A.3 ERROR CODES

Error codes in this section are listed alphabetically. If you receive an error that does not appear in this section, write down all of the events that lead to the error. Perform a cold start to reset the error. If the error still occurs, call your FANUC Robotics technical representative.

Back to top

CALB Error Codes

CALB-000 WARN Unknown error

- **Cause:** An internal error has occured.
  - **Remedy:** Cold start the controller

CALB-001 WARN TCP differs by %s

- **Cause:** The difference between the current TCP and the previous TCP is greater than the pre-defined threshold.
  - **Remedy:** Run the AutoTCP utility again to confirm the TCP value.

CALB-002 WARN XYZ: %s

- **Cause:** AutoTCP logs the previous TCP XYZ value to error log for record keeping.
  - **Remedy:** None.

CALB-003 WARN WPR: %s

- **Cause:** AutoTCP logs the previous TCP WPR value to error log for record keeping.
  - **Remedy:** None.

CALB-010 WARN Cannot access system variables

- **Cause:** Cannot access to the robot signature's system variables
  - **Remedy:** Re-load the option

CALB-011 WARN Position is not recorded.

- **Cause:** The position is not recorded
  - **Remedy:** Please record the position before move to it.

CALB-012 WARN Press shift key.

- **Cause:** Move/Record with press the shift key.
  - **Remedy:** Please press SHIFT key at the same time when record a position or move to a position.

CALB-013 WARN Robot is already in motion.

- **Cause:** Robot is current uner motion control. Cannot issue a new motion at this moment.
  - **Remedy:** Please wait for the current motion to complete before isussing the next motion.

CALB-014 WARN Calib motn requires more data.

- **Cause:** Calibration motion requires more data points.
  - **Remedy:** Please make sure the sensor data, TCP motion data and End Position data are recorded correctly before issuing calibration motion.

CALB-015 WARN Wrong mode to read data file.

- **Cause:** Have to be in the 3rd party data mode to read in a data file.
  - **Remedy:** Please make sure to select 3rd party in the calibration mode in order to read in a data file.

CALB-016 WARN Fail to run calibration motion

- **Cause:** Fail to run calibration motion. in a data file.
  - **Remedy:** Please make sure there is no system error before running robot calibration program.

CALB-017 WARN Jog Group mismatch.

- **Cause:** Current group does not match the jogging group. Cannot issue motion.
  - **Remedy:** Please make sure the jogging group matches the current group.

CALB-018 WARN Robot is not being mastered .

- **Cause:** Cannot record position. The robot is not being mastered.
  - **Remedy:** Please do robot mastering first.

CALB-019 WARN Cannot auto generate positions

- **Cause:** The robot is not being mastered.
  - **Remedy:** Make sure the start position and pull position are seperated by at least 10mm. Make sure the angles are select and Total points are set correctly.

CALB-020 WARN Cannot open data file.

- **Cause:** Cannot find the input data file.

- **Remedy:** Make sure the configuration data file and the calibration data file are available.

CALB-021 WARN Wrong data format.

- **Cause:** Input data file has the wrong format.
  - **Remedy:** Run calibration motion again to get the correct data.

CALB-022 WARN Memory is not available.

- **Cause:** Controller doesn't have enough memory available for this program.
  - **Remedy:** Cold start the controller and run this program again. If the prolem presists, please add more DRAM module to the controller.

CALB-023 WARN Cannot converge to a solution.

- **Cause:** Cannot compute the calibration data from the given data.
  - **Remedy:** Please increase the number of calibration motions by recording more positions in the End Position menu. If problem persists, please monitor the calibration process to make sure the string does not caught by other objects during calibration motion.

CALB-024 WARN Robot model is not supported.

- **Cause:** The Auto Calibration software does not support this robot model.
  - **Remedy:** There are certain robot models that the Auto Calib software does not support due to these model's kinematic equation cannot be easily solved through calibration equations.

CALB-025 WARN Sensor position is not set.

- **Cause:** Stand Alone calibration requies sensor and tool locations this robot model.
  - **Remedy:** Please set the sensor location and tool position under the calibration type setup menu.

CALB-026 WARN No Link length data available.

- **Cause:** This robot model does not have correct link length information set.
  - **Remedy:** Make sure the param_group[].sv_dh_a and param_group[].sv_dh_d are set by robot library.

CALB-027 PAUSE String exceeds its limit.

- **Cause:** The string is pulled over it's limit.
  - **Remedy:** Move the string back toward the sensor's location.

Back to top

CMND Error Codes

CMND-001 WARN Directory not found

- **Cause:** The specified directory can not be found.
  - **Remedy:** Check the device and path that you entered. If none entered, check the system default device from the FILE Menu or from the KCL command, CHDIR.

CMND-002 WARN File not found

- **Cause:** The specified file could not be found.
  - **Remedy:** Check to make sure the file has been spelled correctly and that it exists. Also verify the device and path name are correct.

CMND-003 WARN File already exists

- **Cause:** The file already exists and could not be overwritten.
  - **Remedy:** Make sure the overwrite option has been specified.

CMND-006 WARN Self copy not allowed

- **Cause:** A file cannot be copied to itself.
  - **Remedy:** Change the name of the destination file so it is different from the source file.

CMND-010 WARN Source type code is invalid

- **Cause:** The source variable was not a position type when converting between a Cartesian and joint position.
  - **Remedy:** The valid position types are POSITION, JOINTPOS, XYZWPR, and XYZWPREXT.

CMND-011 WARN Destination type code is invalid

- **Cause:** The destination variable was not a position type when converting between a Cartesian and joint position.
  - **Remedy:** The valid position types are POSITION, JOINTPOS, XYZWPR, and XYZWPREXT.

CMND-012 WARN Type codes do not match

- **Cause:** The requested type code doesn't match the passed variable type.
  - **Remedy:** Internal error. Make sure the type code matches the variable type.

CMND-013 WARN Representation mismatch

- **Cause:** An attempt was made to compare two positions that are not the same type.
  - **Remedy:** Both positions must be the same type. Convert one before comparing.

CMND-014 WARN Positions are not the same

- **Cause:** Two positions were compared and found not to be equal.

- **Remedy:** The two positions were not equal within the specified tolerance. This could be a normal occurrence. This warning is the logical opposite of SUCCESS.

CMND-015 WARN Both arguments are zero

- **Cause:** Both arguments to ATAN2 were zero or an internal error occurred when attempting to convert a POSITION to XYZWPR.
  - **Remedy:** If calling ATAN2, make sure that both arguments are not zero. If converting a POSITION, then it cannot be converted to an XYZWPR.

CMND-016 WARN Division by zero

- **Cause:** An attempt was made to divide by zero.
  - **Remedy:** This is an internal error. Make sure that the divisor is not equal or close to zero.

CMND-017 WARN Angle is out of range

- **Cause:** The rotational angle is to great.
  - **Remedy:** Make sure that the rotational angle is no greater than 100 times PI, or about 314.15926...

CMND-018 WARN Invalid device or path

- **Cause:** An invalid device or path has been specified.
  - **Remedy:** Check the device and path that you entered. If none entered, check the system default device from the FILE Menu or from the KCL command, CHDIR.

CMND-019 WARN Operation cancelled

- **Cause:** The operation was cancelled because CTRL-C or CTRL-Y was pressed.
  - **Remedy:** Repeat the operation.

CMND-020 WARN End of directory

- **Cause:** The directory listing is finished.
  - **Remedy:** This is a notification. You do not have to do anything for this warning message.

CMND-021 WARN Cannot rename file

- **Cause:** The destination file name contained both alphanumeric characters and the global character `*'.
  - **Remedy:** Use only alphanumeric characters or a single global character when renaming a file.

CMND-022 STOP Time motion with dist before

- **Cause:** A time-based motion was specified along with distance before.
  - **Remedy:** Do not use these options in combination.

Back to top

COND Error Codes

COND-001 WARN Condition does not exist

- **Cause:** Specified condition does not exist
  - **Remedy:** Check for condition statements to verify if the specified condition has really been created or not.

COND-002 WARN Condition handler superseded

- **Cause:** The specified condition number already exists in the system, and has been superseded by the new condition.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

COND-003 WARN Already enabled, no change

- **Cause:** The specified condition is already enabled. No change has been made.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

COND-004 WARN Already disabled, no change

- **Cause:** The specified condition is already disabled. No change has been made.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

COND-005 WARN No more conditions defined

- **Cause:** No more conditions are defined for the specified task.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

COND-009 WARN Break point encountered

- **Cause:** Break point has been encountered.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

COND-010 WARN Cond exists, not superseded

- **Cause:** Specified condition already exists. Condition was not superseded. May indicate two condition handlers for the same task with the same condition handler.
  - **Remedy:** Either renumber the condition handler or avoid re-defining the same condition handler.

COND-011 WARN Scan time took too long

- **Cause:** There are too many conditions defined. It took too long to scan them all.
  - **Remedy:** Reduce the number of conditions defined.

Back to top

DICT Error Codes

DICT-001 WARN Dictionary already loaded

- **Cause:** A dictionary cannot be reloaded if it was loaded into FROM.
  - **Remedy:** Load into a different language and use KCL SET LANG to set the language.

DICT-002 WARN Not enough memory to load dict

- **Cause:** There is no more permanent memory available in the system to load another dictionary.
  - **Remedy:** Clear all unnecessary programs, dictionaries or variables.

DICT-003 WARN No dict found for language

- **Cause:** There are no dictionaries loaded for the specified language.
  - **Remedy:** Use the DEFAULT language or a language in which a dictionary has been loaded.

DICT-004 WARN Dictionary not found

- **Cause:** The specified dictionary was not found.
  - **Remedy:** Use KCL LOAD DICT to load the dictionary into the DEFAULT language or the current language.

DICT-005 WARN Dictionary element not found

- **Cause:** The dictionary element was not found.
  - **Remedy:** Check the dictionary or element number to be sure it is specified correctly.

DICT-006 WARN Nested level too deep

- **Cause:** Only five levels of dictionary elements can be nested.
  - **Remedy:** Fix the dictionary text file to include fewer nested levels.

DICT-007 WARN Dictionary not opened by task

- **Cause:** The dictionary was never opened.
  - **Remedy:** Remove the close operation.

DICT-008 WARN Dictionary element truncated

- **Cause:** The dictionary element was truncated because the KAREL string array is not large enough to hold all the data.

- **Remedy:** Increase either the size of the string or the number of strings in the array.

DICT-009 WARN End of language list

- **Cause:** The language list has completed.
  - **Remedy:** This is a notification. You do not have to do anything for this warning message.

DICT-010 WARN End of dictionary list

- **Cause:** The dictionary list has completed.
  - **Remedy:** This is a notification. You do not have to do anything for this warning message.

DICT-011 WARN Dict opened by too many tasks

- **Cause:** Only five dictionaries can be open by one task at one time.
  - **Remedy:** Load the dictionary to memory or close an unused dictionary.

DICT-012 WARN Not enough memory to load dict

- **Cause:** Not enough memory exists in the TEMP pool on the controller. The dictionary was not loaded.
  - **Remedy:** This is a notification of insufficient memory resources on the controller. The hardware and software configurations need to be verified.

DICT-013 WARN Cannot open dictionary file

- **Cause:** The dictionary file does not exist on the specified device or in the specified directory.
  - **Remedy:** Select the proper device/directory and try again.

DICT-014 WARN Expecting $ in dictionary file

- **Cause:** The dictionary text incorrectly specifies an element without a $.
  - **Remedy:** Make sure all dictionary elements begin with $.

DICT-015 WARN Reserved word not recognized

- **Cause:** A reserved word was not recognized in the dictionary text.
  - **Remedy:** Check for misspelling or look up the correct word in the *KAREL Reference Manual.*

DICT-016 WARN Ending quote expected

- **Cause:** The dictionary text incorrectly specifies an element without using quotes.
  - **Remedy:** Make sure all dictionary text is surrounded by double quotes. Use a backslash if you want an actual quote to appear in the text. For example, \"This is an example\" will produce "This is an example"

DICT-017 WARN Expecting element name or num

- **Cause:** A reference to another element is expected.
  - **Remedy:** Use the element number to reference the element.

DICT-018 WARN Invalid cursor position

- **Cause:** The cursor position is specified incorrectly or the values are outside the limits.
  - **Remedy:** Make sure the cursor position is valid. For example, use @1,1 for the first row and col respectively.

DICT-019 WARN ASCII character code expected

- **Cause:** A series of digits are expected after the # to specify an ASCII character code.
  - **Remedy:** Remove the # or look up the ASCII character code in the *KAREL Reference Manual.*

DICT-020 WARN Reserved word expected

- **Cause:** An identifier is expected after the & to specify a reserved word.
  - **Remedy:** Remove the & or look up the reserved word in the *KARE L Reference Manual.*

DICT-021 WARN Invalid character

- **Cause:** An unexpected character was found in the dictionary text file.
  - **Remedy:** Make sure all dictionary text is correct.

DICT-022 WARN Dict already opened by task

- **Cause:** The dictionary is already open by the task.
  - **Remedy:** This is a notification. You do not have to do anything for this warning message.

DICT-023 WARN Dict does not need to be opened

- **Cause:** Dictionaries loaded to memory do not need to be opened.
  - **Remedy:** Do not try to open the dictionary file.

DICT-024 WARN Cannot remove dictionary file

- **Cause:** Dictionaries loaded to FROM cannot be removed or a dictionary cannot be removed if another task has it opened.
  - **Remedy:** Do not try to remove a dictionary loaded to FROM. Remove the dictionary from the same task which loaded it.

DICT-028 WARN Not enough memory to load dict

- **Cause:** Not enough memory exists in the TEMP pool on the controller. The dictionary was not loaded.
  - **Remedy:** This is a notification of insufficient memory resources on the controller. The hardware and software configurations need to be verified.

DICT-029 WARN Help element not found

- **Cause:** The help dictionary element was not found.
  - **Remedy:** Check the dictionary to be sure the help dictionary element was specified correctly. The help dictionary element must be specified with a question mark (?) followed by the element number.

DICT-030 WARN Function key element not found

- **Cause:** The function key dictionary element was not found.
  - **Remedy:** Check the dictionary to be sure the function key element was specified correctly. The function key element must be specified with a caret (^) followed by the element number.

DICT-031 WARN %4s-%03d $%8lX, no message found

- **Cause:** The dictionary containing the error message could not be found.
  - **Remedy:** Refer to the *FANUC Robotics System R-J3 Software Reference Manual* for the error message.

DICT-032 WARN %4s-%03d, see posted error

- **Cause:** The error message was posted to the error log.
  - **Remedy:** See error window or the Alarms menu for the error message.

DICT-040 WARN Expecting element num after $

- **Cause:** The dictionary text incorrectly specifies an element number.
  - **Remedy:** Make sure all dictionary elements begin with $ followed by the element number.

DICT-041 WARN Expecting element name after ,

- **Cause:** The dictionary text incorrectly specifies an element name.
  - **Remedy:** Make sure all dictionary elements are specified as ",element_n ame" after the add constant name.

DICT-042 WARN Expecting add constant name

- **Cause:** The dictionary text was specified incorrectly.
  - **Remedy:** Make sure all dictionary elements are specified as "+add_const _name" after the element number.

DICT-043 WARN Element number out of sequence

- **Cause:** The dictionary text was not specified in sequence.
  - **Remedy:** Make sure all dictionary elements are specified in sequential order.

DICT-044 WARN Warning - large hole in ele seq

- **Cause:** The dictionary text has a large gap between element numbers.
  - **Remedy:** Reduce the gap in the element sequence. Each missing element uses up five bytes of memory.

DICT-045 WARN .LIT or .END mismatch

- **Cause:** The dictionary text was specified incorrectly.
  - **Remedy:** Verify that each .LIT is matched with a .END.

DICT-046 WARN Command already encountered

- **Cause:** The dictionary text was specified incorrectly.
  - **Remedy:** Remove the extra command.

DICT-047 WARN File extension required

- **Cause:** The dictionary compressor expects a file extension.
  - **Remedy:** Use the .etx file extension for error text, the .utx file extension for uncompressed text, or the .ftx file extension for form text.

DICT-048 WARN Invalid file extension

- **Cause:** The dictionary compressor did not recognize the file extension.
  - **Remedy:** Use the .etx file extension for error text, the .utx file extension for uncompressed text, or the .ftx file extension for form text.

DICT-049 WARN Expecting file name

- **Cause:** The dictionary compressor expects a file name.
  - **Remedy:** Specify a file name after the command.

DICT-050 WARN Expecting facility number

- **Cause:** The dictionary compressor expects a facility number in the .KL command.
  - **Remedy:** Specify the facility number after the file name.

DICT-051 WARN Symbol invalid for dictionary type

- **Cause:** An invalid command was specified for this type of dictionary file.
  - **Remedy:** Check the command and if a form is used, verify the file extension is .ftx.

DICT-052 WARN Expecting .ENDFORM symbol

- **Cause:** The dictionary text was specified incorrectly.
  - **Remedy:** Verify that each .FORM is matched with a .ENDFORM.

DICT-053 WARN Cannot open include file

- **Cause:** The include file could not be created.
  - **Remedy:** Make sure a valid file name has been specified.

DICT-054 WARN Form is being displayed

- **Cause:** The form you are trying to compress is currently being displayed.
  - **Remedy:** Abort the KAREL program that is displaying the form.

Back to top

DNET (DeviceNet) Error Codes

DNET-001 STOP No system device file

- **Cause:** The system device definition file is missing from the system.
  - **Remedy:** INIT start and reload the DeviceNet Interface option. If the error still exists, document the events that led to the error and call your FANUC Robotics technical representative.

DNET-002 STOP No application device file

- **Cause:** The application device definition file is missing from the system.
  - **Remedy:** INIT start and reload the DeviceNet Interface option. If the error still exists, document the events that led to the error and call your FANUC Robotics technical representative.

DNET-004 STOP Board init failed: Bd %d

- **Cause:** The specified board has failed to initialize.
  - **Remedy:** Make sure the board parameters are correct. Make sure the board is properly connected to the network and power is supplied.

DNET-006 ERR_SYS_C System error: %d

- **Cause:** A system error has occurred.
  - **Remedy:** Document the events that led to the error and call your FANUC Robotics technical representative.

DNET-008 STOP Invalid board index

- **Cause:** An invalid board index has been specified.
  - **Remedy:** Specify a board index between 0 and 3.

DNET-009 STOP Invalid MAC Id: Bd %d MAC %d

- **Cause:** An invalid MAC Id has been specified.
  - **Remedy:** Specify a MAC Id between 0 and 63 inclusive.

DNET-010 STOP Board already online

- **Cause:** The specified board is already on-line.
  - **Remedy:** Take the board off-line before attempting the operation.

DNET-011 STOP Board not online

- **Cause:** The specified board is not on-line.
  - **Remedy:** Put the board on-line before attempting the operation.

DNET-012 STOP Device already online

- **Cause:** The specified device is already on-line.
  - **Remedy:** Take the device off-line before attempting the operation.

DNET-013 STOP Device not online

- **Cause:** The specified device is not on-line.
  - **Remedy:** Put the device on-line before attempting the operation.

DNET-014 STOP Request timed out

- **Cause:** The attempted DeviceNet command request has timed out.
  - **Remedy:** Check all network connections. If all connections appear to be in order, re-attempt the command.

DNET-015 STOP Board not initialized

- **Cause:** The specified board has not been initialized.
  - **Remedy:** Initialize the board by attempting to put it on-line, and then cycle power. Then, re-attempt the operation.

DNET-016 STOP System failed

- **Cause:** The DeviceNet Interface system has failed.
  - **Remedy:** Cold start the system. If the problem persists, INIT start or reload the system. If the problem continues to persist, document the events that led to the error and call your FANUC Robotics technical representative.

DNET-017 STOP Board not found

- **Cause:** The specified board was not found in the system.
  - **Remedy:** Make sure the daughter boards are properly configured and properly seated on the motherboard.

DNET-018 STOP Memory test failed

- **Cause:** The specified board has failed the initial memory test.
  - **Remedy:** Cold start the system. If the problem persists, INIT start and reload the DeviceNet Interface option.

DNET-019 STOP Code file open failed

- **Cause:** The code file required to initialize the board cannot be accessed.
  - **Remedy:** Cold start the system. If the problem persists, INIT start and reload the DeviceNet Interface option.

DNET-020 STOP Code file read failed

- **Cause:** The code file required to initialize the board cannot be read.
  - **Remedy:** Cold start the system. If the problem persists, INIT start and reload the DeviceNet Interface option.

DNET-021 STOP Code file checksum error

- **Cause:** There is a problem with the DeviceNet scanner code file.
  - **Remedy:** Cold start the system. If the problem persists, INIT start and reload the DeviceNet Interface option. If the problem continues to persist, document the events that led to the error and call your FANUC Robotics technical representative.

DNET-022 STOP Board initialization timeout

- **Cause:** The board initialization routine has timed out.
  - **Remedy:** Turn the controller off. Make sure the motherboard is correctly seated on the back plane. Cold start the controller. If the problem persists, document the events that led to the error and call your FANUC Robotics technical representative.

DNET-023 STOP Board initialization error

- **Cause:** An error has occurred in the board initialization process.
  - **Remedy:** Cycle power to the controller. If the problem persists, turn the controller off and check the motherboard connection to the back plane. Cold start the controller. If the problem persists, document the events that led to the error and call your FANUC Robotics technical representative.

DNET-025 STOP No device assigned for Bd/MAC

- **Cause:** A data mismatch has occurred such that the system cannot find a device assigned for the specified board number and MAC Id.
  - **Remedy:** Turn the controller off and cold start the controller. If the problem persists, delete the board from the Board List screen, reconfigure the board, and re-add devices to the Device List. Cycle power. Also, check the device MAC Id configurations.

DNET-026 STOP No match on dev type look-up

- **Cause:** The system cannot find the specified device type in its list of defined device types.
  - **Remedy:** Check the selected device type on the Device List. Next, check the Defined Device List and the Standard Device Definition List for the required device type. If it does not appear, go to the Defined Device List and add the required device definition, then select it on the Device List screen. When you have finished, turn off then turn on the controller.

DNET-027 STOP Dev online err: Bd %d MAC %d

- **Cause:** The device at the specified board number and MAC Id cannot be brought on-line.
  - **Remedy:** Make sure the device is properly connected to the network. Check the device's MAC Id and baud rate configuration. Check the board's baud rate configuration on the Board Detail screen. Check the board's network connection. Cold Start the controller.

DNET-028 STOP Board online err: Bd %d

- **Cause:** The specified board cannot be brought on-line.

- **Remedy:** Make sure the board is properly connected to the network. Check that network power is being supplied. Check that baud rates for the board and devices are in agreement. Cold Start the controller.

DNET-029 STOP Too many deferred errors

- **Cause:** The system has received the maximum number of DeviceNet errors it can handle at one time.
  - **Remedy:** Attempt to remedy any errors that are displayed, then cold start the controller.

DNET-030 STOP Std dev file fmt err: Line %d

- **Cause:** There is an error in the format of the specified device definition file, on the specified line.
  - **Remedy:** Contact your FANUC Robotics technical representative to obtain a correct device definition file.

DNET-031 STOP App dev file fmt err: Line %d

- **Cause:** There is an error in the format of the specified device definition file, on the specified line.
  - **Remedy:** Contact your FANUC Robotics technical representative to obtain a correct device definition file.

DNET-032 ERR_STOP_C Device not ready: Bd %d MAC %d

- **Cause:** When a device has been added to a scan list, it cannot be brought on-line without cycling power to the controller.
  - **Remedy:** Cycle power to the controller. You will then be able to bring the device on-line.

DNET-033 STOP Unknown keyword

- **Cause:** An unknown keyword has been found in the device definition files.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-034 ERR_STOP_C Cycle power to bring online

- **Cause:** You must turn power off and on to the controller to bring online a newly-added device to a board's
device list.
  - **Remedy:** Cycle power to the controller. You will then be able to bring the device online.

DNET-035 STOP Bad format or out of range

- **Cause:** An integer value in the device definition files is incorrect.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-036 STOP No NINPUTS or NOUTPUTS line

- **Cause:** The specified line was not found in a device definition file.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-037 STOP No PDTCODE line

- **Cause:** The specified line was not found in a device definition file.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-038 STOP No MODULE lines with MULTIMOD

- **Cause:** The specified lines were not found in a device definition file.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-039 STOP Too many MODULE lines

- **Cause:** The specified lines were incorrect in a device definition file.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-040 STOP MODULE specified w/o MULTIMOD

- **Cause:** A definition was incorrect in a device definition file.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-041 STOP Required field missing

- **Cause:** A definition was incorrect in a device definition file.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-042 STOP No DEVTYPE line supplied

- **Cause:** The specified line was not found in a device definition file.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-043 STOP No VENDORID line supplied

- **Cause:** The specified line was not found in a device definition file.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-044 STOP No PRODCODE line supplied

- **Cause:** The specified line was not found in a device definition file.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-045 STOP No I/O type line supplied

- **Cause:** The specified line was not found in a device definition file.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-046 STOP No PDTCODE line supplied

- **Cause:** The specified line was not found in a device definition file.
  - **Remedy:** Contact your FANUC Robotics technical representative to obtain the correct device definition files.

DNET-047 STOP DeviceNet motherboard not found

- **Cause:** The DeviceNet motherboard is not plugged into the back plane.
  - **Remedy:** Turn off the controller and make sure the motherboard is properly seated into the back plane of the controller. Cold start the controller.

DNET-052 STOP Data line too long

- **Cause:** The specified line was incorrect in the device definition file.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-053 STOP Line above DEVICE line ignored

- **Cause:** An extraneous line was found in a device definition file.
  - **Remedy:** Check the Standard Device Definition List to see if device types have been properly loaded. If not, contact FANUC Robotics to obtain the correct device definition files.

DNET-054 STOP All space in shared RAM used

- **Cause:** There is no space left in the DeviceNet I/O buffer.
  - **Remedy:** Contact FANUC Robotics to report the problem. Provide all details of the DeviceNet network, including number and type of devices, baud rates, MAC Ids, and network wiring configuration.

