noise measure. Replace the DMB.			
4216	Communication of the main and servo CPU failure. Reboot the controller. Measure the noise. Replace the DMB.			
4217	Communication of the main and servo CPU failure. Reboot the controller. Measure the noise. Replace the DMB.			
4218	Servo long time command overrun.			
4219	Servo long time command check sum error.			
4220	System watchdog timer detected the failure. Reboot the controller. Measure the noise. Replace the DMB.			
4221	Drive unit check failure.			
4222	RAM failure of the servo CPU. Reboot the controller. Measure the noise. Replace the DMB.			
4223	Failure of duplicate circuit of the emergency stop or the safeguard. Check the wiring.			
4224	Low voltage of the main circuit power supply is detected. Check the power supply voltage. Reboot the controller.			
4225	Control relay contact of the main circuit power supply is welded. Replace the DPB.			
4230	Servo real time status failure. Check sum error.	A data checksum error was detected in the controller. Check the short-circuit and improper connection of the peripheral equipment wiring. (Emergency, D-I/O, and Expansion I/O connectors) Replace the controller.		
4232	Servo real time status failure. Free running counter error with the servo.	A free running counter error was detected in the controller. Check the short-circuit and improper connection of the peripheral equipment wiring. (Emergency, D-I/O, and Expansion I/O connectors) Replace the controller.		
4233	Servo real time status failure. Communication error with the servo CPU.	A communication error was detected in the controller. Check the short-circuit and improper connection of the peripheral equipment wiring. (Emergency, D-I/O, and Expansion I/O connectors) Replace the controller.		
4240	Irregular motion control interruption was detected. Interruption duplicate.	A interruption error was detected in the controller. Check the short-circuit and improper connection of the peripheral equipment wiring. (Emergency, D-I/O, and Expansion I/O connectors) Replace the controller.		

No.	Message	Remedy	Note 1	Note 2
4241	Over speed during low power mode was detected.	The robot over speed was detected during low power mode. Check the robot mechanism. (Smoothness, backlash, non-smooth motion, loose belt tension, brake) Check whether the robot does not interfere with peripheral equipment. (Collision, contact) Replace the motor driver. Replace the motor. (Motor and encoder failure) Check the short-circuit and improper connection of the peripheral equipment wiring. (Emergency, D-I/O, and Expansion I/O connectors)		
4242	Improper acceleration reference was generated.	You attempted to operate the robot with the acceleration reference exceeding the specified value. For a CP motion, decrease the AccelS value.		
4243	Improper speed reference is generated in the high power mode.	The robot over speed was detected during high power mode. Check the robot mechanism. (Smoothness, backlash, non-smooth motion, loose belt tension, brake) Check whether the robot does not interfere with peripheral equipment. (Collision, contact) Replace the motor driver. Replace the motor. (Motor and encoder failure) Check the short-circuit and improper connection of the peripheral equipment wiring. (Emergency, D-I/O, and Expansion I/O connectors)		
4250	Arm reached the limit of motion range during the operation.	Check whether a CP motion trajectory is within the motion range.		
4251	Arm reached the limit of XY motion range specified by XYLim during the operation.	Check the XYLim setting.		
4252	Coordinate conversion error occurred during the operation.	Check whether a CP motion trajectory is within the motion range.		
4267	Attempt to exceed the J4Flag attribute without indication.	You attempted to exceed the J4Flag attribute during motion without the J4Flag indication. Change the J4Flag for the target point.		
4268	Attempt to exceed the J6Flag attribute without indication.	You attempted to exceed the J6Flag attribute during motion without the J6Flag indication. Change the J6Flag for the target point.		
4269	Attempt to exceed the particular wrist orientation attribute without indication.	You attempted to exceed the particular wrist orientation attribute during motion without the Wrist indication. Change the Wrist attribute for the target point. Change the target point to avoid a particular wrist orientation.		

No.	Message	Remedy	Note 1	Note 2
4270	Attempt to exceed the particular arm orientation attribute without indication.	You attempted to exceed the particular hand orientation attribute during motion without the Hand indication. Change the Hand attribute for the target point. Change the target point to avoid a particular hand orientation.		
4271	Attempt to exceed the particular elbow orientation attribute without indication.	You attempted to exceed the particular elbow orientation attribute during motion without the Elbow indication. Change the Elbow attribute for the target point. Change the target point to avoid a particular elbow orientation.		
4272	Specified point flag is invalid.	For a CP motion command, the arm form at the target point is different from the point flag specified with the target point. Change the point flag for the target point.		
4273	J6Flag switched during the lift motion in coveyor tracking	Adjust the Tool orientation so that J6Flag will not switch		
4274	Manipulator motion did not match to J6Flag of the target point	For a CP motion command, the manipulator reached to the target point with J6Flag which differs from the one specified for the target point. Change J6Flag for the target point.		
4275	Manipulator motion did not match to J4Flag of the target point	For a CP motion command, the manipulator reached to the target point with J4Flag which differs from the one specified for the target point. Change J4Flag for the target point.		
4276	Manipulator motion did not match to ArmFlag of the target point	For a CP motion command, the manipulator reached to the target point with ArmFlag which differs from the one specified for the target point. Change ArmFlag for the target point.		
4277	Manipulator motion did not match to ElbowFlag of the target point	For a CP motion command, the manipulator reached to the target point with ElbowFlag which differs from the one specified for the target point. Change ElbowFlag for the target point.		
4278	Manipulator motion did not match to WristFlag of the target point	For a CP motion command, the manipulator reached to the target point with WristFlag which differs from the one specified for the target point. Change WristFlag for the target point.		