DNET-055 STOP Board or network error: Bd %d

- **Cause:** An error has occurred with the specified daughter board or the DeviceNet network connected to it.
  - **Remedy:** Refer to the next DNET alarm posted in the alarm log for specific alarm recovery information.

DNET-056 STOP Network power lost

- **Cause:** Power has been removed from the DeviceNet network.
    - **Remedy:** Check the cable connecting the daughter board to the DeviceNet network. Also, check the connection to the power source. Cycle power to the controller.

DNET-057 STOP Network communications error

- **Cause:** A network communications error has occurred on the network connected to the specified board.
    - **Remedy:** Check that the board's baud rate corresponds to that of the devices. Check cable connections to both the board and devices. Check that the proper device definitions are selected for the devices on the network and that parameters are correct for user-defined devices. Turn off both the controller and the DeviceNet network power, then cold start the controller.

DNET-058 STOP Message queue overrun

- **Cause:** The board has received more messages than it can handle at one time.
    - **Remedy:** The problem may be momentary; attempt to bring the board on-line again. If the problem persists, check that the board baud rate corresponds to the baud rate of the devices. Turn off then turn on the controller.

DNET-059 STOP Message lost

- **Cause:** The board has missed a message over the DeviceNet network.
    - **Remedy:** The problem might be momentary; attempt to bring the board on-line again. If the problem persists, check that the board baud rate corresponds to the baud rate of the devices. Turn off then turn on power to the controller.

DNET-060 STOP Xmit timeout: Network flooded

- **Cause:** The traffic on the DeviceNet network is too heavy for the board to communicate with the devices.
    - **Remedy:** Check that the board baud rate agrees with the baud rate of the devices. If no baud rate problem exists, turn off both the controller and the DeviceNet network power, then turn on both.

DNET-061 STOP No other nodes on network

- **Cause:** All of the devices expected by the board to be on the network appear to be disconnected to the network.
    - **Remedy:** Check cable connections to the board and to the devices. If a device has been disconnected, reconnect and press RESET on the teach pendant. Check that the board baud rate is the same as baud rate of the devices.

DNET-062 STOP Bus off due to comm errors

- **Cause:** The board is not communicating to the network because there are too many errors.
    - **Remedy:** Check that the baud rate of the board and of the devices is the same. Make sure that power is connected to the DeviceNet

network. Press RESET on the teach pendant. If the problem persists, begin removing devices from the network; after each device is removed, press RESET. When the board is brought on-line, check the device configuration and the parameters of the device definition.

DNET-063 STOP Device error: Bd %d MAC %d

- **Cause:** An error has occurred with the device at the specified board number and MAC Id.
  - **Remedy:** Refer to the next DNET alarm posted in the alarm log for specific alarm recovery information.

DNET-064 STOP Connection error

- **Cause:** An error has occurred when attempting connection to the specified device.
  - **Remedy:** Check that the baud rate of the device agrees with the board baud rate. Check that the device is properly connected to the network; make sure the device is receiving power from the network. Inspect the device definition to see that the I/O type, access mode, and size of I/O are correct. Press RESET on the teach pendant to re-attempt connection.

DNET-065 STOP Incorrect vendor Id

- **Cause:** The vendor Id for the device, as specified in the device definition, is incorrect.
  - **Remedy:** Delete the device from the Device List. Check the device documentation for the correct vendor Id. Make corrections in the device definition and add the device to the Device List.

DNET-066 STOP Incorrect product code

- **Cause:** The product code for the device, as specified in the device definition, is incorrect.
  - **Remedy:** Delete the device from the Device List. Check the device documentation for the correct product code. Make corrections in the device definition and add the device to the Device List.

DNET-067 STOP Incorrect device type

- **Cause:** The device type for the device, as specified in the device definition, is incorrect.
  - **Remedy:** Delete the device from the Device List. Check the device documentation for the correct device type. Make corrections in the device definition and add the device to the Device List.

DNET-068 STOP Device timeout

- **Cause:** The connection to the specified device has timed out.
  - **Remedy:** Check the device's connection to the network. Make sure the device baud rate agrees with the board baud rate. Attempt to bring the device on-line by pressing RESET on the teach pendant.

DNET-069 STOP Unknown error code %d

- **Cause:** An unknown error has occurred with the specified device.
  - **Remedy:** Document the events that led to the error and call your FANUC Robotics technical representative. Make sure the error code number is noted and reported.

DNET-070 ERR_STOP_C Connection allocation error

- **Cause:** N/A
  - **Remedy:** N/A

DNET-073 STOP No match on mod type look-up

- **Cause:** The system could not find the module type corresponding to a module on the specified device.
  - **Remedy:** View the module list for the device and delete or change the module in question. If this module was previously functional, cold start the controller and attempt to use this module type again. If the problem persists, perform an INIT start and re-load the DeviceNet Interface option.

DNET-074 STOP Load only at ctrl start

- **Cause:** An I/O configuration file (.IO file) containing DeviceNet configuration data was loaded at COLD START. The DeviceNet configuration data in this file is ignored.
  - **Remedy:** Reload the .IO file at controlled start.

DNET-076 STOP $DN_DEV_DEFS array is full

- **Cause:** There is no more room in the Defined Device List system variable.
  - **Remedy:** Delete any unneeded device definitions from the Defined Device List before adding a new one.

DNET-078 STOP No room for more devices

- **Cause:** The system variable for storage of devices is full.
  - **Remedy:** If there are devices which are off-line, delete these devices unless they are required to be kept on the Device List. After entries in the device list are freed, new devices can be added.

DNET-079 STOP Unknown dev type: Bd %d MAC %d

- **Cause:** The device type used by this device is currently unknown to the system.
  - **Remedy:** This error occurs during the I/O restore. Cold start the controller, add a new device definition corresponding to the specified device, then add the device to the device list.

DNET-080 STOP Loaded config too large

- **Cause:** The previous I/O configuration contains too many modules, devices, or device definitions to be loaded.
  - **Remedy:** Make sure you have the same memory configuration as the system on which the I/O configuration was saved.

DNET-084 STOP Board reset failed: Bd %d

- **Cause:** The command to reset the specified board has failed.
  - **Remedy:** Refer to the next DNET alarm posted in the alarm log for specific alarm recovery information.

DNET-085 STOP Dev reset failed Bd %d MAC %d

- **Cause:** The command to reset the specified device has failed.
  - **Remedy:** Refer to the next DNET alarm posted in the alarm log for specific alarm recovery information.

DNET-086 STOP Stop scan cmd failed: Bd %d

- **Cause:** The specified board is unable to acknowledge the stop-scanning command.
  - **Remedy:** Check DeviceNet connection to the board, as well as DeviceNet power to the network. If board is already in ERROR state, this error can be disregarded.

DNET-087 STOP Bd offline cmd failed: Bd %d

- **Cause:** The board is not acknowledging the command to take it off-line.
  - **Remedy:** Check DeviceNet connection to the board, as well as DeviceNet power to the network. If the board is already in the ERROR state, this error can be disregarded.

DNET-088 STOP Ignored: Bd %d MAC %d Slot %d

- **Cause:** The system does not recognize the module type of the module being loaded.
  - **Remedy:** Make sure the device definition data files are the same between the current system being loaded and the system on which the I/O configuration was saved. Contact FANUC Robotics for the correct definition files.

DNET-089 STOP Can't specify POLL and STROBE

- **Cause:** The data file contains lines which specify both POLL access and STROBE access for the same device.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-090 STOP Can't STROBE w/ num outs > 0

- **Cause:** The device definition file specifies a strobed-access device but the number of outputs is not equal to zero.
  - **Remedy:** The DeviceNet option software is corrupted. Re-install the DeviceNet Interface option. If the problem persists, contact FANUC Robotics to obtain a new Communication Options software disk.

DNET-091 STOP Input size error

- **Cause:** The number of inputs specified in the device definition for this device does not match the number expected by the scanner when it communicates with the device.
    - **Remedy:** Delete the device, correct the device definition, then re-add the device to the device list.

DNET-092 STOP Output size error

- **Cause:** The number of outputs specified in the device definition for this device does not match the number expected by the scanner when it communicates with the device.
    - **Remedy:** Delete the device, correct the device definition, then re-add the device to the device list.

DNET-093 STOP Error reading vendor ID

- **Cause:** The scanner board encountered an error while trying to read the device's vendor ID.
    - **Remedy:** Check that the device baud rate matches the board baud rate. Check also the device's connection to the network.

DNET-094 STOP Error reading device type

- **Cause:** The scanner board encountered an error while trying to read the device's device type.
    - **Remedy:** Check that the device baud rate matches the board baud rate. Check also the device's connection to the network.

DNET-095 STOP Error reading product code

- **Cause:** The scanner board encountered an error while trying to read the device's product code.
    - **Remedy:** Check that the device baud rate matches the board baud rate. Check also the device's connection to the network.

DNET-096 STOP Error setting packet rate

- **Cause:** The scanner board encountered an error while trying to set the communication packet rate for this device.
    - **Remedy:** Check that the device baud rate matches the board baud rate. Check also the device's connection to the network. Reset the device if possible.

DNET-097 STOP Connection sync fault

- **Cause:** The board was unable to achieve synchronization in the connection with the specified device.
    - **Remedy:** Check that the device baud rate matches the board baud rate. Check also the device's connection to the network. Reset the device if possible.

DNET-102 STOP Invalid board MAC Id

- **Cause:** The board's MAC Id is not between 0 and 63.

- **Remedy:** Check the Board Detail screen to see if the board's MAC Id is between 0 - 63, inclusive. If it is not, change the MAC Id to a valid value and press RESET on the teach pendant. If the MAC Id appears valid, cold start the controller. If the problem persists, document the events that led to the error and call your FANUC Robotics technical representative.

DNET-103 STOP Invalid board baud rate

- **Cause:** The board's baud rate is not one of: 125 KB, 250 KB, or 500 KB.
  - **Remedy:** Check the Board Detail screen to see if the board's baud rate is one of the above values. If it is not, change the baud rate to a valid value and press RESET on the teach pendant. If the baud rate appears valid, cold start the controller. If the problem persists, document the events that led to the error and call your FANUC Robotics technical representative.

DNET-104 STOP Duplicate MAC Id error

- **Cause:** The specified device has the same MAC Id as another device on the network.
  - **Remedy:** Check that no other devices have the same MAC Id, particularly those connected to a different master on the same network. Change the MAC Id of the offending device at both the device and on the Device List, and attempt to bring it on-line. If the problem persists, cold start the controller and try again. If the problem continues, document the events that led to the error and call your FANUC Robotics technical representative.

DNET-105 STOP Duplicate device error

- **Cause:** There was an attempt to add a device to the board's device list that was a duplicate of a device already on the list.
  - **Remedy:** If the desired device is already on the network and a second one is not being added, you may ignore the error. Otherwise, change the MAC Id of one of the duplicate devices.

DNET-106 STOP Device not found error

- **Cause:** A device expected to be on the network was not found.
  - **Remedy:** Check that the device is connected to the network. Check that the device baud rate matches the board baud rate. Reset the device if possible. Cycle power to the controller. If the problem persists, document the events that led to the error and call your FANUC Robotics technical representative.

DNET-107 STOP Bus offline error

- **Cause:** The board could not perform an operation because the bus was off-line.
  - **Remedy:** Press RESET on the teach pendant to attempt to bring the board on-line. If the problem persists, cycle power to the controller. If the problem continues to persist, cycle power to the DeviceNet network.

DNET-108 STOP Scanner active error

- **Cause:** The board could not perform an operation because the it is actively scanning the network.
  - **Remedy:** Take the board off-line and re-attempt the operation.

DNET-109 STOP Bus not offline error

- **Cause:** The board could not perform an operation because the bus is not off-line.
  - **Remedy:** Take the board off-line and re-attempt the operation.

DNET-110 STOP Error: board scanning

- **Cause:** The board could not perform an operation because the it is actively scanning the network.
  - **Remedy:** Take the board off-line and re-attempt the operation.

DNET-111 STOP Error: board not scanning

- **Cause:** The board could not perform an operation because the it is not actively scanning the network.
  - **Remedy:** Bring the board on-line and re-attempt the operation.

DNET-112 STOP Board not ready; pls. wait

- **Cause:** An attempt to bring the board on-line was unsuccessful because the board was busy.
  - **Remedy:** Wait ten seconds and re-attempt to bring the board on-line. If the problem persists, check board connection to the network, baud rate, and network power.

DNET-114 STOP Bus fault error detected

- **Cause:** The board has detected a fault on the DeviceNet network, and cannot communicate with devices.
  - **Remedy:** Check that the baud rate of the board matches the baud rate of all devices on the network. Also, check that power is being supplied to the network. If the problem persists, cycle power to the controller, and then to the network if the problem continues.

Back to top

ELOG Error Codes

ELOG-009 WARN call a service man

- **Cause:** A system error has occurred.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that let to the error and call your

FANUC
Robotics technical representative.

ELOG-011 WARN Power off, if you want to recover.

- **Cause:** A system error has occurred.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that let to the error and call your FANUC
    Robotics technical representative.

ELOG-012 WARN A system error has been occurred.

- **Cause:** A system error has occurred
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that let to the error and call your FANUC
    Robotics technical representative.

Back to top

FILE Error Codes

FILE-001 WARN Device not ready

- **Cause:** Specified file device is not ready.
  - **Remedy:** Check if the device is mounted and ready to use. Check if the device name is correct.

FILE-002 WARN Device is Full

- **Cause:** Device is full. There is no more space to store data on the device.
  - **Remedy:** Delete any unnecessary files or change to a new device.

FILE-003 WARN Device is protected

- **Cause:** Device is protected. So, you cannot write to the device.
  - **Remedy:** Release the device protection.

FILE-005 WARN Device not mounted

- **Cause:** Device is not mounted. You should mount the device before using it.
  - **Remedy:** Mount the correct file device.

FILE-006 WARN Device is already mounted

- **Cause:** You tried to mount the device which had been already mounted.
  - **Remedy:** Mount device only once.

FILE-008 WARN Illegal device name

- **Cause:** Device name contains an illegal character.
  - **Remedy:** Check spelling and validity of device name.

FILE-009 WARN Illegal logical unit number

- **Cause:** Illegal LUN is used.
  - **Remedy:** This is an internal error. Check the validity of the logical unit number.

FILE-010 WARN Directory not found

- **Cause:** Specified directory does not exist
  - **Remedy:** Check validity of directory name.

FILE-011 WARN Directory full

- **Cause:** Directory is full. You tried to create a file in the root directory which exceeded the maximum number of files allowed on the device.
  - **Remedy:** Delete unnecessary files in the root directory.

FILE-012 WARN Directory is protected

- **Cause:** You tried to write to a write protected directory.
  - **Remedy:** Release the protection to the directory.

FILE-013 WARN Illegal directory name

- **Cause:** Directory name contains an illegal character.
  - **Remedy:** Check spelling of directory name.

FILE-014 WARN File not found

- **Cause:** The specified file was not found.
  - **Remedy:** Check that the file exists and that the file name was spelled correctly.

FILE-015 WARN File is protected

- **Cause:** You tried to access a protected file.
  - **Remedy:** Release the protection from file.

FILE-017 WARN File not open

- **Cause:** You tried to access a file which is not open.
  - **Remedy:** Open the file before accessing.

FILE-018 WARN File is already opened

- **Cause:** You tried to create/delete/rename a file which is already opened.
  - **Remedy:** Close file before such operations.

FILE-019 WARN File is locked

- **Cause:** You tried to access a file which is locked.
  - **Remedy:** Release the lock.

FILE-020 WARN Illegal file size

- **Cause:** File size is invalid.
  - **Remedy:** Change file size to be correct.

FILE-021 WARN End of file

- **Cause:** End of file was detected.
  - **Remedy:** This is a notification. You do not have to do anything for this warning message.

FILE-022 WARN Illegal file name

- **Cause:** File name contains an illegal character.
  - **Remedy:** Check spelling of file name.

FILE-023 WARN Illegal file number

- **Cause:** File number is illegal.
  - **Remedy:** Use a valid file number which is the ID returned from an open request.

FILE-024 WARN Illegal file type

- **Cause:** File type contains an illegal character.
  - **Remedy:** Check the spelling and validity of the file type.

FILE-025 WARN Illegal protection code

- **Cause:** File protection code is illegal.
  - **Remedy:** Check if the protection code is correct.

FILE-026 WARN Illegal access mode

- **Cause:** File access mode is illegal.
  - **Remedy:** Check if the access mode is correct.

FILE-027 WARN Illegal attribute

- **Cause:** File attribute in the SET_ATTRIBUTE request is illegal.
  - **Remedy:** Check that attribute specified is valid.

FILE-028 WARN Illegal data block

- **Cause:** Data block is broken which is used in FIND_NEXT request.

- **Remedy:** You should keep the data block which is returned from the previous FIND_FIRST or FIND_NEXT request.

FILE-029 WARN Command is not supported

- **Cause:** Illegal request command is specified.
  - **Remedy:** Check if the request code is correct.

FILE-030 WARN Device lun table is full

- **Cause:** Device management table is full.
  - **Remedy:** Dismount any unnecessary devices.

FILE-031 WARN Illegal path name

- **Cause:** Path name contains an illegal character.
  - **Remedy:** Check if the path name is correct.

FILE-032 WARN Illegal parameter

- **Cause:** Illegal parameter is detected.
  - **Remedy:** Check that all parameters for the request are valid.

FILE-033 WARN System file buffer full

- **Cause:** File management buffer is full.
  - **Remedy:** Close unnecessary files.

FILE-034 WARN Illegal file position

- **Cause:** Illegal file position is specified.
  - **Remedy:** Check that the file position parameter from SEEK request is positive and not beyond the end of file.

FILE-035 WARN Device not formatted

- **Cause:** You tried to access a unformatted device.
  - **Remedy:** Format the device before using it.

FILE-036 WARN File already exist

- **Cause:** You tried to rename a file to an already existing file name.
  - **Remedy:** Change the new file name to be unique or delete the existing file.

FILE-037 WARN Directory not empty

- **Cause:** You tried to remove a subdirectory which contains some files or directories.
  - **Remedy:** Remove all files and directories in the subdirectory before removing subdirectory.

FILE-038 WARN File locked by too many tasks

- **Cause:** There are too many lock requests to same file.
  - **Remedy:** Unlock any unnecessary file lock requests.

FILE-039 WARN Directory already exists

- **Cause:** You tried to create a sub-directory that already exists.
  - **Remedy:** Use a unique name for new sub-directory

FILE-040 WARN Illegal file access mode

- **Cause:** You tried to read from a write only opened file or tried to write to a read only opened file.
  - **Remedy:** Open a file with correct access mode.

FILE-041 WARN File not locked

- **Cause:** You tried to unlock file which you had not locked.
  - **Remedy:** Do not unlock a file that is not locked. You can only unlock files which YOU have locked.

FILE-045 WARN need to set $FILE_MAXSEC

- **Cause:** $FILE_MAXSEC has not been set and must be be set before device can be formatted.
  - **Remedy:** Set the variable $FILE_MAXSEC to valid value. A typical value is 800.

FILE-049 WARN File is not standard file

- **Cause:** A file operation has been attempted on a file which is not a standard file.
  - **Remedy:** Use a standard file device (e.g. FR: or RD:).

Back to top

FLPY Error Codes

FLPY-001 WARN End of directory reached

- **Cause:** Your listing has reached the end of the directory. You do not have to do anything for this warning message.
  - **Remedy:** This is a notification. You do not have to do anything for this warning message.

FLPY-002 WARN File already exists

- **Cause:** The file name you are trying to create already exists on this device.
  - **Remedy:** Delete the file of this name or choose a different file name.

FLPY-003 WARN File does not exist

- **Cause:** The file you are trying to open does not exist on this device.

- **Remedy:** Open a file that does exist on the device.

FLPY-004 WARN Unsupported command

- **Cause:** Operation is not supported on floppy disk.
  - **Remedy:** Use only operations supported on floppy disk.

FLPY-005 WARN Disk is full

- **Cause:** The disk file capacity has been reached.
  - **Remedy:** Delete some unneeded files or use a disk with sufficient free space.

FLPY-006 WARN End of file reached

- **Cause:** The end of the file was reached while reading.
  - **Remedy:** Do not attempt to read beyond the end of a file.

FLPY-008 WARN Only one file may be opened

- **Cause:** An attempt was made to open more than one file.
  - **Remedy:** Do not attempt to open more than one file at a time.

FLPY-009 WARN Communications error

- **Cause:** The protocol format was invalid.
  - **Remedy:** Retry the operation.

FLPY-015 WARN Write protection violation

- **Cause:** The disk has write protection enabled.
  - **Remedy:** Remove write protection from the disk or use a disk that is not write protected.

FLPY-100 WARN Directory read error

- **Cause:** The directory information is corrupted and unreadable.
  - **Remedy:** Try another disk or reformat the disk.

FLPY-101 WARN Block check error

- **Cause:** The checksum data is bad. Data is corrupted on disk and can not be read.
  - **Remedy:** Try another disk, or reformat the disk

FLPY-103 WARN Seek error

- **Cause:** There is a bad sector or track on the disk.
  - **Remedy:** Clean the disk drive, try another disk, or reformat the disk.

FLPY-104 WARN Disk timeout

- **Cause:** The drive did not respond to a command.

- **Remedy:** Check the cable to the drive and make sure drive power is on.

FLPY-105 WARN Write protection violation

- **Cause:** The disk has write protection enabled.
  - **Remedy:** Remove write protection from the disk or use a disk that is not write protected.

Back to top

FRSY Error Codes

FRSY-001 WARN FROM disk is full

- **Cause:** The FROM disk does not have enough available memory to perform the specified command. This might have been caused by repeated loading of KAREL programs.
  - **Remedy:** Delete all unnecessary files and then purge the device. If the device is still full, then backup the files to an off-line device and reformat the device.

FRSY-002 WARN Device not formatted

- **Cause:** The device is not formatted.
  - **Remedy:** Format the device before using it.

FRSY-003 WARN Invalid parameter

- **Cause:** An invalid parameter is detected.
  - **Remedy:** Verify all the parameters for the requested command are correct.

FRSY-004 WARN RAM disk must be mounted

- **Cause:** Copying a file to the FROM disk requires that the RAM disk be mounted with enough memory available to temporarily contain the file.
  - **Remedy:** Mount the RAM disk before specifying the command.

FRSY-005 WARN Device not mounted

- **Cause:** The device is not mounted.
  - **Remedy:** Mount the device before using it.

FRSY-006 WARN Device is already mounted

- **Cause:** The device is already mounted.
  - **Remedy:** This is a notification. You do not have to do anything for this warning message.

FRSY-007 WARN Invalid device name

- **Cause:** The specified device is not valid.
  - **Remedy:** Verify the device name.

FRSY-008 WARN File already exists

- **Cause:** The specified file already exists.
  - **Remedy:** Delete the file first or specify overwrite if available with the command.

FRSY-009 WARN Too many files opened

- **Cause:** The maximum number of files is already open. Therefore the requested command cannot be performed
  - **Remedy:** Either close one or more of the files or set $OPEN_FILES to a larger number and perform a cold start.

FRSY-010 WARN Invalid file position

- **Cause:** An invalid file position is specified. The position is beyond the end of the file or a negative position.
  - **Remedy:** Check the file position.

FRSY-011 WARN Directory full

- **Cause:** No more files are allowed on the device.
  - **Remedy:** Delete any unnecessary files or dismount and remount MF: device which will increase the maximum number of files allowed.

FRSY-012 WARN Invalid file access mode

- **Cause:** The requested command cannot be performed because the file is not opened with the proper access mode. This error is also caused by trying to update or append to an existing file on the FROM disk or to an existing compressed file on the RAM disk. Update and append are only allowed with uncompressed files on the RAM disk.
  - **Remedy:** Open the file with the proper access mode.

FRSY-013 WARN Device is too fragmented

- **Cause:** The file cannot be created on the device because not enough consecutive blocks are available.
  - **Remedy:** Delete all unnecessary files and then purge the device. For more information on purging, refer to the PURGE_DEV Built-in in the *FANUC Robotics SYSTEM R-J3 KAREL Reference Manual* . If the device is still full, then backup the files to an off-line device and reformat the device.

FRSY-014 WARN File not found

- **Cause:** The specified file is not found.
  - **Remedy:** Verify the file name and the specified or default device is correct.

FRSY-015 WARN Invalid file name

- **Cause:** The file name contains an invalid character or is blank.
  - **Remedy:** Verify the file name is correct.

FRSY-016 WARN Invalid file type

- **Cause:** The file type contains an invalid character.
  - **Remedy:** Verify the file type is correct.

FRSY-017 WARN File not open File not open

- **Cause:** The file is not open.
  - **Remedy:** Open the file before accessing.

FRSY-018 WARN File is already opened

- **Cause:** The requested command cannot be performed because the file is already opened.
  - **Remedy:** Close the file before specifying the command.

FRSY-019 WARN Command is not supported

- **Cause:** The specified command is not supported for the device.
  - **Remedy:** This is a notification. You do not have to do anything for this warning message.

FRSY-020 WARN RAM disk is full

- **Cause:** The RAM disk does not have enough available memory to perform the specified command. Note that copying a file to the FROM disk requires that the RAM disk be mounted with enough memory available to temporarily contain the file.
  - **Remedy:** Delete all unnecessary files and then purge the device. For more information on purging, refer to the PURGE_DEV Built-in in the *FANUC Robotics SYSTEM R-J3 KAREL Reference Manual.* If the device is still full, then backup the files to an off-line device and reformat the device after setting $FILE_MAXSEC to a larger number.

FRSY-021 WARN End of file

- **Cause:** The end of the file is detected.
  - **Remedy:** This is a notification. Your do not have to do anything for this warning message.

FRSY-022 WARN File ID exceeded maximum

- **Cause:** The file identification number has reached the maximum number for the device.
  - **Remedy:** You must backup all your files, reformat the device, and restore the files. Refer to chapter 9, "File System", in the *FANUC Robotics SYSTEM R-J3 KAREL Reference Manual* for more information.