Servo

No.	Message	Remedy	Note 1	Note 2
5000	Servo control gate array failure. Check the DMB.	Check the short-circuit and improper connection of the peripheral equipment wiring. (Emergency and I/O connectors) Replace the DMB. Replace the additional axis unit.		
5001	Disconnection of the parallel encoder signal. Check the signal cable connection or the robot internal wiring.	Check the M/C cable signal. Check the robot signal wiring. (Missing pin, disconnection, short-circuit) Replace the motor. Replace the DMB. Check the connector connection in the controller. (Loosening, connecting to the serial encoder terminal on the DMB) Check the model setting. Check the peripheral equipment wiring. (Emergency and I/O)		
5002	Motor driver is not installed. Install the motor driver. Check the DMB or the motor driver.	Check whether the motor driver is mounted. Check the model setting and hardware setting. Replace the motor driver. Replace the DMB.		
5003	Initialization communication failure of incremental encoder. Check the signal cable connection and the robot setting.	Check the model setting. Replace the motor. Replace the DMB.		
5004	Initialization failure of absolute encoder. Check the signal cable connection or the robot setting.	Check the model setting. Replace the motor. Replace the DMB.		
5005	Encoder division setting failure. Check the robot setting.	Check the model setting.		
5006	Data failure during absolute encoder initialization. Check the signal cable connection, the controller, or the motor.	Replace the motor. Replace the DMB. Check the noise countermeasures.		
5007	Absolute encoder multi-turn is beyond the maximum range. Reset the encoder.	Reset the encoder. Replace the motor.		
5008	Position is out of the range. Reset the encoder.	Reset the encoder. Replace the DMB. Replace the motor.		
5009	No response from the serial encoder. Check the signal cable connection, the motor, the DMB, or the encoder IF board.	Check the model setting. (Improperly setting of the parallel encoder model) Check the signal cable connection. Replace the DMB and encoder I/F board.		
5010	Serial encoder initialization failure. Reboot the controller. Check the motor, the DMB, or the encoder IF board.	Check the robot configuration. Check the signal cable connection. Replace the DMB and encoder I/F board.		

No.	Message	Remedy	Note 1	Note 2
5011	Serial encoder communication failure. Reboot the controller. Check the motor, the DMB, or the encoder IF board.	Check the robot configuration. Check the signal cable connection. Replace the DMB and encoder I/F board.		
5012	Servo CPU watchdog timer failure. Reboot the controller. Check the motor or the DMB.	Replace the DMB. Check the noise countermeasures.		
5013	Current control circuit WDT failure. Reboot the controller. Check the controller.	Check the power cable connection. Check the 15V power supply and cable connection. Replace the DMB. Check the noise countermeasures.		
5015	Encoder is reset. Reboot the controller.	Reboot the controller.		
5016	Power supply failure of the absolute encoder. Replace the battery. Check the robot internal wiring.	Reset the encoder. Check the signal cable connection.		
5017	Backup data failure of the absolute encoder. Reset the encoder.	Reset the encoder. Check the signal cable connection.		
5018	Absolute encoder battery alarm.	Replace the battery. Check the signal cable connection.		
5019	Position failure of the absolute encoder. Reset the encoder. Replace the motor.	Reset the encoder. Replace the motor.		
5020	Speed is too high at controller power ON. Stop the robot and reboot the controller.	Reboot the controller.		
5021	Absolute encoder overheat.	Lower the motion duty. Wait until the temperature of the encoder decreases.		
5022	R/D transducer failure. Check the resolver board.	Check the noise countermeasure. Replace the resolver board.		
5023	G sensor communication failure. Check the control board.	Check the M/C signal cable. Check the robot signal wiring (for pin falling, disconnection, short). Check the noise countermeasure. Replace the control board. Replace the DMB board.		
5024	G sensor data failure. Check the control board.	Replace the control board.		
5025	Resolver mixing failure. Reset the encoder.	Reset the resolver. Replace the resolver board.		
5026	Resolver signal disconnection. Check the motor and resolver board.	Check the robot signal wiring. Replace the resolver board.		
5027	S-DSP communication failure. Check-sum error, Free-run counter error	Reboot the controller. Replace the DMB. Check the noise countermeasure.		
5028	Current data failure. Data update stopped. Parity error.	Reboot the controller. Replace the DMB. Check the noise countermeasure.		
5029	D-DSP communication failure. Check-sum error, Free-run counter error	Reboot the controller. Replace the DMB. Check the noise countermeasure.		
5032	Servo alarm A.			

No.	Message	Remedy	Note 1	Note 2
5040	Motor torque output failure in high power state. Check the power cable connection, the robot, the driver or the motor.	Specify the Weight/Inertia setting. Check the load. Check the robot. (Smoothness, backlash, non-smooth motion, loose belt tension, brake) Check the interference with the peripheral equipment. (Collision, contact) Check the model setting. Check the power cable connection. Check the robot power wiring. (Missing pin, disconnection, short-circuit) Check the power supply voltage. (Low power supply voltage) Replace the motor driver. Replace the DMB. Replace the motor.		
5041	Motor torque output failure in low power state. Check the power cable connection, robot, brake, driver, or motor.	Check the robot. (Smoothness, backlash, non-smooth motion, loose belt tension, brake) Check the interference with the peripheral equipment. (Collision, contact) Check the model setting. Check the power cable connection. Check the robot power wiring. (Missing pin, disconnection, short-circuit) Check the power supply voltage. (Low power supply voltage) Replace the motor driver. Replace the DMB. Replace the motor.		
5042	Position error overflow in high power state. Check the power cable connection, the robot, the driver and the motor.	Specify the Weight/Inertia setting. Check the load. Check the robot. (Smoothness, backlash, non-smooth motion, loose belt tension, brake) Check the interference with the peripheral equipment. (Collision, contact) Check the model setting. Check the power cable connection. Check the robot power wiring. (Missing pin, disconnection, short-circuit) Check the power supply voltage. (Low power supply voltage) Replace the motor driver. Replace the DMB. Replace the motor.		

No.	Message	Remedy	Note 1	Note 2
5043	Position error overflow in low power state. Check the power cable connection, robot, brake, driver, or motor.	Check the robot. (Smoothness, backlash, non-smooth motion, loose belt tension, brake) Check the interference with the peripheral equipment. (Collision, contact) Check the model setting. Check the power cable connection. Check the robot power wiring. (Missing pin, disconnection, short-circuit) Check the power supply voltage. (Low power supply voltage) Replace the motor driver. Replace the DMB. Replace the motor.		
5044	Speed error overflow in high power state. Check the power cable connection, robot, brake, driver, or motor.	Specify the Weight/Inertia setting. Check the load. Check the robot. (Smoothness, backlash, non-smooth motion, loose belt tension, brake) Check the interference with the peripheral equipment. (Collision, contact) Check the model setting. Check the power cable connection. Check the robot power wiring. (Missing pin, disconnection, short-circuit) Check the power supply voltage. (Low power supply voltage) Replace the motor driver. Replace the DMB. Replace the motor.		
5045	Speed error overflow in low power state. Check the power cable connection, robot, brake, drive, or motor.	Check the robot. (Smoothness, backlash, non-smooth motion, loose belt tension, brake) Check the interference with the peripheral equipment. (Collision, contact) Check the model setting. Check the power cable connection. Check the robot power wiring. (Missing pin, disconnection, short-circuit) Check the power supply voltage. (Low power supply voltage) Replace the motor driver. Replace the DMB. Replace the motor.		

No.	Message	Remedy	Note 1	Note 2
5046	Over speed in high power state. Reduce SpeedS. Check the signal cable connection, robot, brake, driver or motor.	Reduce SpeedS of the CP motion. Change the orientation of the CP motion. Specify the Weight/Inertia setting. Check the load. Check the robot. (Smoothness, backlash, non-smooth motion, loose belt tension, brake) Check the interference with the peripheral equipment. (Collision, contact) Check the model setting. Check the power cable connection. Check the robot power wiring. (Missing pin, disconnection, short-circuit) Check the power supply voltage. (Low power supply voltage) Replace the motor driver. Replace the DMB. Replace the motor.		
5047	Over speed in low power state. Check the signal cable connection, robot, brake, driver, or motor.	Check the motion in high power state. Check the robot. (Smoothness, backlash, non-smooth motion, loose belt tension, brake) Check the interference with the peripheral equipment. (Collision, contact) Check the model setting. Check the power cable connection. Check the robot power wiring. (Missing pin, disconnection, short-circuit) Check the power supply voltage. (Low power supply voltage) Replace the motor driver. Replace the DMB. Replace the motor.		
5048	Over voltage of the main power circuit. Check the main power voltage or the regeneration module.	Specify the Weight/Inertia setting. Check the load. Check the robot. (Smoothness, backlash, non-smooth motion, loose belt tension, brake) Check the interference with the peripheral equipment. (Collision, contact) Check the model setting. Check the power cable connection. Check the robot power wiring. (Missing pin, disconnection, short-circuit) Check the power supply voltage. (Low power supply voltage) Replace the motor driver. Replace the DMB. Replace the motor.		
5049	Over current of the motor driver. Check the power cable connection or the robot internal wiring.	Check the short-circuit and earth fault of the power line. Replace the motor driver. Replace the DMB.		

No.	Message	Remedy	Note 1	Note 2
5050	Over speed during torque control. Check the work motion speed range.	Check the motion speed during torque control.		
5051	15V PWM drive power supply failure. Reboot the controller. Replace the 15V power supply.	Check the 15V power supply and cable connection. Replace the motor driver. Replace the DMB.		
5054	Overload of the motor. Decrease the motion duty and the Accel.	Lower the motion duty. Check the Weight/Inertia setting. Check the robot. (Backlash, large load, loose belt tension, brake)		
5055	Overload of the motor. Decrease the operation duty and the Accel.	Lower the motion duty. Check the Weight/Inertia setting. Check the robot. (Backlash, large load, loose belt tension, brake)		
5056	G sensor output failure. Check the control board.	Check the noise countermeasures. Replace the control board.		
5072	Servo alarm B.			
5080	Motor is overloaded. Decrease the duty and the Accel.	Lower the motion duty. Check the Weight/Inertia setting. Check the robot. (Backlash, large load, loose belt tension, brake)		
5098	High temperature of the encoder. Decrease the duty. Check the reduction gear unit of the robot.	Wait until the temperature of the encoder decreases. Lower the motion duty. Check the Weight/Inertia setting. Check the robot. (Backlash, large load, loose belt tension, brake)		
5099	High temperature of the motor driver . Clean the controller fan filter. Check the ambient temperature. Decrease the duty.	Clean the cooling fan filter. Lower the motion duty. Check the Weight/Inertia setting. Lower the ambient temperature.		
5112	Servo alarm C.			