FRSY-023 WARN No blocks were purged

- **Cause:** No blocks were purged for one of the following reasons: 1) No garbage blocks exist. 2) No spare blocks exist because the FROM disk is full.
  - **Remedy:** If you require more blocks, you must backup all your files, reformat the device, and restore the files. Refer to chapter 9, "File System", in the *FANUC Robotics SYSTEM R-J3 KAREL Reference Manual* for more information.

FRSY-024 WARN Purge is disabled

- **Cause:** You are not allowed to purge the FROM disk because purge is disabled.
  - **Remedy:** Set $PURGE_ENBL to TRUE and retry the purge operation. You may wish to set $PURGE_ENBL to FALSE before running a program or application which requires fast cycle time.

FRSY-026 WARN CRC check failed

- **Cause:** One or more files on the FROM disk are corrupted. This may occur if the FROM is wearing out.
  - **Remedy:** You should backup all your files, reformat the device, and restore the files. Refer to
    chapter 9, "File System", in the *FANUC Robotics SYSTEM R-J3 KAREL Reference Manual* for more information. If the problem persists, the FROM may need to be replaced.

FRSY-028 WARN %d out of %d bad FROM blocks

- **Cause:** The FROM disk is wearing out.
  - **Remedy:** The system will continue to operate as long as enough blocks are available. When too many blocks become bad, the FROM will need to be replaced.

Back to top

GEMM Error Codes

GEMM-001 WARN Send_PC error

- **Cause:** The system was not able to setup the message packet to send to the PC.
  - **Remedy:** System probably out of memory. Cold start.

GEMM-002 WARN Add PC Uninit prog or var name

- **Cause:** An ADD PC buffer built-in was called with a parameter that is uninitialized.
  - **Remedy:** All parameters must have a value when calling the create a data buffer to PC built-ins.

GEMM-003 WARN Add PC Variable not found

- **Cause:** The variable requested in the ADD Byname or Send SysVar routines does not exist.
    - **Remedy:** Check program and variable name spellings. Check variable data type. Only integer, real and string data is supported.

GEMM-004 WARN Add PC Var type not supported

- **Cause:** The variable requested in the ADD Byname or Send SysVar routines is of a data type that is not supported.
    - **Remedy:** Check variable data type. Only integer, real and string data is supported. Check program and variable name spellings.

GEMM-005 WARN Add PC illegal index into buffer

- **Cause:** An ADD PC buffer built-in was called with the index parameter set too big or too small.
    - **Remedy:** Set the index parameter correctly. Make sure the data buffer is big enough for your data.

GEMM-006 WARN Add PC buffer overflow - parm %s

- **Cause:** The data could not be copied to the data buffer because the buffer is too small.
    - **Remedy:** Make sure the data buffer is big enough for your data. If there is too much data to send, you might have to use more than one event to send the data.

GEMM-007 WARN Add PC Un-initialized parameter %s

- **Cause:** An ADD PC buffer built-in was called with a parameter that is uninitialized.
    - **Remedy:** All parameters must have a value when calling the create a data buffer to PC built-ins.

GEMM-008 WARN Send_PC Un-initialized parameter

- **Cause:** A Send PC built-in was called with a parameter that is uninitialized.
    - **Remedy:** All parameters must have a value when calling the send PC built-ins.

GEMM-009 WARN Send_PC Illegal event number

- **Cause:** An event number less that 0 or greater than 255 was used.
    - **Remedy:** Use an event number from 0 to 255.

GEMM-010 WARN Send_PC Illegal wait flag

- **Cause:** Only wait flags of 0 or 1 are allowed.
    - **Remedy:** Use a legal wait flag.

GEMM-011 WARN Send_PC Buffer too big for packet

- **Cause:** The maximum data buffer size supported is 244 bytes.
    - **Remedy:** Use a legal data buffer size.

GEMM-020 WARN Send_PC builtin failed

- **Cause:** A system error occurred when trying to send the data buffer to the PC.
  - **Remedy:** Check other alarms in alarm log for details.

GEMM-021 WARN Send_PC event parm %s error

- **Cause:** A Send to PC MACRO was called with a parameter that is illegal. The parameter is uninitialized or the wrong data type.
  - **Remedy:** Check the MACRO call in the TP program.

GEMM-022 WARN Still waiting for %s

- **Cause:** Status message only. A controller task is waiting for an event flag back from the PC.
  - **Remedy:** Check PC communications.

GEMM-023 WARN Abort wait for %s

- **Cause:** A controller task waited too long for an event flag from the PC. The controller task was aborted.
  - **Remedy:** Check PC communications.

GEMM-024 WARN Continuing without %s

- **Cause:** Status message only. A controller task was waiting for an event flag back from the PC. The PC is taking too long. The controller task has continued without receiving the event flag.
  - **Remedy:** Check PC communications.

GEMM-025 WARN Received answer for %s

- **Cause:** Status message only. The PC set the event flag and the controller task is continuing.
  - **Remedy:** N/A

GEMM-026 WARN Wait timer cannot be set

- **Cause:** A system timer cannot be created or set for this controller task.
  - **Remedy:** Cold start.

GEMM-027 WARN Reg %s could not be set

- **Cause:** Register operation failed
  - **Remedy:** Check if the register is defined and if it has the right value. Must ABORT ALL and retry

GEMM-028 WARN Register %s not defined

- **Cause:** This is just a debug message.
  - **Remedy:** N/A

GEMM-029 WARN Macro Table too small for send option

- **Cause:** The MACRO table must have at least 60 elements for the SEND PC MACRO option to be installed properly.
  - **Remedy:** Increase the MACRO table size.

GEMM-030 WARN Parameter %s error

- **Cause:** Send PC Macro data error.
  - **Remedy:** Check other alarm log errors for more details.

GEMM-031 WARN Send Macro - no data to send

- **Cause:** The Send Data PC MACRO was not given any data to send.
  - **Remedy:** Check MACRO parameters.

GEMM-032 WARN Send_n_wait - Illegal action

- **Cause:** The wait action parameter must be 0 through 3.
  - **Remedy:** Check MACRO parameters.

GEMM-033 WARN Send_n_wait - Uninit parm %s

- **Cause:** A send PC MACRO was called with a parameter that is uninitialized.
  - **Remedy:** All parameters must have a value.

GEMM-034 WARN %s missing

- **Cause:** A MACRO was called without a parameter that must be entered.
  - **Remedy:** Check the MACRO call in the TP program.

GEMM-035 ABORT Aborting TP program

- **Cause:** An error occurred in the TP program.
  - **Remedy:** Check the TP program.

GEMM-036 WARN %s Illegal type

- **Cause:** A MACRO was called with a parameter that is illegal. The parameter has the wrong data type.
  - **Remedy:** Check the MACRO call in the TP program.

Back to top

HOST Error Codes

HOST-001 WARN End of directory reached

- **Cause:** Your listing has reached the end of the directory. You do not have to do anything for this warning message.
  - **Remedy:** This is a notification.

HOST-002 WARN File already exists

- **Cause:** The file name you are trying to create already exists on this device.
  - **Remedy:** Delete the file on this device or choose a different file name.

HOST-003 WARN File does not exist

- **Cause:** The file you are trying to open does not exist on this device.
  - **Remedy:** Open a file that exists on the device.

HOST-004 WARN Illegal command received

- **Cause:** The requested operation is not supported.
  - **Remedy:** Use only supported operations, or check command syntax.

HOST-005 WARN Disk is full

- **Cause:** The disk file capacity has been reached.
  - **Remedy:** Delete some unneeded files or use a disk with sufficient free space.

HOST-006 WARN End of file reached

- **Cause:** The end of the file was reached while reading.
  - **Remedy:** Do not attempt to read beyond the end of a file.

HOST-008 WARN Only one file may be opened

- **Cause:** An attempt was made to open more than one file.
  - **Remedy:** Do not attempt to open more than one file at a time.

HOST-100 WARN Communications error

- **Cause:** The protocol format was invalid.
  - **Remedy:** Retry the operation.

HOST-101 WARN Directory read error

- **Cause:** The directory information is corrupted and unreadable.
  - **Remedy:** Try another disk or reformat the disk.

HOST-102 WARN Block check error

- **Cause:** The checksum data is bad. Data is corrupted on the disk and can not be read.
  - **Remedy:** Try another disk, or reformat the disk

HOST-103 WARN Seek error

- **Cause:** There is a bad sector or track on the disk.
  - **Remedy:** Clean the disk drive, try another disk, or reformat the disk.

HOST-104 WARN Disk timeout

- **Cause:** The drive did not respond to a command.
  - **Remedy:** Check the cable to the drive and make sure drive power is on.

HOST-105 WARN Write protection violation

- **Cause:** The disk has write protection enabled.
  - **Remedy:** Remove write protection from the disk or use a disk that is not write protected.

HOST-106 WARN $PROTOENT entry not found

- **Cause:** Protocol Entry structure ($PROTOENT) is invalid. It should be reset to default values.
  - **Remedy:** Return Protocol Entry structure to initial values from Setup and Operations manual.

HOST-107 WARN $SERVENT entry not found

- **Cause:** Server Entry structure ($SERVENT) is invalid. It should be reset to default values.
  - **Remedy:** Return Server Entry structure to initial values from Setup and Operations manual.

HOST-108 WARN Internet address not found

- **Cause:** Internet Address needs to be set.
  - **Remedy:** Set Internet Address in the Host Comm TCP/IP Protocol Setup Menu.

HOST-109 WARN Host name not found

- **Cause:** Host Name needs to be set.
  - **Remedy:** Set Host Name and Internet Address in The Host Comm TCP/IP Protocol Setup Menu.

HOST-110 WARN Node not found

- **Cause:** The Remote Node Name needs to be set.
  - **Remedy:** Set Remote Node Name in the Host Comm TCP/IP Protocol Setup Menu.

HOST-111 WARN Cycle power to use Ethernet

- **Cause:** ER-1 or ER-2 hardware is already running and can not be restarted without cycling power.
  - **Remedy:** Turn off and then turn on the controller.

HOST-126 WARN Invalid Ethernet address

- **Cause:** The Ethernet address needs to be set.
  - **Remedy:** Set the Ethernet address in BMON.

HOST-127 WARN Ethernet firmware not loaded

- **Cause:** The Ethernet Board firmware is not loaded.
  - **Remedy:** Load the Ethernet Board firmware in BMON.

HOST-128 WARN Ethernet hardware not installed

- **Cause:** The Ethernet Board needs to be reinitialized.
  - **Remedy:** Install the Ethernet Board.

HOST-129 WARN Receiver error

- **Cause:** Data received from external device is invalid. Most likely caused by electrical noise on receivers.
  - **Remedy:** The error can be cleared by Stopping and Starting the Tag.

HOST-130 WARN Buffer alignment wrong

- **Cause:** A buffer was passed to the Serial Port Driver which can not be accessed.
  - **Remedy:** Ensure program can run on this version of controller. You might need to retranslate your program.

HOST-131 WARN Wrong state

- **Cause:** The Host Comm system can not execute the requested command in the present operating mode.
  - **Remedy:** Stop and Start the Host Comm Tag to reset the operating mode.

HOST-132 WARN Can't allocate memory

- **Cause:** The Host Comm system can not allocate memory buffers for receiving or transmitting messages
  - **Remedy:** Either add more memory to the controller or reduce the number of simultaneous connections.

HOST-133 WARN Wrong setup conditions

- **Cause:** The Host Comm system is receiving messages but can not decode them.
  - **Remedy:** Correct port settings: data rate, data size, stop bits, etc to match external device.

HOST-134 WARN BCC or CRC error

- **Cause:** The Host Comm system is receiving checksum errors on all messages.
  - **Remedy:** Ensure that the external device is using the same protocol.

HOST-135 WARN Timeout

- **Cause:** There has not been any network activity on the Comm Tag for a period specified by Inactivity Timeout.
  - **Remedy:** Restart the Comm Tag.

HOST-136 WARN Device not ready

- **Cause:** The remote device is connected but is not responding to requests.
  - **Remedy:** Check cabling between the devices and/or insure the device is powered.

HOST-137 WARN Request cancelled

- **Cause:** The remote device indicates the operation was successfully terminated.
  - **Remedy:** The cancel command was successful.

HOST-138 WARN Request aborted

- **Cause:** The remote device did not indicate operation was terminated.
  - **Remedy:** The command might have been completed before the cancel command was received.

HOST-139 WARN Invalid function

- **Cause:** The Host Comm Protocol does not support the requested function.
  - **Remedy:** Check the Host Comm Protocol version to ensure the function is supported.

HOST-140 WARN Device offline

- **Cause:** The remote device is connected but it is not on-line.
  - **Remedy:** Set the remote device on-line.

HOST-141 WARN Mount/Dismount error

- **Cause:** The Host Comm Protocol could not be started on the selected Comm Tag.
  - **Remedy:** Either use another Comm Tag or Stop and Undefine the selected Comm Tag.

HOST-142 WARN Connection error

- **Cause:** The Host Comm Protocol could not establish communication with the remote device. Possible software mismatch.
  - **Remedy:** Ensure both local and remote are using compatible software versions.

HOST-143 WARN Packet returned by close

- **Cause:** The selected hardware port defined for the Comm Tag could not be closed.
  - **Remedy:** Power the controller off and then on and try again. If the error occurs again a cabling or hardware problem might exist with the port.

HOST-144 WARN No such device or address

- **Cause:** The Comm Tag either does not have a protocol defined or if required does not have a port assigned.

- **Remedy:** DEFINE a protocol to the Comm Tag or assign a port.

HOST-145 WARN Permission denied

- **Cause:** An attempt has been made either to read a file opened for write access only or to write a file opened for read access only.
  - **Remedy:** Close and reopen the file with the correct access parameters.

HOST-146 WARN Bad address

- **Cause:** A bad address has been detected.
  - **Remedy:** UNDEFINE and then DEFINE the Comm Tag after checking whether the Tag has a supported protocol.

HOST-147 WARN Block device required

- **Cause:** The selected protocol requires a device port.
  - **Remedy:** First ensure the Port has No Use from Port Init Setup. Then assign it to the selected Comm Tag.

HOST-148 WARN Mount device busy

- **Cause:** Either the Comm Tag is STARTED or it is presently in use.
  - **Remedy:** Either STOP the Comm Tag or select another Tag.

HOST-149 WARN No such device

- **Cause:** The passed Device Type is not a Comm Tag type (Cx or Sx).
  - **Remedy:** Only Comm Tags can be used with this command.

HOST-150 WARN Invalid argument

- **Cause:** The system does not support selected protocol.
  - **Remedy:** Either select another protocol or install the selected protocol.

HOST-151 WARN No more Ethernet buffers.

- **Cause:** The System has run out of buffers to communicate with the Ethernet Remote PCB.
  - **Remedy:** Reduce the number of simultaneous connections as there is not enough memory.

HOST-152 WARN MAP: MIB not responding

- **Cause:** If the MAP Interface Board is installed it is no longer responding to the MAIN CPU PCB.
  - **Remedy:** Replace the MAP Interface Board.

HOST-153 WARN MAP: PDU size too big

- **Cause:** Either the received or transmitted Protocol Data Unit (PDU) is too big to fit in the buffer sizes which MAP is using.

- **Remedy:** Increase size of PDU buffers by increasing the Host PDU Size ($HOST_PDUSIZ), see Setup and Operations manual for maximum.

HOST-154 WARN MAP: Directory file missing

- **Cause:** Directory file (umap_2_d.tx) is missing on RAM Disk
  - **Remedy:** Directory file contains node names and addresses. Load a saved version or recreate from distribution disks.

HOST-155 WARN MAP: Network file missing

- **Cause:** Network file (umap_2_p.tx) is missing on the RAM Disk.
  - **Remedy:** Network file contains Station Address, slot time, and so forth. Load a saved version or recreate from distribution disks.

HOST-156 WARN MAP: invalid Local Appl. Name

- **Cause:** Local Name is name of robot node. Host Name ($HOST_NAME) must match the local Directory entry. It is missing in Directory File (umap_2_d.tx).
  - **Remedy:** Add Host Name as Local Name to Directory File or add Directory File local entry to Host Name ($HOST_NAME) via MAP Protocol Setup Menu.

HOST-157 WARN MAP: invalid Remote Appl. Name

- **Cause:** Can not find Remote Name in Directory File.
  - **Remedy:** Add Remote Name to Directory File via MAP Protocol Setup Menu.

HOST-158 WARN FTP: no connection available

- **Cause:** An error occurred in the networking software.
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HOST-159 WARN FTP: login failed

- **Cause:** The Comm Tag does not have a valid username and password.
  - **Remedy:** Enter a valid username and password for the Comm Tag.

HOST-160 WARN FTP: dismount request ignored

- **Cause:** An error occurred in the networking software.
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HOST-161 WARN FTP: need remote host name

- **Cause:** The Comm Tag does not have a remote host defined.

- **Remedy:** Enter a remote host name to Current Remote and Startup Remote.

Back to top

HRTL Error Codes

HRTL-002 WARN File/Comm Tag does not exist

- **Cause:** Either the file or the Comm Tag could not be found.
  - **Remedy:** Either retype the file name or DEFINE the Comm Tag.

HRTL-003 WARN No such process

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-004 WARN Interrupted system call

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-006 WARN No protocol or device dest

- **Cause:** The Comm Tag either does not have a protocol defined or if required does not have a port assigned.
  - **Remedy:** DEFINE a protocol to the Comm Tag or assign a port.

HRTL-009 WARN Bad file number

- **Cause:** The file number passed does not match with any open files.
  - **Remedy:** Copy the conditions which caused this to occur.

HRTL-013 WARN Access permission denied

- **Cause:** An attempt has been made to either read a file opened for write access only or write a file open for read access only.
  - **Remedy:** Close and reopen the file with the correct access parameters.

HRTL-014 WARN Invalid Comm Tag

- **Cause:** A bad address has been detected.
  - **Remedy:** UNDEFINE and then DEFINE the Comm Tag after checking the Tag has a supported protocol.

HRTL-015 WARN Port device required

- **Cause:** The selected protocol requires a device port.
  - **Remedy:** First ensure the Port has No Use from Port Init Setup. Then assign it to the selected Comm Tag.

HRTL-016 WARN Comm Tag already defined

- **Cause:** Either the Comm Tag is STARTED or it's presently in use.
  - **Remedy:** Either STOP the Comm Tag or select another Tag.

HRTL-017 WARN File exists

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-019 WARN Invalid device type

- **Cause:** The passed Device Type is not a Comm Tag type (Cx or Sx).
  - **Remedy:** Only Comm Tags can be used with this command.

HRTL-021 WARN Is a directory

- **Cause:** System does not support selected protocol.
  - **Remedy:** Either select another protocol or install the selected protocol.

HRTL-022 WARN Invalid argument

- **Cause:** The passed Device Type is not a Comm Tag type (Cx or Sx).
  - **Remedy:** Only Comm Tags can be used with this command.

HRTL-032 WARN Broken pipe

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-035 WARN Operation would block

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-036 WARN Operation now in progress

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-037 WARN Operation already in progress

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-039 WARN Destination address required

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-040 WARN Message too long

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-041 WARN Protocol wrong type

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-042 WARN Protocol not available

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-043 WARN Protocol not supported

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-045 WARN Operation not supported

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-047 WARN Address family not supported

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-048 WARN Address already in use

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-049 WARN Can't assign requested address

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-050 WARN Network is down

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-051 WARN Network is unreachable

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-053 WARN Software connection abort

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-054 WARN Connection reset by peer

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-055 WARN No buffer space available

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-056 WARN Socket is already connected

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-057 WARN Socket is not connected

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-060 WARN Connection timed out

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-061 WARN Connection refused

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-064 WARN Host is down

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-065 WARN No route to host

- **Cause:** An error occurred in the Ethernet networking software (TCP/IP).
  - **Remedy:** Consult your network administrator. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

HRTL-068 WARN Device is already attached

- **Cause:** Device is already in use.
  - **Remedy:** Check usage against device.

HRTL-070 WARN Cannot detach with open files

- **Cause:** Device in use.
  - **Remedy:** Wait for command complete then retry.

HRTL-071 WARN Device is already allocated

- **Cause:** Device is already allocated.
  - **Remedy:** Wait until device free then retry.

HRTL-073 WARN End of device list reached

- **Cause:** Device limit reached.
  - **Remedy:** Check that device is valid.

HRTL-074 WARN Device is not supported

- **Cause:** Device not available.
  - **Remedy:** Check device installation.

Back to top

INTP Error Codes

INTP-001 PAUSE Cannot lock the motion grp

- **Cause:** Motion control for the specified group cannot be locked.
  - **Remedy:** Check the teach pendant enable switch and other running programs to determine who has motion control.

INTP-002 ABORT Program manager internal error

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error
    is not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

INTP-003 ABORT Invalid request

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error
    is not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

INTP-004 PAUSE Cannot ATTACH with TP enabled

- **Cause:** The ATTACH statement requires the teach pendant to be disabled.
  - **Remedy:** Disable the teach pendant.

INTP-005 PAUSE Cannot release motion control

- **Cause:** Motion control cannot be released.
  - **Remedy:** Abort the running or paused program.

INTP-100 ABORT (%s^4, %d^5) Internal error (PXnn)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.

3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error
is not cleared, document the events that led to the error and call your FANUC
Robotics technical representative.

INTP-101 ABORT (%s^4, %d^5) Internal error (system)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error
    is not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

INTP-102 ABORT (%s^4, %d^5) Code format is invalid

- **Cause:** Program data is corrupted.
  - **Remedy:** For TPE programs, if possible, reload program from back-up device. If a back-up is not available, it may be necessary to re-create the particular routine. For KAREL programs, re-translate and re-load the program.

INTP-103 ABORT (%s^4, %d^5) Program error

- **Cause:** An error occurred while the program was running.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-104 ABORT (%s^4, %d^5) Single step failed

- **Cause:** Single step cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-105 ABORT (%s^4, %d^5) Run request failed

- **Cause:** Program cannot be started.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-106 PAUSE (%s^4, %d^5) Continue request failed

- **Cause:** Program cannot be resumed.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-107 ABORT (%s^4, %d^5) Pause request failed

- **Cause:** An error occurred when program execution was held.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-108 ABORT (%s^4, %d^5) Abort request failed

- **Cause:** An error occurred when program execution was aborted.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-109 WARN (%s^4, %d^5) BWD motion request failed

- **Cause:** Backward motion cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-110 WARN (%s^4, %d^5) Get task status request failed

- **Cause:** The specified task attribute is not found or is not read accessible.
  - **Remedy:** Check the attribute.

INTP-111 WARN (%s^4, %d^5) Skip statement request failed

- **Cause:** The currently executing line cannot be changed.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-112 PAUSE Cannot call interrupt routine

- **Cause:** The interrupt routine cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-113 PAUSE (%s^4, %d^5) Stop motion request failed

- **Cause:** An error occurred when motion was stopped.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-114 PAUSE (%s^4, %d^5) Cancel motion request failed

- **Cause:** An error occurred when motion was canceled.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-115 PAUSE (%s^4, %d^5) Resume motion request failed

- **Cause:** An error occurred when motion was resumed.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-116 PAUSE (%s^4, %d^5) Hold motion request failed

- **Cause:** An error occurred when motion was held.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-117 PAUSE (%s^4, %d^5) Unhold motion request failed

- **Cause:** An error occurred when motion was unheld.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-118 PAUSE (%s^4, %d^5) Walk back data request failed

- **Cause:** An error occurred trying to obtain the execution history.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-119 PAUSE (%s^4, %d^5) Get trace data request failed

- **Cause:** An error occurred trying to obtain the trace data.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-120 PAUSE (%s^4, %d^5) Unwait action request failed

- **Cause:** An error occurred trying to continue program execution.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-121 PAUSE (%s^4, %d^5) Release inquiry request failed

- **Cause:** An error occurred trying to obtain motion information for the RELEASE statement.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-122 PAUSE (%s^4, %d^5) Process motion data failed

- **Cause:** An error occurred during process motion.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-123 PAUSE (%s^4, %d^5) Process application data failed

- **Cause:** An error occurred during process application.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-124 ABORT (%s^4, %d^5) Invalid ITR routine

- **Cause:** The specified interrupt routine is not a valid type.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-125 ABORT Failed to convert position

- **Cause:** The conversion of one position type to another failed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-126 ABORT Vision built-in return failed

- **Cause:** The vision built-in failed to return.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-127 WARN Power fail detected

- **Cause:** Power failure was detected.
  - **Remedy:** Resume the program after hot start is complete.

INTP-128 PAUSE Pos reg is locked

- **Cause:** Pos register is locked.
  - **Remedy:** Wait a moment.

INTP-129 ABORT Cannot use motion group

- **Cause:** Try to lock motion group even though this program cannot use motion group.
  - **Remedy:** Clear motion group mask in program detail screen.

INTP-130 ABORT (%s^4, %d^5) Exec status recovery failed

- **Cause:** Failed to recover execution status.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-131 ABORT Number of stop exceeds limit

- **Cause:** Too many stop data is created at one time.
  - **Remedy:** Decrease number of stop data.

INTP-132 PAUSE Unlocked groups specified

- **Cause:** The specified motion groups are already unlocked.
  - **Remedy:** Change the specify of motion group.

INTP-133 PAUSE Motion is already released

- **Cause:** Some specified motion groups are already unlocked.
  - **Remedy:** Change the specify of motion group. Lock the motion group.

INTP-134 PAUSE.L Over automatic start Max counter

- **Cause:** The automatic start was done the defined times but the alarm was not fixed.
  And the automatic start count of auto error recovery function is over the defined maximum count.
  - **Remedy:** Please remove the cause of the original alarm which is defined to the alarm code monitor feature. And then please input the START signal.

INTP-135 PAUSE.L Recovery DO OFF in auto start mode

- **Cause:** The error recovery status DO is OFF in the automatic start feature. So the resume program cannot be executed automatically.
  - **Remedy:** Please check the condition of error recovery status DO.

INTP-200 PAUSE (%s^4, %d^5) Unimplemented TP instruction

- **Cause:** The teach pendant program instruction is not available.
  - **Remedy:** Check the appropriate option is loaded.

INTP-201 PAUSE (%s^4, %d^5) Untaught element encountered

- **Cause:** The instruction is not taught.
  - **Remedy:** Teach the instruction.

INTP-202 PAUSE (%s^4, %d^5) Syntax error

- **Cause:** Instruction syntax error.
  - **Remedy:** Reteach the instruction.

INTP-203 PAUSE (%s^4, %d^5) Variable type mismatch

- **Cause:** The variable type is not correct.
  - **Remedy:** Check the variable type.

INTP-204 PAUSE (%s^4, %d^5) Invalid value for index

- **Cause:** The index value is invalid.
  - **Remedy:** Check the index value.

INTP-205 PAUSE (%s^4, %d^5) Analog port access error

- **Cause:** Analog I/O is not functioning properly.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-206 PAUSE (%s^4, %d^5) Digital port access error

- **Cause:** Digital I/O is not functioning properly.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-207 PAUSE (%s^4, %d^5) Group I/O port access error

- **Cause:** Group I/O is not functioning properly.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-208 PAUSE (%s^4, %d^5) Divide by 0

- **Cause:** Division by 0 was executed.
  - **Remedy:** Check the value.

INTP-209 PAUSE (%s^4, %d^5) SELECT is needed

- **Cause:** A CASE instruction was executed before a SELECT instruction.
  - **Remedy:** Add a SELECT instruction before the CASE instruction.

INTP-210 PAUSE (%s^4, %d^5) Start TIMER failed

- **Cause:** The program timer cannot be started.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-211 PAUSE (%s^4, %d^5) Delete TIMER failed

- **Cause:** The program timer cannot be stopped.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-212 PAUSE (%s^4, %d^5) Invalid value for OVERRIDE

- **Cause:** The indicated value cannot be used for the OVERRIDE instruction.
  - **Remedy:** Check the value.

INTP-213 PAUSE %s^7 (%s^4, %d^5) UALM[%d^9]

- **Cause:** A user alarm occurred.
  - **Remedy:** Refer to the user alarm code. Use MENUS to display the Alarm Log screen.

NOTE The next ten descriptions of the INTP-213 error code are PalletTool-defined user alarms.

INTP-213 Not PLC or MANUAL (INDEXPAL,37) UALM[1]

- **Cause:** R[7] is not set to 1 or 2.
  - **Remedy:** Make sure R[7] is only used by PalletTool logic.

INTP-213 Unknown box request (program,line) UALM[2]

- **Cause:** The number of boxes requested is greater than the current gripper's number of cases.
  - **Remedy:** Make sure the unit load is setup and calculated properly.

INTP-213 Unknown Infeed (program,line) UALM[3]

- **Cause:** R[2] Current infeed must be defined.
  - **Remedy:** Make sure R[2] is only used by PalletTool logic.

INTP-213 Unknown Pallet (program,line) UALM[4]

- **Cause:** The current pallet number is not defined.
  - **Remedy:** Make sure the pallet register is only used by PalletTool logic.

INTP-213 Srch range exceeded (PUT_SSHT,6) UALM[5]

- **Cause:** No slip sheet was found.
  - **Remedy:** Check stack position registers and sensors.

INTP-213 No Slipsheet detect (program,line) UALM[6]

- **Cause:** The slip sheet was dropped after it was found.
  - **Remedy:** Check the slip sheet present sensor.

INTP-213 I/O setup error (PARTREQ,79) UALM[7] partreq,palletpr,indexpal

- **Cause:** The infeed part reqest outputs have not been completely setup.
  - **Remedy:** Use SETUP, Infeed Stn, SET_IO, Infeed unit request outputs menu to set which digital output to use to request each box on each infeed.

INTP-213 I/O setup error (PALLETPR,42) UALM[7]

- **Cause:** The pallet present inputs have not been completely setup.
  - **Remedy:** Use SETUP, Pallet Stn, SET_IO, Pallet Clear/Present Inputs menu to set which digital input to use check if the pallet is present.

INTP-213 I/O setup error (INDEXPAL,41) UALM[7]

- **Cause:** The Index pallet outputs have not be completely setup.
  - **Remedy:** Use SETUP, Pallet Stn, SET_IO, Index pallet outputs menu to set which digital output to use to index each pallet.

INTP-213 Please ABORT! DON'T continue! (program,line) UALM[8]

- **Cause:** A serious setup error has occurred.
  - **Remedy:** Abort PalletTool (FCTN/ABORT ALL) and check the alarm logs for errors.

INTP-214 PAUSE (%s^4, %d^5) Specified group not locked

- **Cause:** The position register or frame setup instructions were executed in a program without a motion group.
  - **Remedy:** Set up the motion group in the program DETAIL screen.

INTP-215 PAUSE (%s^4, %d^5) Group mismatch

- **Cause:** The position data is invalid.
  - **Remedy:** Check the position data.

INTP-216 PAUSE (%s^4, %d^5) Invalid value for group number

- **Cause:** The indicated value is invalid for the motion group number.
  - **Remedy:** Check the value.

INTP-217 PAUSE (%s^4, %d^5) SKIP CONDITION needed

- **Cause:** The SKIP instruction was executed before a SKIP CONDITION instruction.
  - **Remedy:** Add a SKIP CONDITION instruction.

INTP-218 PAUSE (%s^4, %d^5) Skip failed

- **Cause:** The SKIP instruction or SKIP CONDITION instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-219 ABORT (%s^4, %d^5) Pause task failed

- **Cause:** The PAUSE instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-220 ABORT (%s^4, %d^5) Abort task failed

- **Cause:** The ABORT instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-221 PAUSE (%s^4, %d^5) Application failed

- **Cause:** The application instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-222 PAUSE (%s^4, %d^5) Call program failed

- **Cause:** The program CALL instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-223 PAUSE (%s^4, %d^5) Delay time failed

- **Cause:** The WAIT instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-224 PAUSE (%s^4, %d^5) Jump label failed

- **Cause:** The BRANCH instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-225 PAUSE (%s^4, %d^5) Motion statement failed

- **Cause:** The MOTION instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-226 PAUSE (%s^4, %d^5) Read position register failed

- **Cause:** The position register cannot be read.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-227 PAUSE (%s^4, %d^5) Write position register failed

- **Cause:** The position register cannot be written.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-228 PAUSE (%s^4, %d^5) Read register failed

- **Cause:** The register cannot be read.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-229 PAUSE (%s^4, %d^5) Write register failed

- **Cause:** The register cannot be written.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-230 PAUSE (%s^4, %d^5) Wait condition failed

- **Cause:** A condition WAIT instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-231 PAUSE (%s^4, %d^5) Read next line failed

- **Cause:** The next line cannot be read.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-232 PAUSE (%s^4, %d^5) Invalid frame number

- **Cause:** The frame number is invalid.
  - **Remedy:** Check the frame number.

INTP-233 PAUSE (%s^4, %d^5) Read frame value failed

- **Cause:** The specified frame cannot be read.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-234 PAUSE (%s^4, %d^5) Write frame value failed

- **Cause:** The specified frame cannot be written.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-235 PAUSE (%s^4, %d^5) Read pos item failed

- **Cause:** The position variable cannot be read.

- **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-236 PAUSE (%s^4, %d^5) Write pos item failed

- **Cause:** The position variable cannot be written.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-237 WARN (%s^4, %d^5) No more motion for BWD

- **Cause:** Backward execution cannot be executed any more because the current program line is at the top.
  - **Remedy:** Do not use backward execution at this point.

INTP-238 WARN (%s^4, %d^5) BWD execution completed

- **Cause:** Backward execution was completed.
  - **Remedy:** Do not use backward execution from this point.

INTP-239 WARN (%s^4, %d^5) Cannot execute backwards

- **Cause:** This instruction cannot be executed backwards.
  - **Remedy:** Set the cursor to the following line.

INTP-240 PAUSE (%s^4, %d^5) Incompatible data type

- **Cause:** The specified data type in the PARAMETER instruction is invalid for the parameter type.
  - **Remedy:** Check the data type.

INTP-241 PAUSE (%s^4, %d^5) Unsupported parameter

- **Cause:** This type of parameter cannot be used.
  - **Remedy:** Check the parameter type.

INTP-242 PAUSE (%s^4, %d^5) Offset value is needed

- **Cause:** An OFFSET instruction was executed before an OFFSET CONDITION instruction. A position register was not taught in the OFFSET PR[] instruction.
  - **Remedy:** Add an OFFSET CONDITION instruction before the OFFSET instruction. Teach the position register.

INTP-243 ABORT (%s^4, %d^5) Def grp is not specified

- **Cause:** This program has no motion group defined. The MOTION instruction cannot be executed.
  - **Remedy:** Remove the MOTION instruction or set up the motion group in the program DETAIL screen.

INTP-244 PAUSE (%s^4, %d^5) Invalid line number

- **Cause:** The input line number is incorrect.

- **Remedy:** Check the line number.

INTP-245 PAUSE (%s^4, %d^5) RCV stmt failed

- **Cause:** The RECEIVE R[] instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-246 PAUSE (%s^4, %d^5) SEMAPHORE stmt failed

- **Cause:** The SEMAPHORE instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

INTP-247 PAUSE (%s^4, %d^5) Pre exec failed

- **Cause:** Pre-execution system of motion or application has some trouble and system pauses the program execution for safety.
  - **Remedy:** Press RESET to clear the error and continue the program. If this error continues to occur, perform a cold start by turning off the robot, then while pressing SHIFT and RESET on the teach pendant, turn the robot back on. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

INTP-248 PAUSE (%s^4, %d^5) MACRO failed

- **Cause:** The MACRO instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-249 PAUSE Macro is not set correctly

- **Cause:** The MACRO setup was invalid.
  - **Remedy:** Check the MACRO setup. For more information on setting up macros, Refer to the KAREL and TPP Setup and Operations Manual.

INTP-250 PAUSE (%s^4, %d^5) Invalid uframe number

- **Cause:** The user frame number is invalid.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-251 PAUSE (%s^4, %d^5) Invalid utool number

- **Cause:** The tool frame number is invalid.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-252 PAUSE User frame number mismatch

- **Cause:** The user frame number in the positional data is not the same as the currently selected user frame number.
  - **Remedy:** Check the user frame number.

INTP-253 PAUSE Tool frame number mismatch

- **Cause:** The tool frame number in the positional data is not the same as the currently selected tool frame number.
  - **Remedy:** Check the tool frame number.

INTP-254 PAUSE (%s^4, %d^5) Parameter not found

- **Cause:** The specified parameter name cannot be found.
  - **Remedy:** Check the parameter name.

INTP-255 PAUSE (%s^4, %d^5) CAL_MATRIX failed

- **Cause:** The CAL_MATRIX instruction cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-256 PAUSE (%s^4, %d^5) No data for CAL_MATRIX

- **Cause:** The origin 3 points or destination 3 points are not taught.
  - **Remedy:** Teach the origin 3 points or destination 3 points.

INTP-257 PAUSE (%s^4, %d^5) Invalid delay time

- **Cause:** The wait time value is negative or exceeds the maximum value of 2147483.647 sec.
  - **Remedy:** Input a correct value.

INTP-258 PAUSE (%s^4, %d^5) Weld port access error

- **Cause:** The weld is not functioning properly.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-259 PAUSE (%s^4, %d^5) Invalid position type

- **Cause:** The data type of the position register was taught using joint type.
  - **Remedy:** Change position register data to cartesian.

INTP-260 PAUSE (%s^4, %d^5) Invalid torque limit value

- **Cause:** Invalid torque value.
  - **Remedy:** Input a correct value.

INTP-261 PAUSE (%s^4, %d^5) Array subscript missing

- **Cause:** A subscript is missing from a TPE PARAMETER statement that specifies an array.
  - **Remedy:** Correct the PARAMETER statement to include the subscript of the desired array element.

INTP-262 PAUSE (%s^4, %d^5) Field name missing

- **Cause:** A field name is required in a PARAMETER statement that specifies a structure.
  - **Remedy:** Correct the PARAMETER statement to include the name of the desired field.

INTP-263 PAUSE (%s^4, %d^5) Invalid register type

- **Cause:** The register type is not valid.
  - **Remedy:** Check the register type.

INTP-265 PAUSE (%s^4, %d^5) Invalid value for speed value

- **Cause:** The indicated value cannot be used for the AF instruction.
  - **Remedy:** Check the value.

INTP-266 ABORT (%s^4, %d^5) Mnemonic in interrupt is failed

- **Cause:** There isn't CANCEL or STOP instruction.
  - **Remedy:** insert CANCEL or STOP before call interrupt routine.

INTP-267 PAUSE (%s^4, %d^5) RUN stmt failed

- **Cause:** Specified program is already running.
  - **Remedy:** Abort specified program.

INTP-268 PAUSE (%s^4, %d^5) This statement only one in each line

- **Cause:** This statement can exist in one in each line.
  - **Remedy:** Delete the extra statement.

INTP-269 PAUSE (%s^4, %d^5) Skip statement only one in each line

- **Cause:** Skip statement can exist in one in each line.
  - **Remedy:** Delete the extra skip statement.

INTP-270 PAUSE (%s^4, %d^5) Different group cannot BWD

- **Cause:** During backward execution, a move is encountered that has a different group number from the previous motion statement.
  - **Remedy:** Use FWD execution carefully.

INTP-271 WARN (%s^4, %d^5) Excessive torque limit value

- **Cause:** Torque limit value exceeds maximum value. Torque limit value was modified to the maximum value.
  - **Remedy:** Set torque limit value less than or equal to the maximum value.

INTP-272 PAUSE (%s^4, %d^5) Unsupported operator

- **Cause:** This operator is not supported.
  - **Remedy:** Check the operator Refer to the appropriate application-spec ific Setup and Operations Manual for more information.

INTP-273 PAUSE (%s^4, %d^5) Too many conditions

- **Cause:** The number of the condition exceeds the maximum number.
  - **Remedy:** Reduce the number of condition.

INTP-274 PAUSE (%s^4, %d^5) CH program error

- **Cause:** This monitor statement cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-275 PAUSE Invalid sub type of CH program

- **Cause:** The sub type of specified ch program cannot be used.
  - **Remedy:** Check the sub type of this CH program.

INTP-276 PAUSE (%s^4, %d^5) Invalid combination of motion option

- **Cause:** The motion option instructions (SKIP, TIME BEFORE/AFTER, and application instruction) cannot be taught together.
  - **Remedy:** Delete the motion option instruction.

INTP-277 PAUSE (%s^4, %d^5) Internal MACRO EPT data mismatch

- **Cause:** The EPT index in macro table doesn't point the program name defined in macro table. That is, the EPT index in macro table is incorrect.
  - **Remedy:** Please set the correct EPT index for the program name defined in macro table.

INTP-278 PAUSE %s^7

- **Cause:** The DI monitor alarm for auto error recovery function occurs.
  - **Remedy:** This alarm is defined by the customer. Therefore the customer knows the remedy for this alarm.

INTP-279 PAUSE (%s^4, %d^5) Application data mismatch

- **Cause:** The application instruction was executed. But this application instruction doesn't match to the application process data of this program.
  - **Remedy:** Please change the application process data of this program to the adequate application for this application instruction.

INTP-280 PAUSE (%s^4, %d^5)Application data mismatch

- **Cause:** The application data of called program is different from that of the original program.
  - **Remedy:** Please change the structure of program.

INTP-281 PAUSE (%s^4, %d^5) No application data

- **Cause:** This program doesn't have the application data.
  - **Remedy:** Please define the application data in the program detail screen.

INTP-283 PAUSE (%s^4, %d^5) Stack over flow for fast fault recovery

- **Cause:** Stack over flow to record the fast fault recovery nesting data.
  - **Remedy:** Reduce the nesting of the program.

INTP-284 PAUSE No detection of fast fault recovery

- **Cause:** The point for the fast fault recover cannot be detected.
  - **Remedy:** This message is for information purposes only.

INTP-285 WARN Karel program cannot entry in fast fault recovery

- **Cause:** The fast entry cannot be performed in the karel program.
  - **Remedy:** Use TP program.

INTP-286 WARN MAINT program isn't defined in fast fault recovery

- **Cause:** MAINT program is not defined in fast fault recovery.
  - **Remedy:** Define the MAINT program using the MAINT_PROG teach pendant instruction.

INTP-287 PAUSE Fail to execute MAINT program

- **Cause:** It failed to execute MAINT program.
  - **Remedy:** Confirm the MAINT program name is correct or MAINT program exist in actual.

INTP-288 PAUSE (%s^4, %d^5) Parameter does not exist

- **Cause:** The parameter designated by AR register does not exist.
  - **Remedy:** Confirm the index of AR register and the parameter in CALL/MACRO command in main program.

INTP-289 PAUSE Can't save ffast point at program change

- **Cause:** When fast fault is enabled, the program was paused at the part of program change.
  - **Remedy:** Check whether the CONT termination exists at end of sub-program. If exist, please change it to FINE. This is the limitation of the fast fault recovery function.

INTP-290 PAUSE Fast fault recovery position is not saved

- **Cause:** During fast fault recovery sequence, any alarm occurs. So the fast fault recovery position is not saved.
  - **Remedy:** This message is for information purposes only.

INTP-291 WARN (%s^4, %d^5) Index for AR is not correct.

- **Cause:** The parameter designated by AR register does not exist. But this error does not occur at present.
  - **Remedy:** N/A

INTP-300 ABORT (%s^4, %d^5) Unimplemented P-code

- **Cause:** KAREL program error. This KAREL statement cannot be executed.
  - **Remedy:** Check the KAREL translater software version.

INTP-301 ABORT (%s^4, %d^5) Stack underflow

- **Cause:** KAREL program error. Execution entered into a FOR loop by the GOTO statement.
  - **Remedy:** A GOTO statement cannot be used to enter or exit a FOR loop. Check the label of the GOTO statement.

INTP-302 ABORT (%s^4, %d^5) Stack overflow

- **Cause:** The program stack overflowed. Too many local variables were declared or too many routines were called.
  - **Remedy:** For KAREL programs, refer to the KAREL Reference Manual, Stack Usage and the %STACKSIZE Translator Directive.

INTP-303 ABORT (%s^4, %d^5) Specified value exceeds limit

- **Cause:** KAREL program error. The specified value exceeds the maximum limit.
  - **Remedy:** Check the value.

INTP-304 ABORT (%s^4, %d^5) Array length mismatch

- **Cause:** KAREL program error. The dimensions of the arrays are not the same.
  - **Remedy:** Check the dimensions of the arrays.

INTP-305 ABORT (%s^4, %d^5) Error related condition handler

- **Cause:** KAREL program error. A condition handler error occurred.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-306 ABORT (%s^4, %d^5) Attach request failed

- **Cause:** KAREL program error. The ATTACH statement failed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-307 ABORT (%s^4, %d^5) Detach request failed

- **Cause:** KAREL program error. The DETACH statement failed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-308 ABORT (%s^4, %d^5) No case match is encountered

- **Cause:** KAREL program error. The CASE statement does not match any branches.
  - **Remedy:** Check the CASE value and branches.

INTP-309 ABORT (%s^4, %d^5) Undefined WITHCH parameter

- **Cause:** KAREL program error. The specified parameter cannot be used in the with clause of the condition handler.
  - **Remedy:** Check the parameter.

INTP-310 ABORT (%s^4, %d^5) Invalid subscript for array

- **Cause:** KAREL program error. The index of the array is invalid.
  - **Remedy:** Check the length of the array and index value.

INTP-311 PAUSE (%s^4, %d^5) Uninitialized data is used

- **Cause:** KAREL program error. Untaught or uninitialized data was used.
  - **Remedy:** Teach or initialize the data before using it.

INTP-312 ABORT (%s^4, %d^5) Invalid joint number

- **Cause:** KAREL program error. The wrong axis number was used.
  - **Remedy:** Check the axis number and the data value.

INTP-313 ABORT (%s^4, %d^5) Motion statement failed

- **Cause:** KAREL program error. The MOTION statement cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-314 ABORT (%s^4, %d^5) Return program failed

- **Cause:** KAREL program error. Execution cannot be returned from the routine.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-315 ABORT (%s^4, %d^5) Built-in execution failed

- **Cause:** KAREL program error. A built-in routine error occurred.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-316 ABORT (%s^4, %d^5) Call program failed

- **Cause:** KAREL program error. The routine cannot be called.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen. Verify the routine is loaded.

INTP-317 ABORT (%s^4, %d^5) Invalid condition specified

- **Cause:** KAREL program error. The specified condition was invalid.
  - **Remedy:** Check the condition.

INTP-318 ABORT (%s^4, %d^5) Invalid action specified

- **Cause:** KAREL program error. The specified action was invalid.
  - **Remedy:** Check the action.

INTP-319 ABORT (%s^4, %d^5) Invalid type code

- **Cause:** KAREL program error. The data type was invalid.
  - **Remedy:** Check the data type.

INTP-320 ABORT (%s^4, %d^5) Undefined built-in

- **Cause:** KAREL program error. The built-in routine is not defined.
  - **Remedy:** Check the appropriate option is loaded.

INTP-321 ABORT (%s^4, %d^5) END stmt of a func rtn

- **Cause:** KAREL program error. The END statement was executed in a function routine instead of a RETURN statement.
  - **Remedy:** Add a RETURN statement to the function routine.

INTP-322 ABORT (%s^4, %d^5) Invalid arg val for builtin

- **Cause:** KAREL program error. The argument value of a built-in routine was wrong.
  - **Remedy:** Check the argument value.

INTP-323 ABORT (%s^4, %d^5) Value overflow

- **Cause:** KAREL program error. The data value for the variable was too large.
  - **Remedy:** Check the variable's type and data value.

INTP-324 ABORT (%s^4, %d^5) Invalid open mode string

- **Cause:** KAREL program error. The usage string in the OPEN FILE statement was invalid.
  - **Remedy:** Check the usage string in the OPEN FILE statement.

INTP-325 ABORT (%s^4, %d^5) Invalid file string

- **Cause:** KAREL program error. The file string in the OPEN FILE statement was invalid.
  - **Remedy:** Check the file string. If no device is specified, the default device is used.

INTP-326 ABORT (%s^4, %d^5) File var is already used

- **Cause:** KAREL program error. The FILE variable is already being used.
  - **Remedy:** Close the file before reusing the FILE variable or add a new FILE variable.

INTP-327 ABORT (%s^4, %d^5) Open file failed

- **Cause:** KAREL program error. The file could not be opened.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-328 ABORT (%s^4, %d^5) File is not opened

- **Cause:** KAREL program error. The specified file was not opened before operation.
  - **Remedy:** Open the file before operation.

INTP-329 ABORT (%s^4, %d^5) Write variable failed

- **Cause:** KAREL program error. The value cannot be written to the variable.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-330 ABORT (%s^4, %d^5) Write file failed

- **Cause:** KAREL program error. Writing to the file failed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-331 ABORT (%s^4, %d^5) Read variable failed

- **Cause:** KAREL program error. Reading the variable failed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-332 ABORT (%s^4, %d^5) Read data is too short

- **Cause:** KAREL program error. Data read from the file is too short.
  - **Remedy:** Make sure the data in the file is valid.

INTP-333 ABORT (%s^4, %d^5) Invalid ASCII string for read

- **Cause:** KAREL program error. The string read from the file is wrong.
  - **Remedy:** Check the data of the file.

INTP-334 ABORT (%s^4, %d^5) Read file failed

- **Cause:** KAREL program error. Reading from the file failed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-335 ABORT (%s^4, %d^5) Cannot open pre-defined file

- **Cause:** KAREL program error. A file pre-defined by the system cannot be opened.
  - **Remedy:** Use the file defined by the system without opening it.

INTP-336 ABORT (%s^4, %d^5) Cannot close pre-defined file

- **Cause:** KAREL program error. A file pre-defined by the system cannot be closed.
  - **Remedy:** Do not try to close it.

INTP-337 ABORT (%s^4, %d^5) Invalid routine type

- **Cause:** KAREL program error. This routine cannot be used.
  - **Remedy:** Make sure you have the correct routine type and name.

INTP-338 ABORT (%s^4, %d^5) Close file failed

- **Cause:** KAREL program error. Closing the file failed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-339 ABORT (%s^4, %d^5) Invalid program name

- **Cause:** KAREL program error. The program name is invalid.
  - **Remedy:** Make sure you have the correct program name.

INTP-340 ABORT (%s^4, %d^5) Invalid variable name

- **Cause:** KAREL program error. The variable name is invalid.
  - **Remedy:** Make sure you have the correct variable name.

INTP-341 ABORT (%s^4, %d^5) Variable not found

- **Cause:** KAREL program error. The variable cannot be found.
  - **Remedy:** Verify the program name and variable name.

INTP-342 ABORT (%s^4, %d^5) Incompatible variable

- **Cause:** KAREL program error. The data type defined by the BYNAME function and the variable type are mismatched.
  - **Remedy:** Make sure you have the correct data type and variable type.

INTP-343 ABORT (%s^4, %d^5) Reference stack overflow

- **Cause:** KAREL program error. Too many variables are passed using the BYNAME function.
  - **Remedy:** Decrease the number of BYNAME functions.

INTP-344 ABORT (%s^4, %d^5) Readahead buffer overflow

- **Cause:** KAREL program error. The buffer to read ahead from the device overflowed.
  - **Remedy:** Increase the buffer size.