Vision Calibration

No.	Message	Remedy	Note 1	Note 2
6001	Calibration number is out of range.			
6002	Calibration data is not defined.			
6003	Camera mounting direction is out of range.			
6004	2-point measurement flag is out of range.			
6005	There is an invalid data in the pose data.			
6006	Calibration failure: Invalid data prevents calculation.			
6007	Coordinate conversion: Invalid data prevent calculation.			
6009	Calibration file name is not correct.			
6010	Calibration file does not exist.			
6012	Failed to load the calibration file.			
6013	Failed to write into the calibration file.			
6014	Specify continuous 9 data for the Pixel coordinate.			
6015	Specify continuous 18 data for the Pixel coordinate.			
6016	Specify continuous 9 data for the Robot coordinate.			
6017	Specify continuous 18 data for the Robot coordinate.			
6018	Specify continuous 9 data and 1 reference point for the Robot coordinate.			
6019	Specify continuous 9 data and 2 reference points for the Robot coordinate.			

Points

No.	Message	Remedy	Note 1	Note 2
7003	The specified robot cannot be found.			
7004	Duplicate allocation of the point data area.			
7006	Specified point number cannot be found. Specify a valid point number.	Check the specified point number.		
7007	Specified point number was not defined. Specify a teach point number.	Check whether point data is registered in the specified point. Perform the teaching.		
7010	Cannot allocate the memory area for the pallet definition.			
7011	Cannot free the memory area for the pallet definition.			
7012	Specified pallet number cannot be found. Specify a valid pallet number.	Check the pallet number.		
7013	Specified pallet is not defined. Specify a defined pallet or define the pallet.	Check whether the specified pallet is defined by the Pallet statement. Declare the pallet.		
7014	Specified division number is beyond the pallet division number definition. Specify a valid division.	Check the specified division number.		
7015	Specified coordinate axis number does not exist.			
7016	Specified arm orientation number does not exist.			
7017	Cannot allocate the required memory.			
7018	Specified point label cannot be found. Specify a valid point label.	Check the specified point label.		
7019	Parameter setup in the initialization file is invalid.			
7021	Duplicate point label. Specified label name is already registered. Change the label name.	Change the point label.		
7022	Specified local coordinate system is not defined. Specify a valid local coordinate system number.	Check the specified local number. Define the Local coordinate system.		
7023	Specified string is not in the correct format.			
7024	Point data memory area for the specified robot is not allocated.			
7026	Cannot open the point file. Specify a valid point file name.	Check the point file name. Check whether the point file specified for the project exists.		
7027	Cannot read the point data from the point file.	Create the point file again.		
7028	Point area is allocated beyond the available point number.			
7029	Specified point file name is not correct. Specify a valid point file name.	Check the file extension.		

No.	Message	Remedy	Note 1	Note 2
7030	Specified point label is beyond the maximum length. Specify a valid point label.	Change the point label.		
7031	Description for the specified point is beyond the maximum length. Specify a valid description.	Change the comment.		
7032	Point file is corrupted. Check sum error.	Create the point file again.		
7033	Specified point file cannot be found. Specify a valid point file name.			
7034	Cannot save the point file.			
7035	Cannot save the point file.			
7036	Cannot save the point file.			
7037	Cannot save the point file.			
7038	Cannot save the point file.			
7039	Cannot save the point file.			
7040	The point label is not correct. Specify a valid point point label.			
7041	The point label is not correct. Specify a valid point point label.			

Fieldbus

No.	Message	Remedy	Note 1	Note 2
7101	Communication error occur during transform.	The module is broken or the controller software is damaged. Restore the controller firmware. (If Code 1 is 1, 2, 3, 4, or 10)		
		A communication data error was detected during communication. The communication cable has a problem. Check the communication cable and its related units. (If Code 1 is 11 or 12)		
		The module is broken or the controller software is damaged. Restore the controller firmware. (If Code 1 is 13, 14, or 15)		
		The PLC is not running or not connected. Check the PLC, the communication cable, and peripherals. (If Code 1 is 22 when the CC-Link board is used.)		
7103	Timeout error occurs during transform.	The module is broken or the controller software is damaged. Restore the controller firmware. (If Code 1 is 1, 2, or 3)		
		A communication data error was detected during communication. The communication cable has a problem. Check the communication cable and its related units. (If Code 1 is 4)		

Vision

No.	Message	Remedy	Note 1	Note 2
7300	Vision Communication. Server mode not supported.			
7302	Vision Communication. Failed to read from the camera.	Check the connection with the camera.		
7303	Vision Communication. Read data overflow.			
7304	Vision Communication. Failed to open the Ethernet port.			
7305	Vision Communication. Invalid IP address of camera.	Rebuild the project. Check the camera configuration.		
7306	Vision Communication. No specification of Server/Client.			
7307	Vision Communication. Failed to send to the camera.	Check the connection with the camera.		
7308	Vision Communication. Camera version is old.			
7321	Vision Communication. Camera setting has not been set.	Rebuild the project. Check the camera configuration.		
7322	Vision Communication. Read timeout.			
7323	Vision Communication. Read invalid data.	Check the connection with the camera.		
7324	Vision Communication. Failed to send to the camera.	Check the connection with the camera.		
7325	Vision Communication. Connection is not completed.	Check the connection with the camera.		
7326	Vision Communication. Read data is too long.			
7327	Vision Communication. Undefined vision sequence.			
7328	Vision Communication. Camera setting has not been set.	Rebuild the project. Check the camera configuration.		
7329	Vision Communication. Vis file is not found.	Rebuild the project. Check the camera configuration.		
7330	Vision Communication. Failed to allocate memory.			
7341	Vision Communication. Out of max camera number.			
7342	Vision Communication. Invalid camera number.			
7343	Vision Communication. VSet parameter is too long.			
7344	Vision Communication: Too many parameters for VGet.			
7345	Vision Communication. Not enough data for VGet statement variable assignment.			
7346	Vision Communication. Cannot execute a Vision statement from the command window.			
7500	Smart camera. Out of memory.			
7501	Smart camera. Project does not exist.			
7502	Smart camera. Project has not been set.			