INTP-345 ABORT (%s^4, %d^5) Pause task failed

- **Cause:** KAREL program error. The PAUSE statement cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-346 ABORT (%s^4, %d^5) Abort task failed

- **Cause:** KAREL program error. The ABORT statement cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-347 ABORT (%s^4, %d^5) Read I/O value failed

- **Cause:** KAREL program error. The digital input signal cannot be input.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-348 ABORT (%s^4, %d^5) Write I/O value failed

- **Cause:** KAREL program error. The digital output signal cannot be output.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-349 ABORT (%s^4, %d^5) Hold motion failed

- **Cause:** KAREL program error. The HOLD statement cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-350 ABORT (%s^4, %d^5) Unhold motion failed

- **Cause:** KAREL program error. The UNHOLD statement cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-351 ABORT (%s^4, %d^5) Stop motion failed

- **Cause:** KAREL program error. The STOP statement cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-352 ABORT (%s^4, %d^5) Cancel motion failed

- **Cause:** KAREL program error. The CANCEL statement cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-353 ABORT (%s^4, %d^5) Resume motion failed

- **Cause:** KAREL program error. The RESUME statement cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-354 ABORT (%s^4, %d^5) Break point failed

- **Cause:** KAREL program error. The break point function cannot be executed.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-355 ABORT (%s^4, %d^5) AMR is not found

- **Cause:** KAREL program error. The AMR operated by the RETURN_AMR built-in routine was not found.
  - **Remedy:** Check program operation.

INTP-356 ABORT (%s^4, %d^5) AMR is not processed yet

- **Cause:** KAREL program error. The RETURN_AMR built-in routine cannot be used for an unoperated AMR.
  - **Remedy:** Operate the AMR using the WAIT_AMR built-in routine.

INTP-357 ABORT (%s^4, %d^5) WAIT_AMR is cancelled

- **Cause:** KAREL program error. The execution of the WAIT_AMR built-in routine was cancelled.
  - **Remedy:** The program executing the WAIT_AMR must be restarted.

INTP-358 ABORT (%s^4, %d^5) Timeout at read request

- **Cause:** KAREL program error. The READ statement timed out.
  - **Remedy:** Check the device being read.

INTP-359 ABORT (%s^4, %d^5) Read request is nested

- **Cause:** KAREL program error. Another READ statement was executed while a READ statement was waiting for input.
  - **Remedy:** Remove nested reads.

INTP-360 ABORT (%s^4, %d^5) Vector is 0

- **Cause:** KAREL program error. The vector value was invalid.
  - **Remedy:** Check the vector value.

INTP-361 PAUSE (%s^4, %d^5) FRAME:P2 is same as P1

- **Cause:** KAREL program error. The X-axis direction cannot be calculated in the FRAME built-in routine because P1 and P2 are the same point.
  - **Remedy:** Teach P1 and P2 as different points.

INTP-362 PAUSE (%s^4, %d^5) FRAME:P3 is same as P1

- **Cause:** KAREL program error. The X-Y plane cannot be calculated in the FRAME built-in routine because P1 and P3 are the same point.
  - **Remedy:** Teach P1 and P3 as different points.

INTP-363 PAUSE (%s^4, %d^5) FRAME:P3 exists on line P2-P1

- **Cause:** KAREL program error. The X-Y plane cannot be calculated in the FRAME built-in routine because P3 is located in the X-axis direction.
  - **Remedy:** Teach P3 out of the X-axis direction.

INTP-364 ABORT (%s^4, %d^5) String too short for data

- **Cause:** KAREL program error. The target string was too short.
  - **Remedy:** Increase the target string size.

INTP-365 ABORT (%s^4, %d^5) Predefined window not opened

- **Cause:** KAREL program error. A FILE pre-defined by the system is not opened.
    - **Remedy:** Check the use of this file.

INTP-366 ABORT (%s^4, %d^5) I/O status is not cleared

- **Cause:** KAREL program error. The last file operation failed.
    - **Remedy:** Reset the error using the CLR_IO_STAT built-in routine.

INTP-367 ABORT (%s^4, %d^5) Bad base in format

- **Cause:** KAREL program error. I/O mode operates only from binary to hexadecimal.
    - **Remedy:** Check the specified mode.

INTP-368 PAUSE (%s^4, %d^5) Cannot use specified program

- **Cause:** KAREL program error. The specified program cannot be used.
    - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-369 ABORT (%s^4, %d^5) Timeout at WAIT_AMR

- **Cause:** KAREL program error. The WAIT_AMR built-in routine timed out.
    - **Remedy:** If an AMR was expected within the time-out value check logic in the task that should have posted the AMR.

INTP-370 ABORT (%s^4, %d^5) Vision CPU not plugged in

- **Cause:** KAREL program error. The vision CPU board is not plugged in.
    - **Remedy:** Plug in the vision CPU board.

INTP-371 ABORT (%s^4, %d^5) Vision built-in overflow

- **Cause:** KAREL program error. The operation overflowed in the vision built-in routine.
    - **Remedy:** Modify program so fewer vision builtins are executing at the same time.

INTP-372 ABORT (%s^4, %d^5) Undefined vision built-in

- **Cause:** KAREL program error. The vision built-in routine is not defined.
    - **Remedy:** Check the appropriate option is loaded.

INTP-373 ABORT (%s^4, %d^5) Undefined vision parameter type

- **Cause:** KAREL program error. The parameter to the vision built-in routine is invalid.
    - **Remedy:** Check the parameter of the vision built-in routine.

INTP-374 ABORT (%s^4, %d^5) Undefined vision return type

- **Cause:** KAREL program error. The return value from the vision built-in routine is invalid.

- **Remedy:** Check the return value from the vision built-in routine.

INTP-375 ABORT (%s^4, %d^5) System var passed using BYNAME

- **Cause:** KAREL program error. System variables cannot be passed using the BYNAME function.
  - **Remedy:** Pass without using BYNAME or use GET_VAR and SET_VAR instead.

INTP-376 ABORT (%s^4, %d^5) Motion in interrupt is failed

- **Cause:** There isn't CANCEL or STOP instruction.
  - **Remedy:** insert CANCEL or STOP before call interrupt routine.

INTP-377 WARN (%s^4, %d^5) Local COND recovery failed

- **Cause:** This local condition can't be recovered.
  - **Remedy:** Refer to the error cause code. Use MENUS to display the Alarm Log screen.

INTP-378 WARN (%s^4, %d^5) Local variable is used

- **Cause:** Local variable or parameter is used for the condition.
  - **Remedy:** Use global variable to recover local condition.

INTP-379 ABORT Bad condition handler number

- **Cause:** An invalid condition handler number was used in a condition handler definition, or an ENABLE, DISABLE, or PURGE statement or action.
  - **Remedy:** Correct the condition handler number. Condition handler numbers must be in the range 1-1000.

INTP-380 ABORT Bad program number

- **Cause:** A invalid program number has been specified in an ABORT PROGRAM, PAUSE PROGRAM, or CONTINUE PROGRAM condition or action.
  - **Remedy:** Use a valid program number. Program numbers must be in the range 1..$SCR,$MAXNUMTASK + 2.

INTP-381 ABORT (%s^4, %d^5) Invalid Delay Time

- **Cause:** An invalid delay time has been specified in DELAY statement.
  - **Remedy:** Use a valid delay time. Delay time must be in the range 0-86400000.

INTP-382 ABORT (%s^4, %d^5) Invalid bit field value

- **Cause:** An invalid value has been specified in bit field.
  - **Remedy:** Use a valid value for the bit field.

INTP-383 PAUSE (%s^4, %d^5) Path node out of range

- **Cause:** The specified path node is out of range.

- **Remedy:** Check the path node.

INTP-400 ABORT (%s^4, %d^5) Number of motions exceeded

- **Cause:** Too many motions are executed at the same time.
  - **Remedy:** Decrease the number of motions executed at the same time. Execute the next motion after the completion of the last motion.

INTP-401 ABORT (%s^4, %d^5) Not On Top Of Stack

- **Cause:** Paused motion exists after the motion was resumed.
  - **Remedy:** Resume the motion that was previously paused.

Back to top

JOG Error Codes

JOG-001 WARN Overtravel Violation

- **Cause:** A robot overtravel has occurred.
  - **Remedy:** Use the MANUAL FCTNS OT release menu in to find out which axis is in an overtravel condition. Release overtravel by holding the SHIFT key and pressing the RESET key. At this time the servo power will be turned on. If the SHIFT key is released, the servo power will be turned off again. You can only use JOINT to jog the axis out of overtravel. If you want to jog the overtraveled axis further into the overtravel direction, you have to release the axis by moving the cursor to the axis direction you want, then press release function key in the OT release menu. At this point you can jog the axis to that direction.

JOG-002 WARN Robot not Calibrated

- **Cause:** Robot has not been calibrated.
  - **Remedy:** Set the system variable $MASTER_ENB to 1. Select SYSTEM then Master/Cal, to display the Master/Cal menu. Select a method for calibrating the robot. If the robot can not be calibrated, mastering is required. If the robot has been master before, set the system variable $DMR_GRP[].$master_d one to TRUE then calibrate the robot again. For more information on mastering and calibrating the robot, refer to the "Mastering" appendix in this manual.

JOG-003 WARN No Motion Control

- **Cause:** Other program has motion control.
  - **Remedy:** Abort the program that has motion control by pressing the FCTN key then selecting ABORT.

JOG-004 WARN Illegal linear jogging

- **Cause:** You cannot do more than one rotational jog at a time.
  - **Remedy:** Only press one rotational jog key at a time.

JOG-005 WARN Can not clear hold flag

- **Cause:** The system call to clear hold flag failed error.
  - **Remedy:** Perform a cycle start.

JOG-006 WARN Subgroup does not exist

- **Cause:** No extended axis exist in this group with which to jog.
  - **Remedy:** This is a notification. You do not have to do anything for this warning message.

JOG-007 WARN Press shift key to jog

- **Cause:** The SHIFT key is not pressed.
  - **Remedy:** You must press the SHIFT key when jogging the robot. Release the jog key then hold the SHIFT key and press the jog key to jog.

JOG-008 WARN Turn on TP to jog

- **Cause:** Teach pendant is not enable.
  - **Remedy:** Hold the DEADMAN and turn on the teach pendant before jogging the robot.

JOG-009 WARN Hold deadman to jog

- **Cause:** The DEADMAN switch is not pressed.
  - **Remedy:** Press the DEADMAN switch, then press the RESET key to clear the error.

JOG-010 WARN Jog pressed before shift

- **Cause:** The jog key was pressed before the shift key was pressed.
  - **Remedy:** Release the jog key. Then hold the SHIFT key then press the jog key.

JOG-011 WARN Utool changed while jogging

- **Cause:** The selected tool frame changed while jogging.
  - **Remedy:** Release the SHIFT key and the JOG key. The new TOOL frame will take effect automatically. To start jogging, hold down the SHIFT key and press the JOG key.

JOG-012 WARN manual brake enabled

- **Cause:** The manual brake enabled.
  - **Remedy:** Engage all the brakes by pressing EMERGENCY STOP button, then press the RESET key. To start jogging, press the shift and the jog key.

JOG-013 WARN Stroke limit (G:%d A:%x Hex)

- **Cause:** Robot axis reaches its specified stroke limit.
  - **Remedy:** The robot already reach the stroke limit and cannot jog in the current direction any more. Extend the axis limit if it does not exceed the robot and software specifications.

JOG-014 WARN Vertical fixture position

- **Cause:** Robot reaches its vertical fixture position.
  - **Remedy:** To continue jogging, release the JOG key then press it again.

JOG-015 WARN Horizontal fixture position

- **Cause:** Robot reaches its horizontal fixture position.
  - **Remedy:** To continue jogging, release the JOG key then press it again.

JOG-016 SERVO Softfloat time out(G:%d)

- **Cause:** Follow-up time is over when softfloat is ON.
  - **Remedy:** Make the system variable $SFLT_FUPTIM larger.

JOG-020 WARN Can not PATH JOG

- **Cause:** PATH JOG has selected, but robot is not currently on a taught path, or tool Z direction is same teaching path, so Y direction can not be determined. Cannot PATH JOG.
  - **Remedy:** Use shift-FWD to execute program path, or specify another jog frame.

JOG-021 WARN Multi key is pressed

- **Cause:** Use of multiple jog keys is not supported in PATH JOG.
  - **Remedy:** Use only one jog key at a time.

Back to top

LANG Error Codes

LANG-004 WARN File is not open

- **Cause:** 1. The wrong port is set to the port you want to use.
  2. The device may be out of order.
  - **Remedy:** 1. Set the correct port.
    2. Check the device if it works fine.

LANG-005 WARN Program type is different

- **Cause:** Only able to process teach pendant programs.
  - **Remedy:** Select a TPE program.

LANG-006 WARN Invalid or corrupted TP file

- **Cause:** A when loading .TP file, invalid data was found. This may occur if a .TP file has become corrupted or if some other type of file (for example a .PE file), has been copied or renamed to a .TP file.
  - **Remedy:** Generate (using SAVE, with $ASCII_SAVE = FALSE) and load a valid .TP file.
    Note: An existing TP program in the controller might have been

corrupted as a result of your attempt to load the invalid file. You might have to reteach the teach pendant program, before you save it as a .TP file.

LANG-007 WARN

- **Cause 1:** The data of .TP file is corrupted.
  - **Remedy 1:** Create new .TP file.
    - **Cause 2:** The format of .TP file is wrong.
      - **Remedy 2:** Check the format of .TP file.

LANG-014 WARN Program already exists

- **Cause:** The program that is being loaded already exists in the system.
  - **Remedy:** Before you load the program, delete the program already in the system.

LANG-015 WARN Can not write file

- **Cause:** Failure when writing data to the floppy.
  - **Remedy:** Check the connection of the device.

LANG-016 WARN Can not read file

- **Cause:** Failure when reading data from the floppy.
  - **Remedy:** Check the connection of the device.

LANG-017 WARN File format is incorrect

- **Cause:** The data you are trying to save to a file is either abnormal or broken, therefore the file cannot be loaded.
  - **Remedy:** The file cannot be loaded with the data as it is. The data must be normal to load the file.

LANG-018 WARN Group mask value is incorrect

- **Cause:** When printing the program, there was an illegal position that did not match the group mask of the program.
  - **Remedy:** Reteach the position data so that the group number matches the group mask of the program.

LANG-050 WARN %s contains %s, program/file names must match

- **Cause:** The file name and the program name are not the same. Their names must match.
  - **Remedy:** Rename the file to be same as the program name.

LANG-094 WARN File already exists

- **Cause:** The specified file already exists in the floppy.
  - **Remedy:** Before you write the new file to the floppy, delete the file that already exists on the floppy.

LANG-095 WARN File does not exist

- **Cause:** The specified file does not exist in the floppy.
  - **Remedy:** Check the file name or content of the floppy.

LANG-096 WARN Disk is full

- **Cause:** The floppy disk has reached its limit and is full.
  - **Remedy:** Either use a new floppy disk or delete an unnecessary file in order to make room for saving to the floppy.

LANG-097 WARN Only one file may be opened

- **Cause:** An attempt was made to open more than one file.
  - **Remedy:** Do not attempt to open more than one file at a time.

LANG-098 WARN Disk timeout

- **Cause:** It could not access the disk.
  - **Remedy:** Check if the correct device is set to the appropriate port and that the device is turned on.

LANG-099 WARN Write protection violation

- **Cause:** The disk has write protection.
  - **Remedy:** Remove the write protection.

LANG-100 WARN Device error

- **Cause:** Could not access the device.
  - **Remedy:** Connect the correct device to the correct port.

Back to top

LNTK Error Codes

LNTK-000 STOP Unknown error (LN00)

- **Cause:** System internal error.
  - **Remedy:** Press RESET to clear the error and continue the program. If this error continues to occur, perform a cold start by turning off the robot, then while pressing SHIFT and RESET on the teach pendant, turn the robot back on. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

LNTK-001 STOP No global variables

- **Cause:** The Line Track global variables have NOT been properly loaded.
  - **Remedy:** Check the application installation manual for the proper installation procedure for the Line Track system.

LNTK-002 STOP Motion data missing

- **Cause:** The Line Track internal motion data was NOT found.
  - **Remedy:** Press RESET to clear the error and continue the program. If this error continues to occur, perform a cold start by turning off the robot, then while pressing SHIFT and RESET on the teach pendant, turn the robot back on. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

LNTK-003 STOP Error allocating data memory

- **Cause:** The Line track internal memory allocation failed.
  - **Remedy:** Check Memory usage and Line Track installation.

LNTK-004 STOP No system variables

- **Cause:** The Line Track system variables (eg. $LNSCH[], $LNSNRSCH[]) were not found.
  - **Remedy:** Check the application installation manual for the proper installation procedure for the Line Track system.

LNTK-005 STOP Illegal schedule number

- **Cause:** An invalid Line Track schedule (track or frame) number was used within a program instruction (eg. TRK[59]) or program header data (eg. FRAME = 59).
  - **Remedy:** Check all schedule numbers (TRK[] or FRAME usages) used within the specified program to verify that they are within the allowable range specified for the $LNSCH[] system variable.

LNTK-006 STOP Illegal tracking type

- **Cause:** An invalid tracking type was specified within the tracking schedule (i.e. $LNSCH[]) associated with the specified program.
  - **Remedy:** Check the value of $LNSCH[i].$TRK_TYPE (where `i' is the FRAME number specified within the DETAIL screen for the specified program) to make sure that it is one of the valid values listed under the description for this system variable.

LNTK-007 STOP Illegal encoder number

- **Cause:** An invalid sensor(encoder) number was used within the specified tracking program instruction or within the program's associated schedule $LNSCH[i].$TRK_ENC_NUM value (where 'i' is the FRAME number used within the DETAIL screen for the specified program).
  - **Remedy:** Check the value of the specified program instruction's LINE[] parameter and the program's associated schedule $LNSCH[i].$TRK_ENC_NUM value to make sure that it is one of the valid values listed under the description for the $ENC_STAT[] system variable.

LNTK-008 STOP Invalid nominal position

- **Cause:** An invalid or uninitialized nominal tracking frame position was used within the tracking schedule (i.e. $LNSCH[]) associated with the specified program.

- **Remedy:** Check the value of $LNSCH[i].$TRK_FRAME (where `i' is the FRAME number specified within the DETAIL screen for the specified program) to make sure that it is a properly initialized, valid position.

LNTK-009 STOP Illegal position type

- **Cause:** The position type used within the specified program is not valid.
  - **Remedy:** Check the KAREL or TPE user manual for valid position types.

LNTK-010 STOP Illegal encoder schedule num

- **Cause:** An invalid sensor (encoder) schedule number was used within the specified tracking program instruction's SCH[] parameter.
  - **Remedy:** Check the $LNSNRSCH[] system variable description for the range of valid sensor schedule numbers.

LNTK-011 STOP Illegal boundary set number

- **Cause:** An illegal value was used within the specified tracking program instruction or within the program's associated schedule $LNSCH[i].$SEL_BOUND value (where `i' is the FRAME number used within the DETAIL screen for the specified program).
  - **Remedy:** Check the value of the specified program instruction's BOUND[] parameter and the program's associated schedule $LNSCH[i].$SEL_BOUND value to make sure that they are one of the valid values listed under the description for this system variable.

LNTK-012 STOP Invalid input position

- **Cause:** An invalid or uninitialized position was used within the specified tracking program instruction.
  - **Remedy:** Check the position (or position register) value for the specified tracking program instruction to make sure that it is a properly initialized, valid position.

LNTK-013 STOP Invalid trigger input value

- **Cause:** An invalid or uninitialized value was used for the specified tracking program instruction's trigger value.
  - **Remedy:** Check the value of the program register used by the specified tracking program instruction.

LNTK-014 STOP Encoder/sensor not enabled

- **Cause:** The tracking sensor (encoder) associated with the specified program (specified by $LNSCH[i].$TRK_ENC_NUM, where `i' is the FRAME number used within the DETAIL screen for the specified program) must be enabled to perform this program instruction.
  - **Remedy:** Use the LINE enable instruction to enable the proper tracking sensor(encoder).

LNTK-015 STOP Invalid encoder trigger value

- **Cause:** An invalid or uninitialized sensor (encoder) trigger value (specified by $LNSCH[i].$TRIG_VALUE, where `i' is the FRAME number used within the DETAIL screen for the specified program) was found.
  - **Remedy:** Make sure that this value is properly set prior to either teaching path positions, or issuing programmed robot motion instructions.

LNTK-016 STOP Invalid input time

- **Cause:** An invalid or uninitialized prediction time was used within the specified tracking program instruction.
  - **Remedy:** Check the prediction time being used for proper initialization.

LNTK-017 STOP Invalid input pointer

- **Cause:** An invalid internal position input pointer was specified.
  - **Remedy:** Perform a COLD start of the system. (Cycle power) Notify FANUC Robotics if problem persists.

LNTK-018 STOP Invalid teach distance

- **Cause:** An invalid or uninitialized teach distance value (specified by $LNSCH[i].$TEACH_DIST, where `i' is the FRAME number used within the DETAIL screen for the specified program) was found.
  - **Remedy:** Make sure that this value is properly set prior to either teaching path positions, or issuing programmed robot motion instructions.

LNTK-019 STOP Invalid scale factor

- **Cause:** An invalid or uninitialized scale factor value (specified by $LNSCH[i].$SCALE, where 'i' is the FRAME number used within the DETAIL screen for the specified program) was found.
  - **Remedy:** Make sure that this value is properly set prior to either teaching path positions, or issuing programmed robot motion instructions. NOTE: This value may NOT be equal to 0.0.

LNTK-020 STOP Invalid extreme position

- **Cause:** An invalid or uninitialized extreme position value (specified by $LNSCH[i].$TCP_EXTRM, where 'i' is the FRAME number used within the DETAIL screen for the specified program) was found.
  - **Remedy:** Make sure that this value is properly set prior to either teaching path positions, or issuing programmed robot motion instructions. **NOTE:** A value of 1,000,000 (1.0e6) may be set to disable TCP extreme position checking.

LNTK-021 STOP Invalid track axis number

- **Cause:** An invalid or uninitialized track axis number (specified by $LNSCH[i].$TRK_AXIS_NUM, where `i' is the FRAME number used within the DETAIL screen for the specified program) was found.
  - **Remedy:** Make sure that this value is properly set to one of the valid values listed under the description for this system variable.

LNTK-022 STOP No tracking hardware

- **Cause:** No tracking sensor hardware interface or improperly initialized system variables.
  - **Remedy:** Check tracking hardware setup and the values of $SCR.$ENC_TYPE and $SCR.$ENC_AXIS.

LNTK-023 STOP Bad tracking hardware

- **Cause:** Bad tracking sensor hardware interface.
  - **Remedy:** Check all sensor hardware, cables, and connections.

LNTK-024 STOP Illegal encoder average

- **Cause:** Illegal encoder average number.
  - **Remedy:** Use a valid encoder average number.

LNTK-025 STOP Illegal encoder multiplier

- **Cause:** Illegal encoder multiplier number.
  - **Remedy:** Use a valid encoder multiplier number.

LNTK-026 STOP Encoder not enabled

- **Cause:** Tracking encoder is not enabled.
  - **Remedy:** Enable the tracking encoder before reading its COUNT or RATE within the program.

LNTK-027 STOP Invalid data on LNTK stack

- **Cause:** Invalid data was found on the tracking stack.
  - **Remedy:** Perform a COLD start of the system. (Cycle power.) Notify FANUC Robotics if problem persists.

LNTK-028 STOP LNTK stack underflow

- **Cause:** The tracking stack attempted to read more data than was present.
  - **Remedy:** Perform a COLD start of the system. (Cycle power.) Notify FANUC Robotics if problem persists.

LNTK-029 STOP LNTK stack overflow

- **Cause:** Too many tracking sub-processes are present. There is a limit to the number of tracking processes that can be called from other programs.
  - **Remedy:** Check to ensure sub-processes are not being called erroneously. Consider rewriting procedures so that fewer sub-processes are used.

LNTK-030 STOP Stack / header mismatch

- **Cause:** The schedule number on the tracking stack did not match the schedule of the program it corresponds to.
  - **Remedy:** Perform a COLD start of the system. (Cycle power.) Notify FANUC Robotics if problem persists.

LNTK-031 STOP UFRAME must be zero

- **Cause:** User frames cannot be used when tracking.
  - **Remedy:** Set $MNUFRAMENUM[] to zero.

LNTK-032 STOP Conveyor resync failed

- **Cause:** The conveyor was not resynchronized properly.
  - **Remedy:** Make sure the Tracking Schedule is properly initialized, the encoder is active, and all hardware is functioning properly.

Back to top

MACR Error Codes

MACR-001 WARN Can't assign to MACRO command

- **Cause:** The conditions for assigning macros are not correct.
  - **Remedy:** Check if there is a double definition or if the index is over the range.

MACR-003 WARN Can't assign motn_prog to UK

- **Cause:** It is not possible to assign a program with MOTION lock group to the User Key (UK) button.
  - **Remedy:** Remove the motion lock group from the program.

MACR-004 WARN Can't execute motn_prog by UK

- **Cause:** It is not possible to execute a program with MOTION lock group with the User Key (UK) button.
  - **Remedy:** Remove the motion lock group from the program.

MACR-005 WARN Please enable teach pendant

- **Cause:** It is not possible to execute a program when the teach pendant is disabled.
  - **Remedy:** Enable the teach pendant.

MACR-006 WARN Please disable teach pendant

- **Cause:** It is not possible to execute a program when the teach pendant is enabled.
  - **Remedy:** Disable the teach pendant.

MACR-007 WARN The same macro type exists

- **Cause:** The macro assign type already exists.
  - **Remedy:** Change the assign type to another.

MACR-008 WARN Remote-cond isn't satisfied

- **Cause:** This assign type is only enabled at REMOTE condition.
  - **Remedy:** Create REMOTE condition.

MACR-009 WARN The index is out of range

- **Cause:** This assign index is out of range.
  - **Remedy:** Change the assign index.

MACR-010 WARN This SOP button is disabled

- **Cause:** This SOP button is not enabled for macro execution.
  - **Remedy:** Change the value of the $MACRSOPENBL system variable. Refer to the *SYSTEM R-J3 Software Reference Manual* , Chapter 2, "System Variable Alphabetical Description", for more information on setting system variables.

MACR-011 WARN This UOP button is disabled

- **Cause:** This UOP signal is not enabled for macro execution.
  - **Remedy:** Change the value of the $MACRSOPENBL system variable. Refer to the *SYSTEM R-J3 Software Reference Manual* , Chapter 2, "System Variable Alphabetical Description", for more information on setting system variables.

MACR-012 WARN Number of DI+RI is over

- **Cause:** The number of RI+DI is over the maximum number. You can assign RI and DI to macro assign type, but the total number of assignments possible is restricted by the system variable $MACROMAXDRI. $MACROMAXDRI must be set to 5 and never be changed. When the total number of assignments is over $MACROMAXDRI, this alarm occurs.
  - **Remedy:** First de-assign the other RI or DI assignments. Then assign the new macro as RI or DI.

MACR-013 WARN MACRO execution failed

- **Cause:** Cannot execute this MACRO.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

MACR-016 WARN The macro is not completed

- **Cause:** The macro aborted while executing.
  - **Remedy:** The macro will begin executing from the first line at the next execution.

Back to top

MCTL Error Codes

MCTL-001 NONE TP is enabled

- **Cause:** Teach pendant is enabled, therefore motion control was not granted.
  - **Remedy:** Disable the teach pendant, and try the operation again.

MCTL-002 NONE TP is disabled

- **Cause:** The teach pendant is disabled, therefore motion control was not granted.
  - **Remedy:** Enable the teach pendant, and try the operation again.

MCTL-003 NONE system is in error status

- **Cause:** The system is in error status, therefore motion control was not granted.
  - **Remedy:** Clear the error by pressing RESET, and try the operation again.

MCTL-004 NONE motion is in progress

- **Cause:** Motion control was not granted because motion is still in progress.
  - **Remedy:** Wait until the robot comes to a complete stop.

MCTL-005 NONE not in control of motion

- **Cause:** Motion control was not granted because brakes were engaged.
  - **Remedy:** Make sure all brakes are released and try the operation again.

MCTL-006 NONE TP has motion control

- **Cause:** The teach pendant currently has the motion control, therefore motion control was not granted.
  - **Remedy:** Disable the teach pendant, and try the same operation again.

MCTL-007 NONE PROG has motion control

- **Cause:** The program has the motion control, therefore motion control was not granted.
  - **Remedy:** Pause or abort the program, and try the same operation again.

MCTL-008 NONE Operator panel has motion control

- **Cause:** Because the operator panel has the motion control, the motion control was not granted.
  - **Remedy:** Set the $rmt_master system variable correctly, and try the operation again.

MCTL-009 NONE Other has motion control

- **Cause:** Other device has the motion control, and the motion control was not granted.
  - **Remedy:** Set the $rmt_master system variable correctly, and try the operation again.

MCTL-010 NONE Other than msrc is rel'ing

- **Cause:** System internal error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MCTL-011 NONE Due to error processing

- **Cause:** System internal error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MCTL-012 NONE subsystem code unknown

- **Cause:** System internal error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MCTL-013 NONE ENBL input is off

- **Cause:** ENBL input on the UOP is off.
  - **Remedy:** Set ENBL input ON.

MCTL-014 NONE Waiting for Servo ready

- **Cause:** The motion control was not granted because servo was not up.
  - **Remedy:** Wait for a few seconds until servo is up and ready.

MCTL-015 NONE Manual brake enabled

- **Cause:** The motion control was not granted because manual brake control is enabled.
  - **Remedy:** Disable the manual brake control.

Back to top

MEMO Error Codes

MEMO-002 WARN Specified program is in use

- **Cause:** The specified program is being edited or executing.
  - **Remedy:** Abort the specified program. Or select it again after selecting another program.

MEMO-003 WARN Specified program is in use

- **Cause:** The specified program is being edit or executing.
  - **Remedy:** Abort the specified program. Or select it once more after selecting another program.

MEMO-004 WARN Specified program is in use

- **Cause:** The specified program is being edited or executing.
  - **Remedy:** Abort the specified program. Or select it once more after selecting another program.

MEMO-006 WARN Protection error occurred

- **Cause:** The specified program is protected by user.
  - **Remedy:** Cancel the protection of the specified program.

MEMO-007 WARN Invalid break number

- **Cause:** The specified break number does not exist.
  - **Remedy:** Specify the correct break number.

MEMO-008 WARN Specified line no. not exist

- **Cause:** The specified line number does not exist in the specified or default program.
  - **Remedy:** Specify a correct line number.

MEMO-010 WARN Program name error

- **Cause:** The specified program name is different form that of the P-code file.
  - **Remedy:** Specify the same program name.

MEMO-013 WARN Program type is different

- **Cause:** The specified program type is different from that of the object being processed.
  - **Remedy:** Specify the same program type.

MEMO-014 WARN Specified label already exists

- **Cause:** The specified label id already exists in the program.
  - **Remedy:** Specify another label number.

MEMO-015 WARN Program already exists

- **Cause:** The specified program already exists in the system.
  - **Remedy:** Specify another program name. Or delete the registered program.

MEMO-019 WARN Too many programs

- **Cause:** The number of the programs and routines exceeded the maximum possible number (3200).
  - **Remedy:** Delete unnecessary programs or routines.

MEMO-025 WARN Label does not exist

- **Cause:** Specified label does not exist.
  - **Remedy:** Set the index to an existing label.

MEMO-026 WARN Line data is full

- **Cause:** The number of line data exceeded the maximum possible line number (65535).
  - **Remedy:** Delete unnecessary line data.

MEMO-027 WARN Specified line does not exist

- **Cause:** The specified line data does not exist.
  - **Remedy:** Specify another line number.

MEMO-029 WARN The line data can't be changed

- **Cause:** The specified line data can't be changed. The size of modified data is different from that of original data when replacing it.
  - **Remedy:** Specify another line number or the data of same size.

MEMO-032 WARN Specified program is in use

- **Cause:** The specified program is being edited or executing.
  - **Remedy:** Abort the specified program. Or select it once more after selecting another program.

MEMO-034 WARN The item can't be changed

- **Cause:** The specified item is locked to change by system.
  - **Remedy:** Specify another item.

MEMO-038 WARN Too many programs

- **Cause:** The number of the programs exceeded the maximum number.
  - **Remedy:** Delete unnecessary programs.

MEMO-048 WARN Break point data doesn't exist

- **Cause:** The specified break point data does not exist.
  - **Remedy:** Specify another break point.

MEMO-050 WARN Program does not exist

- **Cause:** The specified program does not exist in the system.
  - **Remedy:** Specify another program or create the same program first.

MEMO-056 WARN Program does not exist

- **Cause:** The specified program does not exist in the system.
  - **Remedy:** Specify another program or create the same program first.

MEMO-061 WARN No write access

- **Cause:** The program must be opened with write access before attempting write operations.
  - **Remedy:** Open the program with write access before writing.

MEMO-065 WARN Too many opened programs

- **Cause:** Too many CALL instructions is used. The number of opened programs exceeded the maximum possible number(100).
  - **Remedy:** Abort the unnecessary programs. Or, remove unnecessary CALL instructions.

MEMO-068 WARN Specified program is in use

- **Cause:** 1. The specified program is editing or executing.
  2. The specified program is entried to MACRO
  - **Remedy:** 1. Abort the specified program. Or select it once more after select another program.
    2. Remove the program form the MACRO entry.

MEMO-071 WARN Position does not exist

- **Cause:** The specified position data does not exist.
  - **Remedy:** Specify another position.

MEMO-072 WARN Position data already exists

- **Cause:** Position data already exists in the specified position you want to move.
  - **Remedy:** Specify another position. Or, delete the data in the specified position.

MEMO-073 WARN Program does not exist

- **Cause:** The specified program does not exist in the system.
  - **Remedy:** Specify another program or create the same program first.

MEMO-074 WARN Program type is not TPE

- **Cause:** The operation can be apply only to TPE programs.
  - **Remedy:** Select a TPE program.

MEMO-075 WARN Program can't be used

- **Cause:** The program must be opened before attempting read or write operations.
  - **Remedy:** Open the program before reading or writing.

MEMO-078 WARN Program can't be used

- **Cause:** The specified operation is not supported for this program type.
  - **Remedy:** Specify a program whose program type matches the operation.

MEMO-080 WARN Protection error occurred

- **Cause:** The specified program is protected by user.
  - **Remedy:** Cancel the protection of the specified program.

MEMO-081 WARN Specified program is in use

- **Cause:** The specified program is editing or executing.
  - **Remedy:** Abort the specified program. Or select it once more after select another program.

MEMO-088 WARN Program does not exist

- **Cause:** The specified position data does not exist.
  - **Remedy:** Specify another position.

MEMO-093 WARN Specified program is in use

- **Cause:** The specified program is editing or executing.
  - **Remedy:** Abort the specified program. Or select it once more after select another program.

MEMO-098 WARN EOF occurs in file access

- **Cause:** EOF occurs in file access. When P-code file was scanned, EOF occurs.
  - **Remedy:** The P-code data may be broken. Translate the specified KAREL program again. Then reload the P-code.

MEMO-099 WARN Program name is wrong

- **Cause:** The program name length is different from that of the P-code data.
  - **Remedy:** Check the program name of the specified program.

MEMO-103 WARN Check sum error occurred

- **Cause:** The specified data was broken. This is the internal error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is

not cleared, document the events that led to the error and call your FANUC
Robotics technical representative.

MEMO-104 WARN Program already exists

- **Cause:** The specified program already exists in the system.
  - **Remedy:** Specify another program name. Or delete the registered program.

MEMO-112 WARN Break data already exists

- **Cause:** The specified break point data already exists in the program.
  - **Remedy:** Specify another break point.

MEMO-113 WARN File access error

- **Cause:** The port that has the program you want to load is not connected.
  - **Remedy:** Check the port setting and the connected device.

MEMO-114 WARN Break point can't be removed

- **Cause:** The break point data can not be overwritten. The program is protected by user or executing.
  - **Remedy:** Cancel the protection of the program or abort the program.

MEMO-115 WARN Break point can't be removed

- **Cause:** The break point data can not be removed. The program is protected by user or executing.
  - **Remedy:** Cancel the protection of the program or abort the program.

MEMO-119 WARN Application data doesn't exist

- **Cause:** The specified application data does not exist because the program does not correspond to the specified application.
  - **Remedy:** Specify another application data. Then create the program in the current system.

MEMO-120 WARN Application data doesn't exist

- **Cause:** The specified application data does not exist because the program does not correspond to the specified application.
  - **Remedy:** Specify another application data. Create the program in the current system again.

MEMO-123 WARN Application data doesn't exist

- **Cause:** The specified application data does not exist because the program does not correspond to the specified application.
  - **Remedy:** Specify another application data. Create the program in the current system again.

MEMO-124 WARN Program version is too new

- **Cause:** KAREL program version number is newer than that of the system.
  - **Remedy:** Translate the program with an older version of the Translator.

MEMO-125 WARN Program version is too old

- **Cause:** KAREL program version number is older than that of the system.
  - **Remedy:** Translate the program with a newer version of the Translator.

MEMO-126 WARN No more available memory

- **Cause:** Lack of the memory which can be used.
  - **Remedy:** Delete unnecessary programs.

MEMO-127 WARN Pos reference over 255 times

- **Cause:** Reference of the same position exceeded the maximum count (256).
  - **Remedy:** Set new position ID for the referenced position.

MEMO-128 WARN %s parameters are different

- **Cause:** A routine exists in memory with a different parameter definition than the routine in the PC file being loaded.
  - **Remedy:** Update the calling convention in the KAREL program being loaded or delete the obsolete routine from system memory.

MEMO-130 SYST Please power up again

- **Cause:** The data of the system been broken.
  - **Remedy:** Please power up again.

MEMO-131 SYST Please power up again

- **Cause:** System data in CMOS has been broken.
  - **Remedy:** Turn power off and then back on.

MEMO-132 WARN %s has been broken

- **Cause:** Program data has been broken at the power fail recover.
  - **Remedy:** Delete the program and create it again. Press the RESET key to clear the error. If the error is not cleared, document the events that led to the error and call your FANUC Robotics technical representative.

MEMO-133 SYST Please power up again

- **Cause:** System data in CMOS has been broken.
  - **Remedy:** Turn power off and then back on.

MEMO-134 WARN TPE program %s already exists

- **Cause:** The TPE program which has the same name already exists.
  - **Remedy:** Delete the teach pendant (TP) program. Then load the specified KAREL program again.

MEMO-135 WARN Cannot create TPE program here

- **Cause:** The TPE program cannot be created in this start mode.
  - **Remedy:** Select the function menu to change the start mode.

MEMO-136 WARN Cannot load P-code here

- **Cause:** The KAREL program cannot be loaded in this start mode.
  - **Remedy:** Select the function menu to change the start mode.

MEMO-137 WARN Load at Control Start Only

- **Cause:** Specified KAREL program cannot be loaded in this mode. Because the same name program has already been loaded at controlled start.
  - **Remedy:** Load the program at controlled start.

MEMO-138 WARN Delete at Control Start Only

- **Cause:** Specified program has already been loaded at controlled start. Because of this, you can only delete the program at controlled start.
  - **Remedy:** Delete the program at controlled start.

MEMO-144 WARN Header size too big

- **Cause:** The TPE header size specified is too big. Must be less than 256.
  - **Remedy:** Change size to range of 1-256. If necessary, use multiple header records.

MEMO-145 WARN TPE cannot have KAREL routine

- **Cause:** The routine of the specified program has been already referred by the KAREL program. Because of this, the specified program must be the KAREL program. The user cannot use the specified program name as a TPE program.
  - **Remedy:** Change the program name, or delete the KAREL program which refers the routine of the specified program.

MEMO-146 WARN Invalid variable is used

- **Cause:** Invalid variable is used in the specified KAREL program.
  - **Remedy:** Check the variable used in the specified KAREL program.

MEMO-147 WARN Flash File access error (write)

- **Cause:** The write access to the Flash File (F-ROM) failed. Some program may be lost.
  - **Remedy:** The Flash File (F-ROM) may be broken. Create or load the lost program again.

MEMO-148 WARN Flash File access error (read)

- **Cause:** The read access to the Flash File (F-ROM) failed. Some program may be lost.

- **Remedy:** The Flash File (F-ROM) may be broken. Create or load the lost program again.

MEMO-149 WARN Specified program is broken

- **Cause:** Program data has been broken.
  - **Remedy:** Power OFF and ON. Then check the program data of the specified program.

MEMO-151 WARN No more available memory (TEMP)

- **Cause:** Lack of the temporary memory which can be used for the program.
  - **Remedy:** Delete unnecessary programs, or change the D-RAM module to a larger one.

Back to top

MOTN Error Codes

MOTN-000 WARN Unknown error (MO00)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-001 STOP Internal error in osmkpkt

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-002 STOP Internal error in ossndpkt

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-003 STOP Internal error in oswrtmbx

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-004 STOP Internal error in ossigflg

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-005 STOP Internal error in osclrflg

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-006 STOP Internal error in osrcvpkt

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-007 STOP Internal error in osredmbx

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your

FANUC
Robotics technical representative.

MOTN-008 STOP Internal error in oswaiflg

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-009 STOP Normal Single Step / BWD stop

- **Cause:** System executes normal Single Step or Backward motion stop.
  - **Remedy:** This is a normal condition. No action is required.

MOTN-010 STOP Internal error in osathpkt

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-011 STOP Internal error in osdltpkt

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-012 STOP Invalid softpart MIR

- **Cause:** Invalid softpart MIR.
  - **Remedy:** Make sure the correct basic motion softpart is installed

MOTN-013 STOP Invalid softpart SEG

- **Cause:** Invalid softpart SEG.
  - **Remedy:** Make sure the correct basic motion softpart is installed.

MOTN-014 WARN unknown error (MO14)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-015 WARN unknown error (MO15)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-016 WARN unknown error (MO16)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-017 STOP Limit error (G:%d^2, A:%x^3 Hex)

- **Cause:** Limit error.
  - **Remedy:** Reteach the position out of limits.

MOTN-018 STOP Position not reachable

- **Cause:** Position not reachable Or near by singularity.
  - **Remedy:** Reteach the position that is not reachable.

MOTN-019 WARN In singularity

- **Cause:** Position near by singularity.
  - **Remedy:** Reteach the position that is near a singularity point.

MOTN-020 WARN Wristjoint warning

- **Cause:** Wrist joint warning.
  - **Remedy:** Wrist joint warning.

MOTN-021 STOP No kinematics error

- **Cause:** No kinematics.
  - **Remedy:** Use joint motion.

MOTN-022 STOP Invalid limit number

- **Cause:** Invalid limit number.
  - **Remedy:** Set limit number correctly.

MOTN-023 STOP In singularity

- **Cause:** The position is near a singularity point.
  - **Remedy:** Reteach the position that is near a singularity point.

MOTN-024 STOP Kinematics not defined

- **Cause:** Kinematics is not defined.
  - **Remedy:** Define Kinematics.

MOTN-025 WARN unknown error (MO25)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-026 WARN unknown error (MO26)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-027 WARN unknown error (MO27)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-028 WARN unknown error (MO28)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-029 STOP unknown error (MO29)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-030 STOP Internal error in MMGR:PEND

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-031 STOP Internal error in MMGR:ESEG

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-032 STOP Internal error in MMGR:PRSD

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-033 STOP Internal error in MMGR:GNL

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-034 STOP Internal error in MMGR_MMR

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-035 STOP Internal error in MMGR_MIR

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-036 STOP Internal error in MMGR:MSTR

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-037 STOP Internal error in MMGR:MDON

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your

FANUC
Robotics technical representative.

MOTN-038 STOP Internal error in MMGR:CAN

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-039 STOP Internal error in MMGR:FCAN

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-040 STOP Internal error in MMGR:CAND

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-041 STOP Internal error in MMGR:PSTR

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-042 STOP Internal in MSSR

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.

3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
not cleared, document the events that led to the error and call your FANUC
Robotics technical representative.

MOTN-043 STOP Internal error in MMGR:EPKT

- **Cause:** Internal system error.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-044 STOP Internal error in MMGR:ERR

- **Cause:** Internal system error.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-045 STOP Internal error in pro. start

- **Cause:** Internal system error.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-046 STOP Internal error in MMGR:LSTP

- **Cause:** Internal system error.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-047 STOP Internal error in MMGR:PRST

- **Cause:** Internal system error.

- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-048 STOP unknown error (MO48)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-049 STOP Attempt to move w/o calibrated

- **Cause:** Robot not calibrated.
  - **Remedy:** Calibrate the robot.

MOTN-050 STOP Invalid spdlim (G:%d^2 A:%x^3 H)

- **Cause:** Invalid joint speed limit.
  - **Remedy:** Set $SPEEDLIMJNT correctly.

MOTN-051 STOP Speed out of range (G:%d^2)

- **Cause:** Speed out of range.
  - **Remedy:** Set speed correctly.

MOTN-052 STOP Jntvellim out of range (G:%d^2)

- **Cause:** Joint vel limit out of range.
  - **Remedy:** Set $JNTVELLIM correctly.

MOTN-053 STOP Internal planner error (G:%d^2)

- **Cause:** Internal Planner error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-054 STOP Uninitialized dest pos (G:%d^2)

- **Cause:** Uninitialized destination position.
  - **Remedy:** Teach destination position.

MOTN-055 STOP Uninitialized via pos (G:%d^2)

- **Cause:** Uninitialized via position.
  - **Remedy:** Teach via position.

MOTN-056 WARN Speed limits used (G:%d^2)

- **Cause:** Speed limits used.
  - **Remedy:** This is just a notification that the command translational speed is not attained (before acceleration) due to rotational speed limits being applied. This message is also displayed if time-based motion is issued and the command time value cannot be attained due to rotational or translational speed limits being applied. If the slowdown is unacceptable, modify the program so that the orientation change is smaller (for non-time-based motion), or increase the segment time, or decrease the taught distance between points (for time-based motion).

MOTN-057 STOP Invalid mir (G:%d^2)

- **Cause:** Invalid packet received by planner.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-058 STOP Invalid cancel request (G:%d^2)

- **Cause:** Invalid cancel request received by planner.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-059 STOP Null segment received (G:%d^2)

- **Cause:** Planner received null seg when not expecting one.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-060 STOP Uninitialized base vec (G:%d^2)

- **Cause:** Uninitialized base vector in relative moves.
  - **Remedy:** Initialize base vector.

MOTN-061 STOP Uninitialized distance (G:%d^2)

- **Cause:** Uninitialized distance in relative moves.
  - **Remedy:** Initialize distance.

MOTN-062 STOP Invalid position type (G:%d^2)

- **Cause:** Invalid position type received by planner.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-063 STOP Position config change (G:%d^2)

- **Cause:** Configuration mismatch.
  - **Remedy:** Reteach the destination position so that its configuration string matches the start position's configuration string.

MOTN-064 STOP Rs orientation error (G:%d^2)

- **Cause:** RS orientation planning error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-065 STOP AES orientation error (G:%d^2)

- **Cause:** AES orientation planning error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-066 STOP Degenerate circle (G:%d^2)

- **Cause:** Degenerate circle.

- **Remedy:** Reteach via and/or destination positions.

MOTN-067 STOP Ata2 error in circle (G:%d^2)

- **Cause:** Internal system error during circular planning.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-068 STOP Invalid Prgoverride (G:%d^2)

- **Cause:** Prgoverride is not within 0 to 100.
  - **Remedy:** Set $prgoverride within 0 to 100.

MOTN-069 STOP Error in mocmnd (G:%d^2)

- **Cause:** Internal error: planner received invalid mocmnd.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-070 STOP Error in motype (G:%d^2)

- **Cause:** Internal error: planner received invalid motype.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-071 STOP Error in termtype (G:%d^2)

- **Cause:** Internal error: planner received invalid termtype.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-072 STOP Error in segtermtype (G:%d^2)

- **Cause:** Internal error: planner received invalid segtermtype.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-073 STOP Error in orientype (G:%d^2)

- **Cause:** Internal error: planner received invalid orientype.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-074 STOP Error in speed (G:%d^2)

- **Cause:** Speed is not within 0 to $speedlim.
  - **Remedy:** Set speed within 0 to $speedlim.

MOTN-075 STOP Error in rotspeed (G:%d^2)

- **Cause:** Rotspeed is not within 0 to $rotspeedlim.
  - **Remedy:** Set Rotspeed within 0 to $rotspeedlim.

MOTN-076 STOP Error in contaxisvel (G:%d^2)

- **Cause:** Contaxisvel is not within 0 to 100.
  - **Remedy:** Set contaxisvel to within 0 to 100.

MOTN-077 STOP Error in seg_time (G:%d^2)

- **Cause:** Seg_time is negative.
  - **Remedy:** Set seg_time positive.

MOTN-078 STOP Error in accel_ovrd (G:%d^2)

- **Cause:** Accel_ovrd greater than 500.
  - **Remedy:** Set accel_ovrd within 0 to 500.

MOTN-079 STOP Error in accu_num (G:%d^2)

- **Cause:** Internal error: planner received invalid accu_num.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is

not cleared, document the events that led to the error and call your FANUC
Robotics technical representative.

MOTN-080 STOP Via position required (G:%d^2)

- **Cause:** Missing via position for circular motion.
- **Remedy:** Teach via position.

MOTN-081 STOP Extended position error (G:%d^2)

- **Cause:** Internal error: planner received invalid extended position representation.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-082 STOP Null mir pointer (G:%d^2)

- **Cause:** NULL MIR pointer.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-083 STOP Illegal SEG recvd (G:%d^2)

- **Cause:** Internal error: planner received segment belonging to another group.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-084 STOP Illegal CONSEG recvd (G:%d^2)

- **Cause:** Not used.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-085 STOP Error in gp_concurrent(G:%d^2)

- **Cause:** Internal error: planner received invalid mmr.gp_concurrent.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-086 STOP Not all CON_SEGs recvd(G:%d^2)

- **Cause:** Group motion: not all segments are received.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-087 STOP Utool change not allowed(G:%d^2)

- **Cause:** $utool is changed before move.
  - **Remedy:** Do not change $utool for this move.

MOTN-088 STOP Not cartesian move (G:%d^2)

- **Cause:** Motype is not cartesian.
  - **Remedy:** Must set motype to cartesian.

MOTN-089 STOP Segment not planned (G:%d^2)

- **Cause:** Internal plan error:seg in list not all planned.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-090 STOP MIR mismatch (G:%d^2)

- **Cause:** Internal plan error:mir mismatch.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your

FANUC
Robotics technical representative.

MOTN-091 STOP Va orientation error (G:%d^2)

- **Cause:** Internal plan error:atan2 error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-092 STOP Extended not supported (G:%d^2)

- **Cause:** Extended axes not supported.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-093 STOP Internal PLAN blend err(G:%d^2)

- **Cause:** Internal plan error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-094 STOP Blend corner too big (G:%d^2)

- **Cause:** Not used.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-095 WARN Can't blend corner line:%d^5

- **Cause:** Warning, there is not enough distance to perform corner blending.
  - **Remedy:** If corner blending is still required for the line shown reteach pos further apart

MOTN-096 STOP Cart rate not equal(G:%d^2)

- **Cause:** Intellitrak On: $linear_rate and $circ_rate must be equal.
  - **Remedy:** Set $linear_rate equal to $circ_rate. cycle power

MOTN-097 WARN INTR overrun %d^3 (G:%d^2)

- **Cause:** Interpolator overrun.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-098 STOP Circle angle too large

- **Cause:** Taught points define an arc larger than half circle.
  - **Remedy:** If arc bigger than half circle is intended, use two or more Circular instructions to teach the circle. If the intended arc is smaller than half circle then circle's via point is not between Circle's start and destination points. Check the taught points and make the necessary changes.

MOTN-099 STOP INTR Fail to get MIRPKT (G:%d^2)

- **Cause:** Internal interpolator error:failed to receive mir when expecting one.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-100 STOP INTR Fail to get FDO (G:%d^2)

- **Cause:** Internal interpolator error:failed to receive fdo when expecting one.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-101 STOP MIR list is empty (G:%d^2)

- **Cause:** Internal interpolator error: mir list is empty when it shouldn't be.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.

3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
not cleared, document the events that led to the error and call your FANUC
Robotics technical representative.