No.	Message	Remedy	Note 1	Note 2
7503	Smart camera. Vision property or result not supported.			
7504	Smart camera. Cannot open project file.			
7505	Undefined vision sequence.			
7506	Undefined vision object.			
7507	Smart camera. Critical error.			
7508	Smart camera. Invalid command.			
7509	Invalid vision property value.			
7510	Invalid vision property.			
7511	Vision model not trained.			
7512	Undefined vision calibration.			
7513	Vision model object not Self.			
7514	Invalid vision result.			
7515	Vision object not found.			
7516	No vision calibration.			
7517	Incomplete vision calibration.			
7518	Smart camera. Cannot connect with camera.			
7819	Smart camera. Communication error.			

GUI Builder

No.	Message	Remedy	Note 1	Note 2
7600	Cannot execute a GUI Builder statement from the command window.	GUI Builder commands are only available in the program.		
7602	GSet parameter is too long.	-		
7603	Too many parameters for GGet.	-		
7604	Not enough data for GGet statement variable assignment.	-		
7610	The event task cannot be executed. System in pause state and EventTaskType is Normal.	Specify NoEmgAbort for EventTaskType.		
7611	The event task cannot be executed. Safeguard is open and EventTaskType is Normal.	Specify NoEmgAbort for EventTaskType.		
7612	The event task cannot be executed. Estop is active and EventTaskType is not NoEmgAbort.	Specify NoEmgAbort for EventTaskType.		
7613	The event task cannot be executed. System in error state and EventTaskType is not NoEmgAbort.	Specify NoEmgAbort for EventTaskType.		
7650	Invalid property.	-		
7651	Invalid form.	-		
7652	Invalid control.	-		
7653	The specified form is already open.	-		
7654	Event function does not exist.	Create the event function.		
7655	The item does not exist.			
7656	Invalid property value.			

Hardware

No.	Message	Remedy	Note 1	Note 2
9001	Emergency stop circuit failure was detected. Disconnection or other failure was found in one of the redundant inputs.	Check whether no disconnection, earth fault, or short-circuit of the emergency stop input signal exits. Then reboot the controller.		
9002	Safeguard circuit failure was detected. Disconnection or other failure was found in one of the redundant inputs.	Check whether no disconnection, earth fault, or short-circuit of the safeguard input signal exits. Then reboot the controller.		
9011	Battery voltage of the CPU board backup is lower than the specified voltage. Replace the CPU board battery.			
9012	5V input voltage for CPU board is lower than the specified voltage.			
9013	24 V input voltage for the motor brake, encoder and fan is lower than the specified voltage.			
9014	Internal temperature of the Controller is higher than the specified temperature.	Stop the controller as soon as possible and check whether the ambient temperature of the controller is not high. Check whether the filter is not clogged up.	Current value	Boundary value
9015	Rotating speed of the controller fan is below the allowed speed. (FAN1)	Check whether the filter is not clogged up. If the warning is not cleared after the controller is rebooted, replace the fan.	Current value	Boundary value
9016	Rotating speed of the controller fan is below the allowed speed. (FAN2)	Check whether the filter is not clogged up. If the warning is not cleared after the controller is rebooted, replace the fan.	Current value	Boundary value
9017	Internal temperature of the Controller is higher than the specified temperature.			
9100	Initialization failure. Failed to allocate memory.	Reboot the controller.		
9101	Message queue has become full.			
9233	The Fieldbus I/O driver is in an abnormal state.	The module is broken or the controller software is damaged. Restore the controller firmware.		
9234	Fieldbus I/O driver initialization failure.	The module is broken or the controller software is damaged. Restore the controller firmware.		
9610	RAS circuit detected a servo system malfunction. Reboot the controller. Check for noise. Replace the controller.	Check the noise countermeasures. Replace the DMB.		
9611	Servo CPU internal RAM failure. Reboot the controller. Check for noise. Replace the DMB.	Check the noise countermeasures. Replace the DMB.		
9612	RAM for the main and servo CPU communication failure. Reboot the controller. Check for noise. Replace the DMB.	Check the noise countermeasures. Replace the DMB.		
9613	Servo CPU internal RAM failure. Reboot the controller. Check for noise. Replace the DMB.	Check the noise countermeasures. Replace the DMB.		
9614	Initialization communication of main CPU and servo CPU failure. Reboot the Controller. Check for noise. Replace DMB.	Check the noise countermeasures. Replace the DMB.		

No.	Message	Remedy	Note 1	Note 2
9615	Initialization communication of the main and servo CPU failure. Reboot the controller. Check for noise. Replace the DMB.	Check the noise countermeasures. Replace the DMB.		
9616	Communication of the main and servo CPU failure. Reboot the controller. Check for noise. Replace the DMB.	Check the noise countermeasures. Replace the DMB.		
9617	Communication of the main and servo CPU failure. Reboot the controller. Check for noise. Replace the DMB.	Check the noise countermeasures. Replace the DMB.		
9618	Servo long time command overrun.	Check the noise countermeasures. Replace the DMB.		
9619	Servo long time command check sum error.	Check the noise countermeasures. Replace the DMB.		
9620	System watchdog timer detected a failure. Reboot the controller. Check for noise. Replace the DMB.	Check the noise countermeasures. Replace the DMB.		
9621	Drive unit check failure.	Check the noise countermeasures. Replace the DMB.		
9622	RAM failure of the servo CPU. Reboot the controller. Check for noise. Replace the DMB.	Check the noise countermeasures. Replace the DMB.		
9623	Failure of the redundant circuitry for the emergency stop or the safeguard. Check the wiring.	Check the noise countermeasures. Replace the DMB.		
9624	Low voltage of the main circuit power supply was detected. Check the power supply voltage. Reboot the controller.	Check the noise countermeasures. Replace the DMB.		
9625	Control relay contact of the main circuit power supply is welded closed. Replace the DPB.	Replace the DMB.		
9630	Servo real time status failure. Check sum error.	Reboot the controller. Replace the DMB. Check the noise countermeasures.		
9632	Servo real time status failure. Servo free running counter error	Reboot the controller. Replace the DMB. Check the noise countermeasures.		
9633	Servo real time status failure. Servo CPU communication error.	Reboot the controller. Replace the DMB. Check the noise countermeasures.		
9640	Irregular motion control interruption was detected. Interruption duplicate.	Reboot the controller. Replace the DMB. Check the noise countermeasures.		
9700	Servo control gate array failure. Check the DMB.	Check the short-circuit and improper connection of the peripheral equipment wiring. (Emergency and I/O connectors) Replace the DMB. Replace the additional axis unit.		

No.	Message	Remedy	Note 1	Note 2
9701	Disconnection of the parallel encoder signal. Check the signal cable connection or the robot internal wiring.	Check the M/C cable signal. Check the robot signal wiring. (Missing pin, disconnection, short-circuit) Replace the motor. (Encoder failure) Replace the DMB. (Detection circuit failure) Check the connector connection in the controller. (Loosening, connecting to the serial encoder terminal on the DMB) Check the model setting. (Improperly setting of the parallel encoder) Check the peripheral equipment wiring. (Emergency and I/O)		
9702	Motor driver is not installed. Install the motor driver. Check the DMB or the motor driver.	Check whether the motor driver is mounted. Check the model setting and hardware setting. Replace the motor driver. Replace the DMB.		
9703	Initialization communication failure of incremental encoder. Check the signal cable connection and the robot setting.	Check the model setting. Replace the motor. (Encoder failure) Replace the DMB.		
9704	Initialization failure of absolute encoder. Check the signal cable connection or the robot setting.	Check the model setting. Replace the motor. (Encoder failure) Replace the DMB.		
9705	Encoder division setting failure. Check the robot setting.	Check the model setting.		
9706	Data failure at the absolute encoder initialization. Check the signal cable connection, the controller, or the motor.	Replace the motor. (Encoder failure) Replace the DMB. Check the noise countermeasures.		
9707	Absolute encoder multi-turn is beyond the maximum range. Reset the encoder.	Reset the encoder. Replace the motor. (Encoder failure)		
9708	Position is out of the range. Reset the encoder.	Reset the encoder. Replace the DMB. Replace the motor. (Encoder failure)		
9709	No response from the serial encoder. Check the signal cable connection, the motor, the DMB, or the encoder IF board.	Check the model setting. (Improperly setting of the parallel encoder model) Check the signal cable connection. Replace the DMB and encoder I/F board.		
9710	Serial encoder initialization failure. Reboot the controller. Check the motor, the DMB, or the encoder IF board.	Check the robot configuration. Check the signal cable. Replace the DMB and encoder I/F board.		
9711	Serial encoder communication failure. Reboot the controller. Check the motor, the DMB, or the encoder IF board.	Check the robot configuration. Check the signal cable. Replace the DMB and encoder I/F board.		
9712	Servo CPU watchdog timer failure. Reboot the controller. Check the motor or the DMB.	Replace the DMB. Check the noise countermeasures.		
9713	Current control circuit WDT failure. Reboot the controller. Check the controller.	Check the power cable connection. Check the 15V power supply and cable connection. Replace the DMB. Check the noise countermeasures.		
9715	Encoder is reset. Reboot the controller.	Reboot the controller.		
9716	Power supply failure of the absolute encoder. Replace the battery to a new one. Check the robot internal wiring.	Reset the encoder. Check the signal cable connection.		
9717	Backup data failure of the absolute encoder. Reset the encoder.	Reset the encoder. Check the signal cable connection.		