MOTN-102 STOP SEG list is empty (G:%d^2)

- **Cause:** Internal interpolator error: seg list is empty when it shouldn't be.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-103 STOP Send ENB pkt fail (G:%d^2)

- **Cause:** Internal interpolator error: error in sending ENB packet.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-104 STOP Send DSB pkt fail (G:%d^2)

- **Cause:** Internal interpolator error: error in sending DSB packet.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-105 STOP Send TRG pkt fail (G:%d^2)

- **Cause:** Internal interpolator error: error in sending TRG packet.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-106 STOP Process motion done (G:%d^2)

- **Cause:** Internal interpolator error: process motion had completed without being restarted.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-107 STOP Bad filter type (G:%d^2)

- **Cause:** Internal interpolator error: invalid filter type received.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-108 STOP INTR seglist error (G:%d^2)

- **Cause:** Internal interpolator error: error in seg list management.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-109 STOP Internal INTR error (G:%d^2)

- **Cause:** Internal interpolator error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-110 STOP Use FINE in last L (G:%d^2)

- **Cause:** Cannot replan joint motion in interpolator for this move.
  - **Remedy:** Use FINE in last L statement.

MOTN-111 WARN Can't switch filter(G:%d^2)

- **Cause:** Warning message to indicate that switch filter cannot take place.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

MOTN-112 SABRT Increment move turn Mismatch

- **Cause:** Incremental motion causes turn number mismatch.
  - **Remedy:** Change position to absolute position.

MOTN-113 WARN Robot not calibrated

- **Cause:** Robot not calibrated.
  - **Remedy:** Calibrate the robot.

MOTN-114 WARN Servo is on (G:%d^2)

- **Cause:** Servo in still on.
  - **Remedy:** Turn off servo.

MOTN-115 WARN Invalid brake mask (G:%d^2)

- **Cause:** Invalid brake mask.
  - **Remedy:** Check brake mask.

MOTN-116 WARN Invalid solution (G:%d^2)

- **Cause:** Invalid kinematics solution.
  - **Remedy:** Reteach position.

MOTN-117 WARN Robot not mastered (G:%d^2)

- **Cause:** Robot not mastered.
  - **Remedy:** Master the robot. Refer to the *Setup and Operations Manual* specific to your application.

MOTN-118 WARN Robot in over travel (G:%d^2)

- **Cause:** Robot in overtravel.
  - **Remedy:** Reset over travel jog the robot outside over travel position.

MOTN-119 WARN Servo is off (G:%d^2)

- **Cause:** Robot servo is on.
  - **Remedy:** Turn off servo.

MOTN-120 WARN Invalid reference position (G:%d^2)

- **Cause:** Invalid reference position.
  - **Remedy:** Check reference position.

MOTN-121 WARN Invalid config. string (G:%d^2)

- **Cause:** Invalid config string.
  - **Remedy:** Reteach your config string.

MOTN-122 STOP Dfilter not empty (G:%d^2)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-123 STOP Not enough node (G:%d^2)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-124 STOP INTR:Bad Mirpkt req_code(G:%d^2)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-125 STOP INTR got illegal pkt (G:%d^2)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-126 STOP Can't init CH KPT (G:%d^2)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-127 STOP Can't detach CH PKT (G:%d^2)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-128 STOP Group mtn not supported(G:%d^2)

- **Cause:** Group motion not supported.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-129 STOP Local cond ptr conflict(G:%d^2)

- **Cause:** Conflict in local condition list pointers.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-130 STOP Non-empty local cond list(G:%d^2)

- **Cause:** Local condition list attached to SEG is not NULL.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-131 STOP In singularity

- **Cause:** Position near by singularity.
  - **Remedy:** Reteach position that is near a singularity point.

MOTN-132 STOP Group circ not supported(G:%d^2)

- **Cause:** Group motion: circular motype for all groups not supported.

- **Remedy:** Reteach motype.

MOTN-133 WARN Time after limit used(G:%d^2)

- **Cause:** Local condition time after value is too big. System will use time after limit. This is just a warning.
  - **Remedy:** No corrective action required.

MOTN-134 STOP Can not move path backward (G:%d^2)

- **Cause:** Backward path/subpath motion is not supported.
  - **Remedy:** Remove backward command.

MOTN-135 STOP Last motype can't be circular (G:%d^2)

- **Cause:** Backward last node motype can not be circular.
  - **Remedy:** Change last node motype.

MOTN-136 STOP Circular Points too close (L:%d^5)

- **Cause:** Two of the circular taught points are too close to each other.
  - **Remedy:** Re-teach the points. Ideally, circular points should be evenly spaced. Otherwise, a small change in one point can drastically change the programmed circle.

MOTN-137 STOP No circular softpart (G:%d^2)

- **Cause:** The circular motion softpart is not loaded in the system.
  - **Remedy:** Load the circular softpart.

MOTN-138 STOP No joint short motion SP (G:%d^2)

- **Cause:** Joint short motion softpart is not loaded in the system.
  - **Remedy:** Load joint short motion softpart.

MOTN-139 STOP No cart short motion SP (G:%d^2)

- **Cause:** Cartesian short motion softpart is not loaded in the system.
  - **Remedy:** Load cartesian short motion softpart.

MOTN-140 STOP No KAREL motion softpart (G:%d^2)

- **Cause:** The KAREL motion softpart is not loaded in the system.
  - **Remedy:** Load the KAREL motion softpart.

MOTN-141 STOP No KAREL motion func. ptr (G:%d^2)

- **Cause:** The KAREL motion function pointer is not initialized or does not exist.
  - **Remedy:** Check that the KAREL Motion softpart has been loaded, and restart the controller.

MOTN-142 STOP No Group Motion SP (G:%d^2)

- **Cause:** The Group Motion softpart is loaded and multi-group motion is specified.
    - **Remedy:** Check that the Group Motion softpart has been loaded, and restart the controller.

MOTN-143 STOP No Motion Resume SP (G:%d^2)

- **Cause:** The Motion Resume softpart is loaded and path resume motion is specified.
    - **Remedy:** Check that the Motion Resume softpart has been loaded, and restart the controller.

MOTN-144 STOP No joint Turbo Move SP (G:%d^2)

- **Cause:** Joint Turbo Move softpart is not loaded in the system.
    - **Remedy:** Load joint Turbo Move softpart.

MOTN-145 STOP No cart Turbo Move SP (G:%d^2)

- **Cause:** Cartesian Turbo Move softpart is not loaded in the system.
    - **Remedy:** Load cartesian Turbo Move softpart.

MOTN-146 STOP INTR can't replan major axis(G:%d^2)

- **Cause:** Mismatch in major axis turn number.
    - **Remedy:** Reteach position.

MOTN-147 WARN L->J replan joint slowdown (G:%d^2)

- **Cause:** Linear motions ignore turn numbers. Therefore, when a joint motion follows several linear motions, the turn number might be mismatched, causing the robot to slow down.
    - **Remedy:** Change the current motion's motype to linear or change the previous motion's motype to joint. If the problem persists, re-teach the path.

MOTN-148 WARN Can't move concurrently (G:%d^2)

- **Cause:** Two motion groups cannot synchronize with each other due to replanning of one group. This will cause slow down on both groups.
    - **Remedy:** If slow down is not acceptable, re-teach the path.

MOTN-149 STOP CF:rotspeedlim exceeded line:%d^5

- **Cause:** CF:rotspeedlim exceeded.
    - **Remedy:** Set $CF_PARAMGP[].$cf_framenum=1 or 2 and cycle power or reduce speed or use FINE in prev line.

MOTN-300 STOP CD not support:Use CNT L:%d^5

- **Cause:** Term type CD is not supported.
    - **Remedy:** Change termtype FINE or CNT.

MOTN-301 STOP Can't resume motion (G:%d^2)

- **Cause:** Can't resume motion.
  - **Remedy:** Abort and run program.

MOTN-302 WARN Corner speed slowdown L:%d^5

- **Cause:** Corner speed slows down automatically because of robot constraint.
  - **Remedy:** If slow down is not acceptable, re-teach the path to provide a larger corner radius or increase the corner distance in the CD field.

MOTN-303 WARN Can't maintain CDist L:%d^5

- **Cause:** Can't maintain corner distance because the node spacing is short or speed is high.
  - **Remedy:** Lengthen node spacing or reduce speed.

MOTN-304 WARN CS:Prog speed achieved L:%d^5

- **Cause:** SPD value does not affect corner speed anymore.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

MOTN-305 WARN Can't maintain speed L:%d^5

- **Cause:** Can't maintain program speed on the path because of robot constraint.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

MOTN-306 STOP Can't replan (G:%d^2, A:%x^3 Hex)

- **Cause:** Resume motion cannot reach stop position Can't resume original path.
  - **Remedy:** Abort program and rerun.

MOTN-307 STOP Mismatch MMR (G:%d^2)

- **Cause:** Internal system error. Can't resume original path.
  - **Remedy:** Abort program and rerun.

MOTN-308 WARN FINE termtype used L:%d^5

- **Cause:** Cannot generate a corner between two motions because of motion instruction. And CNT or CD is ignored.
  - **Remedy:** Use LOCK PREG instruction when PR[] is used for position or OFFSET instruction is used.

MOTN-309 WARN Circular speed reduced L:%d^5

- **Cause:** Circular speed is reduced because of a robot constraint.
  - **Remedy:** Reduce the program speed not to display.

MOTN-310 STOP Pos. Cfg. change 2 (G:%d^2)

- **Cause:** Configuration mismatch

- **Remedy:** Reteach the destination position so that its configuration string matches the start position's configuration string.

MOTN-311 STOP Can't resume motion CJ (G:%d^2)

- **Cause:** Can't resume motion on the original path.
  - **Remedy:** Abort and run program. Then, the resumed motion may not be on the original path.

MOTN-312 STOP Can't resume in single step CJ

- **Cause:** Can't resume motion in single step mode.
  - **Remedy:** Abort program and rerun.

MOTN-313 STOP Can't resume motion CJ(2)

- **Cause:** Can't resume motion on the original path.
  - **Remedy:** Abort and run program. Then, the resumed motion may not be on the original path.

MOTN-314 STOP unknown error (MO314)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-315 STOP Command speed is changed CJ

- **Cause:** Can't resume motion on the original path due to command speed change.
  - **Remedy:** Modify back the command speed, or abort program.

MOTN-316 STOP unknown error (MO316)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

MOTN-317 STOP unknown error (MO317)

- **Cause:** Internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.

2. On the teach pendant, press and hold the SHIFT and RESET keys.
3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
not cleared, document the events that led to the error and call your FANUC
Robotics technical representative.

MOTN-318 STOP unknown error (MO318)

- **Cause:** Internal system error.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

MOTN-319 STOP CRC large orient change (G:%d^2)

- **Cause:** Small circle but large orientation change.
- **Remedy:** Reteach circular points.

Back to top

OPTN Error Codes

OPTN-000 WARN Unknown error (OPTN)

- **Cause:** System internal error.
- **Remedy:** Perform a cold start:
  1. Turn off the robot.
  2. On the teach pendant, press and hold the SHIFT and RESET keys.
  3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
  not cleared, document the events that led to the error and call your FANUC
  Robotics technical representative.

OPTN-001 WARN Too many options installed

- **Cause:** The maximum number of software options/updates (50) is installed.
- **Remedy:** None required. Options/updates will load but not be logged.

OPTN-002 WARN Installed: `%s'

- **Cause:** Installation of software option/update has finished successfully.
- **Remedy:** This is just a notification. You do not have to do anything for this warning message.

OPTN-003 WARN Skipped: `%s'

- **Cause:** S/W option was skipped by installer.
  - **Remedy:** Some options cannot be overlayed, you may need to delete some options first.

OPTN-004 WARN `%s' is incompatible

- **Cause:** Software option or update is incompatible with an already installed option or update.
  - **Remedy:** Install only one of the two mutually exclusive software options.

OPTN-005 WARN `%s' overlayed/reinstalled

- **Cause:** Software option or update was previously installed and can be overlayed as an additional instance of that software option or update. The software was successfully overlayed.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

OPTN-006 WARN Not Installed: `%s'

- **Cause:** The specified software option was not installed properly.
  - **Remedy:** Reinstall the option.

OPTN-007 WARN Unauthorized: `%s'

- **Cause:** Software option has not been authorized for this configuration.
  - **Remedy:** Call your FANUC Robotics technical representative.

OPTN-008 WARN Requires: `%s'

- **Cause:** The required floppy disk was not used.
  - **Remedy:** Reinstall the option using the required floppy disk.

OPTN-009 WARN Authorized: `%s'

- **Cause:** Software option is now authorized for this configuration.
  - **Remedy:** This is a notification. No action is needed.

OPTN-010 WARN Start (COLD) Disallowed

- **Cause:** Setup Application has not been done
  - **Remedy:** Setup Application prior to START (COLD)

OPTN-011 WARN Start (CTRL2) Disallowed

- **Cause:** Setup Application has not been done
  - **Remedy:** Setup Application prior to START (CTRL2)

OPTN-012 WARN ID/File is Missing/Corrupt

- **Cause:** Your software was installed improperly or the F-ROM in your controller is damaged.
  - **Remedy:** Reinstall the software from the beginning.

OPTN-013 WARN Invalid PAC

- **Cause:** You have typed an invalid PAC code.
  - **Remedy:** Retry typing the PAC code again. If you are still unsuccessful, contact the FANUC Robotics Spare Parts Department.

OPTN-015 WARN Excludes: '%s'

- **Cause:** This option is not compatible with an option that is already installed.
  - **Remedy:** You cannot have both options.

OPTN-016 WARN Key file is missing/corrupt

- **Cause:** The KEY file, keyfile.dat, is missing or corrupted.
  - **Remedy:** Do a full load from the original distribution media.

OPTN-017 WARN No updates on this media

- **Cause:** The distribution media does not contain update.tx, so there are no customizations to install.
  - **Remedy:** None required.

OPTN-018 WARN No CUSTOMIZATIONS on this media

- **Cause:** The distribution media does not contain custom.tx, so there are no customizations to install.
  - **Remedy:** None required.

OPTN-019 WARN Versions mismatched

- **Cause:** The distribution media contains updates or customizations, but has a different release version than this core.
  - **Remedy:** Get an update or customization that has the same release version as your core.

Back to top

PALT Error Codes

PALT-000 WARN Layer 1 cannot be flipped

- **Cause:** Layer 1 cannot be flipped
  - **Remedy:** Layer 1 will be automatically forced to NoFlip. No action is necessary

PALT-001 WARN Length must be longer than width

- **Cause:** Length dimension must always be greater than width.
  - **Remedy:** If the specified length was less than the width, then the length is forced to the width dimension. If the specified width was greater than the length, then the width is forced to the length dimension. Enter the correct length or width.

PALT-002 WARN Maximum layers = 40

- **Cause:** A layer number greater than the maximum allowed layers was specified.
    - **Remedy:** Specify a layer number less than the allowed maximum.

PALT-003 WARN Cannot Flip Lt or Wd for Unique

- **Cause:** Length or width flip was specified for a unique matrix which is not allowed.
    - **Remedy:** Specify No flip or diagonal (length and width) flip for the unique matrix.

PALT-004 WARN P1 has not been taught

- **Cause:** Point P1 on the teaching aid was not taught.
    - **Remedy:** Teach P1 on the teaching aid.

PALT-005 WARN P2 has not been taught

- **Cause:** Point P2 on the teaching aid was not taught.
    - **Remedy:** Teach P2 on the teaching aid.

PALT-006 WARN P3 has not been taught

- **Cause:** Point P3 on the teaching aid was not taught.
    - **Remedy:** Teach P3 on the teaching aid.

PALT-007 WARN Unit load must be created first

- **Cause:** The specified unit load does not exist.
    - **Remedy:** Go to Unit load setup and create this file, or transfer this file from the PC to Robot Menu.

PALT-008 WARN Number of RDIs is zero

- **Cause:** There are no RDIs to set since the number of RDIs was specified as zero.
    - **Remedy:** A valid number between 1 and 8 should be specified to enter the DETAIL menu.

PALT-009 WARN Number of RDOs is zero

- **Cause:** There are no RDOs to set since the number of RDOs was specified as zero.
    - **Remedy:** A valid number between 1 and 8 should be specified to enter the DETAIL menu.

PALT-010 PAUSE %s Position is not reachable

- **Cause:** The position the robot is trying to go to is not reachable. If the preceding error is: "Error: Pallet=x Unit=y," it means that the robot was working with pallet x and box y when the error occurred.

- **Remedy:** Verify that the value of $UTOOL and/or $MNUTOOL are correct. If the robot stopped while heading towards the pallet, then check the value of Pallet approach length and width in Optimal path setup. You might have specified large pallet offsets or you might need to specify a correct pallet offset in the Optimal path setup.

PALT-011 WARN Position has not been taught

- **Cause:** Position is yet to be taught.
  - **Remedy:** Teach the position.

PALT-012 PAUSE MOVE-TO could not execute %s

- **Cause:** Motion control was not obtained for robot motion.
  - **Remedy:** Check if another task is running or if the teach pendant is enabled. The teach pendant should be disabled.

PALT-013 PAUSE GET_VAR failed %s

- **Cause:** Data in a setup menu could not be set.
  - **Remedy:** Cold start the controller and retry.

PALT-014 PAUSE SET_VAR failed %s

- **Cause:** Data in a setup menu could not be set.
  - **Remedy:** Cold start the controller and retry.

PALT-015 WARN Could not create station file

- **Cause:** An error occurred while creating an infeed or pallet station file.
  - **Remedy:** Cold start the controller and retry.

PALT-016 WARN Processing UL data done

- **Cause:** Finished calculating the optimal path data.
  - **Remedy:** This is a status message only.

PALT-017 WARN File does not exist. Use CREATE

- **Cause:** Cannot modify a file which is yet to be created
  - **Remedy:** Use CREATE to create a file first

PALT-018 PAUSE Could not load .VR file

- **Cause:** The .VR file does not exist or an error occurred in communication.
  - **Remedy:** Check the communication line and make sure that the file exists on the floppy disk.

PALT-019 PAUSE Could not create unit load file

- **Cause:** An error occurred while creating unit load file.
  - **Remedy:** Cold start the controller and retry.

PALT-020 ABORT Could not open .DT file for read

- **Cause:** An error occurred while opening a .DT file.
  - **Remedy:** Cold start the controller and retry.

PALT-021 WARN IO_STATUS error occurred

- **Cause:** An I/O error occurred during data transfer.
  - **Remedy:** Cold start the controller and retry.

PALT-022 WARN Could not save .VR file %s

- **Cause:** An error occurred while saving a .VR file.
  - **Remedy:** Cold start the controller and retry.

PALT-023 WARN Could not delete existing file

- **Cause:** An error occurred while deleting a .VR file.
  - **Remedy:** Cold start the controller and retry.

PALT-024 WARN Could not load file %s

- **Cause:** 1. An error occurred while loading a .VR file. 2. A gripper setup file from previous versions of PalletTool cannot be read. The number of grippers was increased and the structure of the data has change. You will get the error VARS-014 Create type - xxxx failed.
  - **Remedy:** Cold start the controller and retry if you know you should be able to read the .vr file into PalletTool. Otherwise, create a new gripper setup file.

PALT-025 WARN Processing UL data..

- **Cause:** The CALC key was pressed. Unitload calculations are in process.
  - **Remedy:** This is only a status message.

PALT-026 WARN Station num %s outside range

- **Cause:** The specified station number was out of range.
  - **Remedy:** Specify a station number in the range 1-12.

PALT-027 WARN Could not access files %s

- **Cause:** An error occurred while accessing the floppy disk.
  - **Remedy:** Make sure the communication is correct & retry.

PALT-028 WARN Could not access files

- **Cause:** An error occurred while accessing the floppy disk.
  - **Remedy:** Make sure the communication is correct & retry.

PALT-029 WARN File transfer not done

- **Cause:** File transfer was not successful. Some data might not have been transferred.
  - **Remedy:** Cold start the controller and retry.

PALT-030 WARN .DT file list is empty

- **Cause:** No .DT files exist on floppy to transfer.
  - **Remedy:** .DT files must exist on floppy to transfer.

PALT-031 PAUSE Pallet Stn %s not found

- **Cause:** The specified station number is not loaded.
  - **Remedy:** Load the station file or create one.

PALT-032 PAUSE Pallet stn %s not taught

- **Cause:** The pallet station specified in Pallet System setup is not taught.
  - **Remedy:** Teach pallet station specified in Pallet System setup.

PALT-033 PAUSE Unit load file %s not found

- **Cause:** The unit load file is not loaded.
  - **Remedy:** Load the Unit load file or transfer the .DT file or create a new one and retry.

PALT-034 PAUSE Insufficient data in %s

- **Cause:** Not all the required items are set in the unit load setup.
  - **Remedy:** Go to Unit load setup and optimal path setup and make sure that all the data are set & retry.

PALT-035 PAUSE Invalid layer number %s

- **Cause:** The layer count is invalid.
  - **Remedy:** N/A

PALT-036 WARN UL will not fit on pallet %s

- **Cause:** The unit load is larger than the pallet.
  - **Remedy:** ABORT the program. Specify the correct maximum overhang in Optimal path setup, or re-specify unit load such that Unit load will fit on the pallet.

PALT-037 PAUSE Invalid in-feed station %s

- **Cause:** The specified station number is out of range.
  - **Remedy:** Specify a station number in the range 1-12.

PALT-038 PAUSE Infeed stn %s not taught

- **Cause:** The infeed station specified in Pallet System setup is not taught.
  - **Remedy:** Teach infeed station specified in Pallet System setup.

PALT-039 PAUSE Gripper not single/double type

- **Cause:** The specified gripper is unknown to PalletTool.
  - **Remedy:** Check the value of gripper-id in Optimal path setup. It should be in the range of 1-8.

PALT-040 PAUSE Unknown flip type %s

- **Cause:** The specified flip type is unknown to PalletTool.
  - **Remedy:** Check the value of flip type in Unit load setup It should be a known flip type.

PALT-041 PAUSE Infeed stn %s not found

- **Cause:** The specified infeed station is not taught or loaded
  - **Remedy:** Teach or load the infeed station.

PALT-042 PAUSE Invalid in-feed orientation %s

- **Cause:** An orientation besides LT_ON_LT or WD_ON_LT was encountered by PalletTool.
  - **Remedy:** N/A

PALT-043 PAUSE Unit position out of range

- **Cause:** The calculated infeed pickup position is not reachable.
  - **Remedy:** The conveyor where the station was taught might need to be moved so that the calculated position is within the work envelope.

PALT-044 WARN Unknown unit orientation

- **Cause:** An orientation besides LT_ON_LT or WD_ON_LT was encountered by PalletTool.
  - **Remedy:** N/A

PALT-045 WARN Cannot change PC file data

- **Cause:** Unit load data file was created using PalletTool PC.
  - **Remedy:** Data created using PalletTool PC cannot be changed in PalletTool. You must go back to the PC to make the changes and then retransfer the file.

PALT-046 WARN Could not run task %s

- **Cause:** While PalletTool was internally trying to run another program in multi-tasking mode, an error occurred.
  - **Remedy:** ABORT ALL and retry.

PALT-047 PAUSE Invalid data for partial pal %s

- **Cause:** Correct starting count was not provided while starting in partial pallet mode.
  - **Remedy:** Abort program and restart. Provide correct count of units on the pallet if starting in partial pallet mode.

PALT-048 PAUSE Error opening %s

- **Cause:** An error occurred while PalletTool was trying to open a .TP program.
  - **Remedy:** Make sure that the .TP program is loaded & retry.

PALT-049 PAUSE Set_pos_tpe %s

- **Cause:** An error occurred while PalletTool was trying to set a position in a .TP program.
  - **Remedy:** Cold start the controller and retry.

PALT-050 PAUSE Error closing %s

- **Cause:** An error occurred while PalletTool was trying to open a .TP program.
  - **Remedy:** Cold start the controller and retry.

PALT-051 PAUSE Slip sheet not supported

- **Cause:** Slip sheet support is not provided.
  - **Remedy:** Disable slip sheet in the Pallet System menu.

PALT-052 WARN Pattern not supported

- **Cause:** Some patterns from older versions of PalletTool are no longer supported.
  - **Remedy:** Create a new unit load; select a different pattern.

PALT-053 WARN Gripper is not DOUBLE type

- **Cause:** Depalletizing was chosen with a gripper other than single.
  - **Remedy:** Choose single gripper for depalletizing.

PALT-054 PAUSE Invalid parts requested %s

- **Cause:** A request for picking up 0 part was received
  - **Remedy:** Abort all and retry.

PALT-055 PAUSE Error in CNV_STR_CONF

- **Cause:** Internal error occurred.
  - **Remedy:** Abort all and retry.

PALT-056 PAUSE Multi-tasking failed %s

- **Cause:** An error occurred in multi-tasking calculations.
  - **Remedy:** Abort all and retry.

PALT-057 PAUSE Gripper type not supported: %s

- **Cause:** The specified gripper is unknown to PalletTool.
  - **Remedy:** Check the value of gripper-id in Optimal path setup. The valid range is 1-9. Ten (10) is also allowed if the multi-case option is loaded.

Eleven (11) and twelve (12) are also allowed if the fork option is loaded.

PALT-058 WARN Cannot select PC pattern

- **Cause:** A PalletTool PC pattern cannot be selected while you create or modify a unit load.
  - **Remedy:** Choose Single, Doubleside, DoubleTop or Unique Other patterns can only be transferred from PalletTool PC.

PALT-059 WARN Error using CLEAR built-in

- **Cause:** An error occurred while clearing a variable file. If a .vr file was loaded into memory at controlled start, it can only be cleared at controlled start.
  - **Remedy:** See error PALT-133 for details.

PALT-060 WARN P1 and P2 are same

- **Cause:** The same position was recorded for P1 and P2 on the teaching aid.
  - **Remedy:** Teach different positions for P1 and P2.

PALT-061 WARN P1 and P3 are same

- **Cause:** The same position was recorded for P1 and P3 on the teaching aid.
  - **Remedy:** Teach different positions for P1 and P3.