| No.	Message	Remedy	Note 1	Note 2
9718	Absolute encoder battery alarm.	Replace the battery. Check the signal cable connection.		
9719	Position failure of the absolute encoder. Reset the encoder. Replace the motor.	Reset the encoder. Replace the motor. (Encoder failure)		
9720	Speed is too high at controller power ON. Stop the robot and reboot the controller.	Reboot the controller.		
9721	Absolute encoder over heat.	Lower the motion duty. Wait until the temperature of the encoder decreases.		
9722	R/D transducer failure. Check the resolver board.	Check the noise countermeasure. Replace the resolver board.		
9723	G sensor communication failure. Check the control board.	Check the M/C signal cable. Check the robot signal wiring (for pin falling, disconnection, short). Check the noise countermeasure. Replace the control board. Replace the DMB board.		
9724	G sensor data failure. Check the control board.	Replace the control board.		
9725	Resolver mixing failure. Reset the encoder.	Reset the resolver. Replace the resolver board.		
9726	Resolver signal disconnection. Check the motor and resolver board.	Check the robot signal wiring. Replace the resolver board.		
9727	S-DSP communication failure. Check-sum error, Free-run counter error	Reboot the controller. Replace the DMB. Check the noise countermeasure.		
9728	Current data failure. Data update stopped. Parity error.	Reboot the controller. Replace the DMB. Check the noise countermeasure.		
9729	D-DSP communication failure. Check-sum error, Free-run counter error	Reboot the controller. Replace the DMB. Check the noise countermeasure.		
9732	Servo alarm A.			

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No.	Message	Remedy	Note 1	Note 2
7713	Option not enabled.			
7714	File not found.			
10000	Command aborted by user			
10001	Command timeout.			
10002	Bad point file line syntax			
10003	Project could not be built.			
10004	Cannot initialize Spel class instance.			
10005	Cannot initialize parser.			
10006	Cannot initialize wbproxy.			
10007	Project does not exist.			
10008	No project specified.			
10009	Cannot open file.			
10010	Cannot create file.			
10011	File not found			
10012	Option not enabled			
10013	Cannot execute LoadPoints with Robot Manager open.			
10014	Project cannot be locked.　It is being used by another session.			
10015	Project could not be synchronized.			
10016	Drive not ready			
10017	Invalid IP address			
10018	Invalid IP mask			
10019	Invalid IP gateway			
10020	IP address or gateway cannot be the subnet address			
10021	IP address or gateway cannot be the broadcast address			
10022	Invalid DNS address			
10023	Commands cannot be executed because the project build is not complete.			
10024	Invalid task name.			
10025	Trial runtime expired.			
10100	Command already in cycle.			
10101	Command aborted by user.			

8.2   Cannot Connect the Development PC and the Controller using the USB cable

⚠ CAUTION	■ Do not connect the USB cable to a PC or a Controller without installing Program Development Software EPSON RC+ 5.0 to the PC. You must install EPSON RC+ 5.0 to control the Controller. If the USB cable is connected to a PC or a Controller without installing Program Development Software EPSON RC+ 5.0, the [Add New Hardware] wizard appears. Click the <Cancel> button to close the [Add New Hardware] wizard.

- If the following error message appears when connecting the development PC and Controller with the USB cable and connecting the Controller to EPSON RC+ 5.0, Windows may not recognize the Controller properly.   Refer to *8.2.1 Confirmation Using Windows Device Manager* to check the connection of the Controller.
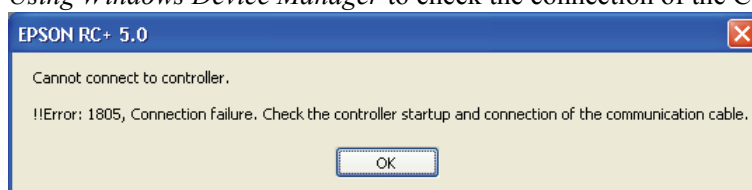
- "*****" part of the driver name differs depends on the type of Windows you use.

  Driver name "EPSON Robot Controller *****"

8.2.1   Confirmation Using Windows Device Manager

(1) Make sure that the development PC and the Controller is connected to the USB cable.

NOTE 👉

When checking the Controller connection using the Windows device manager, the development PC and the Controller must be connected with the USB cable.
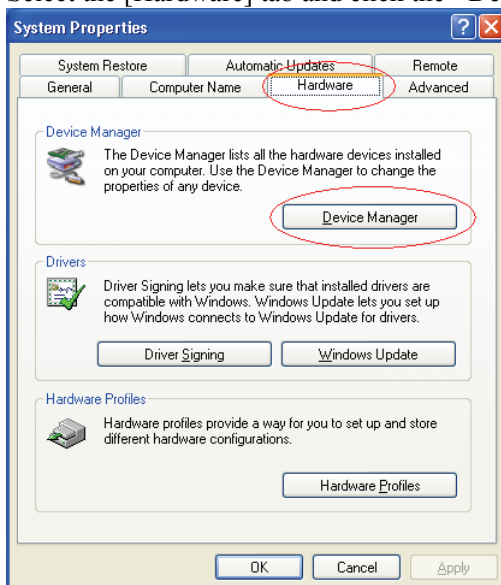
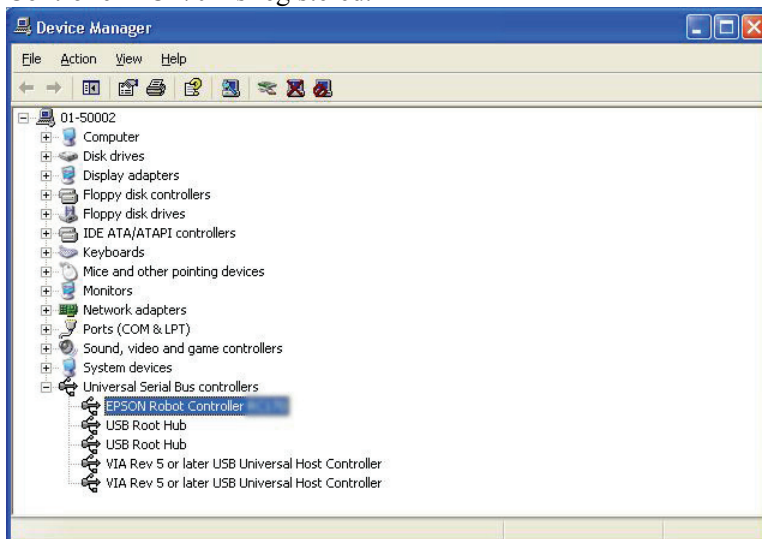(2) Click Windows-[Control Panel]-<Performance and Maintenance>.
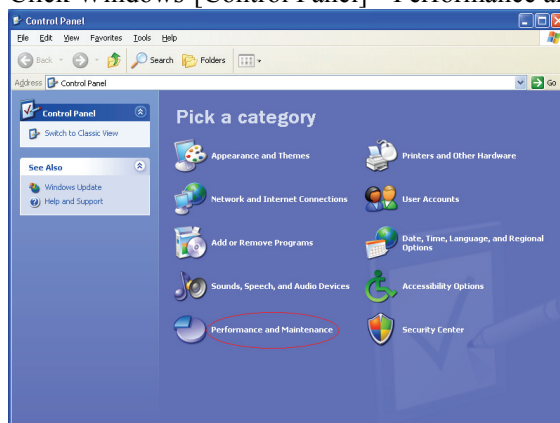
(3) The [Performance and Maintenance] dialog appears.

Click the <System> icon.
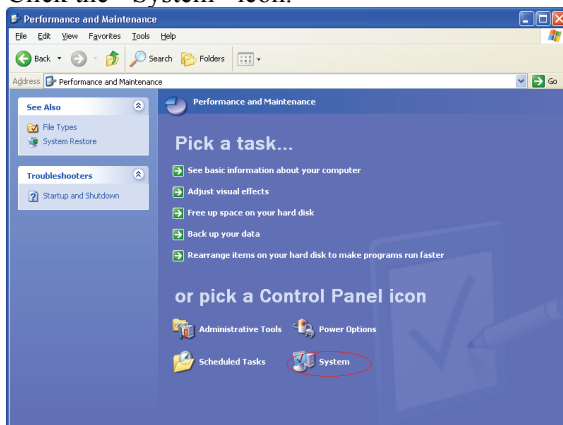
(4) The [System Properties] dialog appears.

Select the [Hardware] tab and click the <Device Manager> button.

(5) The [Device Manager] dialog appears.

Click <Universal Serial Bus controllers> and make sure that "EPSON Robot Controller RC170" is registered.

NOTE

☞

When "EPSON Robot Controller RC170" is registered and located under "Universal Serial Bus controllers" in step (5), the development PC and the Controller connect properly.

If the following error message appears, please contact EPSON.
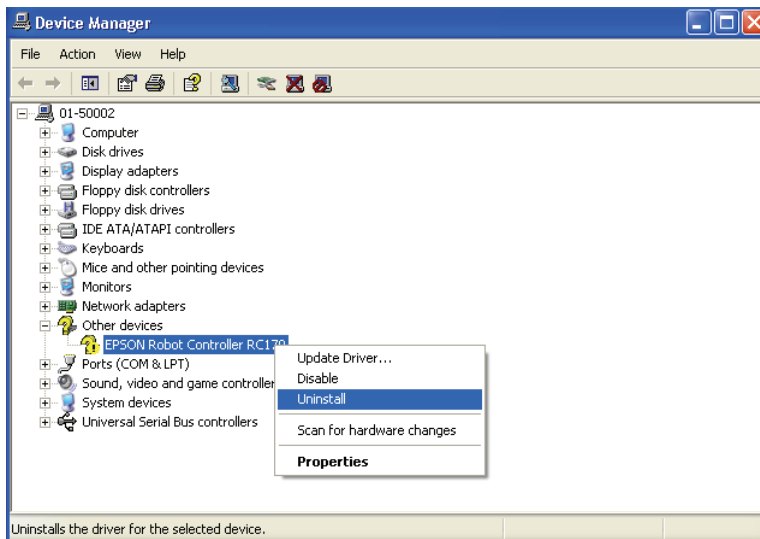
"Cannot connect to controller.
!! Error: 1805, Connection failure, check the controller startup and connection of the communication cable."

If "EPSON Robot Controller RC170" is not located under "Universal Serial Bus controllers" but located under "Other devices" in step (5), refer to *8.2.2 When recognized under "Other devices" in Windows Device Manager*.

If "EPSON Robot Controller RC170" is recognized under "Other devices" in the Windows device manager as shown in the following dialog, delete "EPSON Robot Controller RC170" from the device manager and connect the USB cable again to correct the problem.


(1) Select and right click "EPSON Robot Controller RC170" in the [Device Manager] dialog.

(2) Select [Uninstall].

(3) The [Confirm Device Removal] dialog appears.
     Click the <OK> button.

(4) Remove the USB cable and connect the USB cable again.   The following message appears at the right bottom of the Windows screen.

(5) When the Controller is installed automatically and the following message appears, the communication is available.
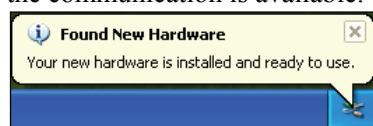
NOTE

☞   If the problem is not corrected, please contact EPSON.