PALT-062 WARN P3 and P2 are same

- **Cause:** P2 and P3 are taught at the same location.
  - **Remedy:** Teach different positions for P2 and P3.

PALT-063 WARN Id is uninit in UL %s

- **Cause:** Product-id is not set in the UL file.
  - **Remedy:** Set product_id in the UL file from Unit load setup.

PALT-064 WARN MOVE TO done

- **Cause:** The motion to P1, P2 or P3 on the teaching aid was successful.
  - **Remedy:** This is only a warning/notification message.

PALT-065 PAUSE Invalid reg value %s

- **Cause:** An invalid register value was encountered.
  - **Remedy:** From the DATA menu, verify that the register contains the correct value.

PALT-066 PAUSE Reg %s could not be set

- **Cause:** Register operation failed.
  - **Remedy:** Check if the register is defined, if it is between 1-64 and if it has the right value. You must ABORT ALL and retry the operation.

PALT-067 PAUSE Reg value not set %s

- **Cause:** Could not set an internally calculated value V to the register R.
  - **Remedy:** From the DATA menu, verify that the register is defined, is in the range 1-64, and has the correct value. You must ABORT ALL and retry the operation.

PALT-068 PAUSE Infeed/Pallet for UL %s unknown

- **Cause:** The infeed on which the unit load enters the workcell was not assigned in the Pallet System menu.
  - **Remedy:** Make the infeed-unit load assignment in the Pallet System setup menu. You must ABORT ALL and retry the operation.

PALT-069 PAUSE Invalid UL %s found

- **Cause:** A valid unit load number was not found at the layer indicated for the mixed unit load
  - **Remedy:** From the Mixed UnitLd menu, indicate valid unit load numbers for each unit layer. You must ABORT ALL and retry the operation.

PALT-070 PAUSE Palt num not set in Reg %s

- **Cause:** The value of the next pallet the robot was supposed to go to was not set in the indicated register by the NEXTPALT.TP program.
  - **Remedy:** Check the logic in NEXTPALT.TP and make sure that the next pallet register always gets set for all values of current pallet. You must ABORT ALL and retry the operation.

PALT-071 WARN Not all pallets assigned UL

- **Cause:** Not all the pallets have been assigned a unit load in the Pallet System menu.
  - **Remedy:** This is only a warning message. Make sure in the Pallet System menu, that all the pallets have a corresponding unit load assigned.

PALT-072 WARN Not all infeeds assigned UL

- **Cause:** Not all the infeeds have been assigned a unit load in Pallet System menu.
  - **Remedy:** This is only a warning message. Make sure in the Pallet System menu, that all the infeeds have a corresponding unit load assigned.

PALT-073 WARN Station teaching completed

- **Cause:** All the teaching aid points have been taught and the teaching of the station is complete.
  - **Remedy:** This is only a notification message.

PALT-074 PAUSE Perch position not taught

- **Cause:** The perch position is uninitialized (Not taught)

- **Remedy:** Select PM_MAIN from the SELECT screen, go to DATA menu, and record variable perch after jogging robot to the perch position. You must ABORT ALL and retry the operation.

PALT-075 PAUSE Number of Pallets not set

- **Cause:** The number of pallets in the workcell has not been specified in Pallet System setup
  - **Remedy:** Go to Pallet System setup and enter the number of pallets in the workcell. ABORT and retry.

PALT-076 PAUSE Number of infeeds not set

- **Cause:** The number of infeeds in the workcell has not been specified in Pallet System setup
  - **Remedy:** Go to Pallet System setup and enter the number of infeeds in the workcell. ABORT and retry.

PALT-078 PAUSE Slip sh ENBL/DISBL not set

- **Cause:** Whether slip sheets should be enabled or disabled has not been specified in the Pallet System setup. ABORT and retry.
  - **Remedy:** Go to Pallet System setup and enter whether slip sheets should be enabled or disabled ABORT and retry.

PALT-079 PAUSE Pallet switch not set

- **Cause:** The type of pallet switch - per layer or per pick has not been specified in Pallet System setup.
  - **Remedy:** Go to Pallet System setup and enter the the type of pallet switch. ABORT and retry.

PALT-080 PAUSE Part-id method not set

- **Cause:** The part-id method - PLC or MANUAL has not been specified in Pallet System menu
  - **Remedy:** Go to Pallet System setup and enter the the part-id method. ABORT and retry.

PALT-081 WARN Moving to perch position..

- **Cause:** This is a notification that the robot will move to perch position.
  - **Remedy:** This is only a warning message.

PALT-082 WARN Indexing pallet %s

- **Cause:** This is a notification that the pallet is being indexed.
  - **Remedy:** This is only a warning message.

PALT-083 WARN Placing slip sheet %s

- **Cause:** This is a notification to user that slip sheet is being placed.
  - **Remedy:** This is only a warning message.

PALT-084 WARN Computing for UL: %s

- **Cause:** This is a notification to user that data computation in multi-tasking is taking place for the Unit load (UL)
  and for layer (L).
  - **Remedy:** This is only a warning message.

PALT-085 PAUSE Operator Panel E-stop ON

- **Cause:** The rogram cannot run with the operator panel E-STOP on.
  - **Remedy:** Release the Operator panel E-stop, press reset and press cycle start to continue.

PALT-086 PAUSE Teach pendant E-stop ON

- **Cause:** The rogram cannot run with teach pendant E-STOP on.
  - **Remedy:** Release the teach pendant E-stop, press reset and press cycle start to continue.

PALT-087 PAUSE Teach pendant is enabled

- **Cause:** The program cannot run with teach pendant enabled.
  - **Remedy:** Disable the teach pendant, press reset, and press cycle start to continue.

PALT-088 WARN Pal Stop must be disabled

- **Cause:** The pallet stop is already on. You can only have either cycle stop or pallet stop on; not both.
  - **Remedy:** Disable pallet stop, then enable cycle stop.

PALT-089 WARN Cycle Stop must be disabled

- **Cause:** The cycle stop is already on. You can only have either cycle stop or pallet stop on; not both.
  - **Remedy:** Disable cycle stop, then enable pallet stop.

PALT-090 PAUSE Invalid palt # %s from NEXTPALT.TP

- **Cause:** NEXTPALT.TP set a value for the destination pallet that was greater than the number of pallets in the workcell.
  - **Remedy:** Modify NEXTPALT.TP to make sure that the correct value of pallet number is set in register 1.

PALT-091 PAUSE Slip sheet stack door open

- **Cause:** One of the slip sheet stack doors is open.
  - **Remedy:** Find out which slip sheet stack door is open and close it. Press cycle start to resume.

PALT-092 WARN PMINIT for UL %s from cycle stop

- **Cause:** This is a debug message
  - **Remedy:** None

PALT-093 WARN PMINIT for UL %s from next_layer

- **Cause:** This is a debug message
  - **Remedy:** None

PALT-094 WARN Switch - Pal stop ON & pal done %s

- **Cause:** This is a debug message
  - **Remedy:** None

PALT-095 WARN PalStopRec for Pallet %s

- **Cause:** This is a debug message
  - **Remedy:** None

PALT-096 WARN First calc done for pallet %s

- **Cause:** This is a debug message
  - **Remedy:** None

PALT-097 WARN Second layer calc for %s

- **Cause:** This is a debug message
  - **Remedy:** None

PALT-098 WARN PMINIT next_ly_pend %s

- **Cause:** This is a debug message
  - **Remedy:** None

PALT-099 WARN PMINIT ind_pal_pend %s

- **Cause:** This is a debug message
  - **Remedy:** None

PALT-100 WARN PMINIT for palt %s from reinit_pal

- **Cause:** This is a debug message
  - **Remedy:** None

PALT-101 WARN File is in use by robot. Cannot transfer

- **Cause:** The unit load file that was being attempted to transfer is being used by the robot. It is being used in production or is being edited using SETUP UNITLOAD or SETUP OPTIMAL PATH.
  - **Remedy:** First stop the robot then ABORT ALL. Next, attempt to transfer the unit load file again.

PALT-102 PAUSE CNV_JPOS_REL error %s

- **Cause:** An error occurred during execution of the built-in CNV_JPOS_REL.
  - **Remedy:** ABORT ALL and retry the operation.

PALT-103 PAUSE CNV_REL_JPOS error %s

- **Cause:** An error occurred during execution of the built-in CNV_REL_JPOS
  - **Remedy:** ABORT ALL and retry the operation.

PALT-104 WARN Wrist angle corrected

- **Cause:** The unit position on the pallet was compensated for excessive wrist rotation.
  - **Remedy:** This is only a warning notification message.

PALT-105 WARN Station not taught

- **Cause:** Either (P1,P2) or (P1, P3) or (P2, P3) or (P1,P2,P3) were all taught at the same point.
  - **Remedy:** Use MODIFY under Infeed Stn setup and reteach the frame points P1, P2 and P3 correctly

PALT-106 WARN Cannot switch in 1 Pallet Cell

- **Cause:** There is only 1 pallet in the workcell.
  - **Remedy:** This is only a warning message. NOSWITCH is the only option allowed for 1 Pallet cell.

PALT-107 WARN Data entry not complete!

- **Cause:** You cannot continue setting up for production until all the data is correctly entered on this screen.
  - **Remedy:** Complete the data entry.

PALT-108 WARN Part not present in tool %s

- **Cause:** Did not get part presence or faulty part presence sensor.
  - **Remedy:** Check if the gripper is in contact with the part and why part presence is not coming on.

PALT-109 WARN Part still present in tool %s

- **Cause:** Part presence sensor is still detecting part or faulty sensor.
  - **Remedy:** Check if part presence is OFF and if not if the sensor is ok.

PALT-110 WARN Tool %s is already open

- **Cause:** Tool was open and the user pressed OPEN.
  - **Remedy:** This is only a warning message.

PALT-111 WARN Tool %s is already closed

- **Cause:** Tool was closed and the user pressed CLOSE.
  - **Remedy:** This is only a warning message.

PALT-112 WARN NOSWITCH illegal when pallets > 1

- **Cause:** Number of pallets is greater than 1 and the pallet switch was NOSWITCH. This is not allowed in PalletTool.
    - **Remedy:** This is only a warning message. By default, PalletTool forces PER_PICK. You can change this to other values except NOSWITCH.

PALT-113 WARN Please enable teach pendant

- **Cause:** Program cannot run if teach pendant is not enabled.
    - **Remedy:** This if for safety reasons. Enable TP and and press Tool 1 or Tool 2 hardkey you want.

PALT-114 WARN Must index pallet before changing product

- **Cause:** A partial or completed pallet is present at the station where you want to change product If the existing pallet is not indexed, then the new product will crash with the existing pallet.
    - **Remedy:** Choose Index pallet from the menu and index the existing pallet first.

PALT-115 WARN Coldstart setup complete.

- **Cause:** Part of the application setup of an R-J3 robot is done at the first cold start. This may take up to 20 seconds. The teach pendant Hints menu will be displayed before PalletTool has loaded all its .tp programs and macros. **Note** : PalletTool needs an additional cold start after its application setup cold start to completly setup its macros.
    - **Remedy:** This is an informational message only.

PALT-116 WARN PalletSystem setup incomplete

- **Cause:** Not all the workcell information has been specified in Pallet System setup.
    - **Remedy:** Go to Pallet System setup and fill in the workcell information. ABORT ALL and retry the operation.

PALT-117 WARN Error creating new variables

- **Cause:** An error occurred while creating a new file.
    - **Remedy:** Check the available memory. If RAM is full, clear unneeded data and try again. Cold start the controller and retry the operation.

PALT-118 WARN Cannot use MODIFY

- **Cause:** Could not find the requested data.
    - **Remedy:** Teach or load the required data.

PALT-119 WARN Stn file not loaded or created

- **Cause:** The specified station is not taught or loaded.
    - **Remedy:** Teach or load the station.

PALT-120 WARN UL file not loaded or created

- **Cause:** The specified unitload is not taught or loaded.

- **Remedy:** Teach or load the unitload.

PALT-121 WARN Could not read %s

- **Cause:** Could not read the unitload .dt file - Data error.
  - **Remedy:** Check the motet communication and PTPC status.

PALT-122 WARN Cannot go to DETAIL page

- **Cause:** Not all the gripper information has been specified in Pallet System setup.
  - **Remedy:** Go to Gripper setup and fill in the gripper information.

PALT-123 WARN Data modification disallowed

- **Cause:** The robot is in production. Setup data cannot be changed during production.
  - **Remedy:** Wait until production is aborted and then make the changes.

PALT-124 WARN Setting length = width

- **Cause:** The data was not set up properly. The illegal data was corrected automatically.
  - **Remedy:** Make sure the value is as needed.

PALT-125 WARN Setting width = length

- **Cause:** The data was not set up properly. The illegal data was corrected automatically.
  - **Remedy:** Make sure the value is as needed.

PALT-126 WARN Setting layer = 1

- **Cause:** The data was not set up properly. The illegal data was corrected automatically.
  - **Remedy:** Make sure the value is as needed.

PALT-127 WARN Flip not allowed

- **Cause:** The data was not set up properly. The illegal data was corrected automatically.
  - **Remedy:** Make sure the value is as needed.

PALT-128 WARN Pallet Switch type changed

- **Cause:** The data was not set up properly. The illegal data was corrected automatically.
  - **Remedy:** Make sure the value is as needed.

PALT-129 WARN Inf Pos calculation failed

- **Cause:** The infeed station is not fully set up.
  - **Remedy:** Teach pallet station specified in Pallet System setup

PALT-130 WARN Unit Pos Calculation failed

- **Cause:** The unitload is not fully setup.
  - **Remedy:** Make sure the unitload is fully setup and Calc-ed.

PALT-131 WARN Layer num outside range (1-40)

- **Cause:** Layer count cannot be more than 40 or less than 1.
  - **Remedy:** Pick a legal layer.

PALT-132 WARN Cannot resume program

- **Cause:** The program cannot run because an error condition will not clear. When on the ALARM page, select this error and press HELP to see error detail.
  - **Remedy:** Fix the error condition, press reset.

PALT-133 WARN Could not clear file

- **Cause:** 1. If the unitload is being used in production it cannot be cleared. 2. If a unitload was loaded into memory at controlled-start, it can only be cleared at controlled start.
  - **Remedy:** 1. Wait until production is aborted and clear the unit load. 2. If the unitload was loaded at controlled-start, you will have to go to controlled start to clear it. At controlled start press MENUS, select Clear UnitLd. You will only be able to clear unitloads that were loaded at controlled start from the controlled start menu.

PALT-134 WARN STAKOPEN macro failed

- **Cause:** An error caused the STAKOPEN macro to fail. See the next error in the ALARM log for details.
  - **Remedy:** Make changes depending on the particular error.

PALT-135 WARN PLC_INF macro failed

- **Cause:** An error caused the PLC_INF macro to fail. See the next error in the ALARM log for details.
  - **Remedy:** Make changes depending on the particular error.

PALT-136 WARN PLC_PAL macro failed

- **Cause:** An error caused the PCL_PAL macro to fail. See the next error in the ALARM log for details.
  - **Remedy:** Make changes depending on the particular error.

PALT-137 WARN Unit load num out of range

- **Cause:** Specified Unit load number was out of range.
  - **Remedy:** Specify a Unit load number in the range of 1-999.

PALT-138 WARN Only Pal OR Cycle stop allowed

- **Cause:** Cause: Pallet stop or cycle stop is already on. You can only have either cycle stop or pallet stop on; not both.
    - **Remedy:** Disable one before trying to enable the other.

PALT-139 WARN %s Wrist angle correction failed

- **Cause:** The routine that calculates the final destination position while moving from the current source position has failed. The preceding error should be: "Error: Infeed=x Pallet=y Unit=x." This means that the robot was working with infeed x, pallet y, and box z when the error occurred.
    - **Remedy:** Check that all positions are in range.

PALT-140 WARN Cycle power to increase position regs

- **Cause:** An old smaller POSREG.VR file was loaded onto the controller. The number of position registers was changed to fewer than what the current version of PalletTool needs.
    - **Remedy:** PalletTool logic has automatically set the number of position registers to the necessary size again. But a cold start is needed to increase the position register table size. Perform a cold start.

PALT-141 WARN Cycle power to increase macros

- **Cause:** An old smaller SYSMACRO.SV file was loaded onto the controller. The number of macros was changed to fewer than what the current version of PalletTool needs.
    - **Remedy:** PalletTool logic has automatically set the number of macros to the necessary size again. But it needs a cold start in order for the macro table size to be increased. Perform a cold start.

PALT-142 WARN Program not selected

- **Cause:** To run a .tp program in local you must first select the program.
    - **Remedy:** Press SELECT key and choose a program to run. If trying to run PalletTool, the key switch must be in the REMOTE position.

PALT-143 WARN Data in use by Robot

- **Cause:** The robot is in production. Setup data cannot be changed during production.
    - **Remedy:** Wait until production is aborted and then make the changes.

PALT-144 WARN Visit layer spacing/flip menus

- **Cause:** Number of layers in the unit load was changed
    - **Remedy:** This is only a warning message to remind the user to visit the layer flips and layer spacing menus to make sure that flips and spacing are correct for all the layers.

PALT-145 WARN %s

- **Cause:** General status messages.
    - **Remedy:** None

PALT-146 WARN UOP Ignored. Wrong Start Mode

- **Cause:** The operator selects which device can be used to start palletizing on the SETUP Pallet System menu. Start device can be set to SOP or UOP/PLC or PTPC.
    - **Remedy:** The UOP/PLC must be set as the start device or the UOP signal will be ignored.

PALT-147 WARN SOP Ignored. Wrong Start Mode

- **Cause:** The operator selects which device can be used to start palletizing on the SETUP Pallet System menu. Start device can be set to SOP or UOP/PLC or PTPC.
    - **Remedy:** The SOP must be set as the start device or the SOP signal will be ignored.

PALT-148 PAUSE Approach Posn out of range

- **Cause:** The approach position the robot is trying to go to is not reachable.
    - **Remedy:** See error PALT-010 for details.

PALT-149 PAUSE Unit Posn out of range

- **Cause:** The placement position the robot is trying to go to is not reachable.
    - **Remedy:** See error PALT-010 for details.

PALT-150 WARN Loading error - %s

- **Cause:** There was a problem loading the specified file.
    - **Remedy:** Check the communication line and make sure that the file exists on the floppy disk.

PALT-151 WARN %s exists. Not loaded

- **Cause:** The specified file already exists on the controller.
    - **Remedy:** Delete the file from the controller before reloading.

PALT-152 WARN Warning-ignoring entry where CASE# was 0

- **Cause:** The gripper's setup information has a case number of zero which is illegal.
    - **Remedy:** Edit the gripper data.

PALT-153 WARN Initializing Data

- **Cause:** Initializing data for production.
    - **Remedy:** This is only a status message.

PALT-154 WARN Error setting gripper data %s

- **Cause:** Could not read or write the gripper data.
    - **Remedy:** Check the available memory. Try to reload a backup of the gripper data.

PALT-155 PAUSE Register not defined %s

- **Cause:** This is a debug message
  - **Remedy:** None

PALT-156 PAUSE Current pallet unknown

- **Cause:** R[80] is not setup properly when SET UTOOL macros are used.
  - **Remedy:** Make sure R[80] contains the number of the desired pallet.

PALT-157 PAUSE UTOOL unknown for tool %s

- **Cause:** The utool of the pallet requested in R[80] is not set up properly.
  - **Remedy:** Make sure all the stations are completely set up.

PALT-158 PAUSE Last Utool not known

- **Cause:** This is a debug message
  - **Remedy:** None

PALT-159 WARN Can change UnitLd on palt %s only

- **Cause:** The answer to the question 'Change product at pallet:' is the pallet needing a new unitload.
  - **Remedy:** Change the unitload number of the selected pallet.

PALT-160 WARN PalletTool aborted

- **Cause:** PalletTool production is aborted because of an error.
  - **Remedy:** This is a status message. See other errors in the ALARM log for details.

PALT-161 WARN Not all cases have I/O defined

- **Cause:** Each of the gripper's cases must have inputs and outputs defined for control.
  - **Remedy:** Complete the gripper information tables.

PALT-162 WARN Recvd PLC signal for indexing pallet %s

- **Cause:** This is a status message only.
  - **Remedy:** None

PALT-163 WARN Infeed I/O undefined-OKTOPICK.TP

- **Cause:** The infeed I/O must be setup using MENU SETUP INFEED STN, SET IO.
  - **Remedy:** Make sure the infeed I/O is set up.

PALT-164 WARN Gripper number not set in register

- **Cause:** R[15] is not setup properly when gripper macros are used.
  - **Remedy:** Make sure R[15] contains the number of the desired gripper.

PALT-165 WARN Invalid Gripper number set in register

- **Cause:** R[15] is not set up properly when gripper macros are used. The Gripper numbers supported in PalletTool are: single = 1 double icc = 3 Triple case = 5 custom 1 = 6 custom 2 = 7 custom 3 = 8 custom 4 = 9 multi case = 10 fork pick = 11 bag push = 12.
  - **Remedy:** Make sure R[15] contains the number of the desired gripper.

PALT-166 WARN Upgrading %s variable file

- **Cause:** Certain variable files can change with each release of PalletTool. Files saved with an older release are automatically updated as needed.
  - **Remedy:** This is a status message only.

PALT-167 WARN Variable file is older version

- **Cause:** Certain variable files can change with each release of PalletTool. Files saved with an older release are automatically updated as needed.
  - **Remedy:** This is a status message only.

PALT-168 WARN Units/layer %s exceeds allowed maximum

- **Cause:** 1. The number of units in the unitload is less than the start unit entered. 2. The number of units is greater than the maximum allowed (50).
  - **Remedy:** Enter a smaller number of layers.

PALT-169 WARN Number of layers %s exceeds allowed maximum

- **Cause:** 1. The number of layers in the unitload is less than the start layer entered. 2. The number of layers is greater than the maximum allowed (40).
  - **Remedy:** Enter a smaller number of layers.

PALT-170 WARN Invalid pattern type in data file

- **Cause:** An illegal matrix type was received from PalletTool PC.
  - **Remedy:** Check the MOTET communication and PTPC status.

PALT-171 PAUSE System still in fault state

- **Cause:** An error condition exists such that the robot cannot be reset.
  - **Remedy:** Fix the error condition, press reset.

PALT-172 ABORT Invalid infeed number from PLC %s

- **Cause:** PLC sent an invalid infeed number. The number must be greater than 0 and less than or equal to the 'number of infeeds' setup.
  - **Remedy:** Make sure a valid infeed number was sent by PLC. Check the PLC communication status.

PALT-173 ABORT Invalid Pallet number from PLC %s

- **Cause:** PLC sent an invalid pallet number. The number must be greater than 0 and less than or equal to the 'number of pallets' setup.
  - **Remedy:** Make sure a valid pallet number was sent by PLC. Check the PLC communication status.

PALT-174 WARN Setup Application Completed

- **Cause:** Indicates that PalletTool controlled start setup is complete.
  - **Remedy:** This is only a status message.

PALT-175 ABORT Can't use labels-out for triple gripper

- **Cause:** Labels out is supported only for the single and double case gripper.
  - **Remedy:** This is an informational message only.

PALT-176 ABORT Cannot upgrade .vr file

- **Cause:** An error occurred while attempting to upgrade an older variable file to the current release format.
  - **Remedy:** Create a new file.

PALT-177 ABORT Single or Double pattern not supported

- **Cause:** The selected unitload has the wrong matrix type. (it is less than type 4). This very old data is no longer supported by PalletTool.
  - **Remedy:** Create a new unitload.

PALT-178 WARN Data not calculated for UL %s

- **Cause:** To run in production, each unitload's optimal path data must be calculated.
  - **Remedy:** Go to the SETUP OPTIMAL PATH screen for this unitload and press the CALC key.

PALT-179 WARN GETINF.TP not setup correctly

- **Cause:** GETINF returned an infeed number which is assigned ul = 0.
  - **Remedy:** Check GETINF.TP for infeed/unitload data. Check production setup data.

PALT-180 WARN Label data may need updating

- **Cause:** The optimal path data was automatically updated.
  - **Remedy:** Check the labels out data for completeness. This is only a status message.

PALT-181 WARN Labels-out disabled

- **Cause:** Labels out was selected for a gripper that is not supported.
  - **Remedy:** This is an informational message only.

PALT-182 WARN Not allowed for this gripper type

- **Cause:** Labels out is supported only for the single and double case gripper.
  - **Remedy:** This is an informational message only.

PALT-183 WARN Cycle stop disabled

- **Cause:** The cycle stop option has been disabled.
  - **Remedy:** This is a status message only.

PALT-184 WARN Cycle stop enabled

- **Cause:** The cycle stop option has been enabled.
  - **Remedy:** This is a status message only.

PALT-185 WARN Pallet stop disabled

- **Cause:** The pallet stop option has been disabled.
  - **Remedy:** This is a status message only.

PALT-186 WARN Pallet stop enabled

- **Cause:** The pallet stop option has been enabled.
  - **Remedy:** This is a status message only.

PALT-187 WARN Active only during palletizing

- **Cause:** Cycle stop and Pallet Stop functions are only available when the robot is palletizing.
  - **Remedy:** This is an informational message only.

PALT-188 WARN Palletizing:STEP mode not allowed

- **Cause:** The STEP key was pressed before entering or while in palletizing mode.
  - **Remedy:** This is only a warning message. The STEP mode is automatically cleared by the system.

PALT-189 ABORT Unit load data not set up

- **Cause:** Unit load gripper data has not been completely setup.
  - **Remedy:** Check the variable pick_ar_tc_n and pick_ar_tc_f in the unit load file. Also check the variables new_order_n and new_order_f.

PALT-190 WARN .VR file has not been created

- **Cause:** During the transfer of data from the PC, the VR data file could not be created.
  - **Remedy:** Check the available memory. If RAM is full, clear unneeded data and try again.

PALT-191 WARN TEMP DRAM memory is low

- **Cause:** Temporary memory is getting too low to download more Unit Load files.
  - **Remedy:** Warning only. Delete any unneeded data before down-loading Unit Load files.

PALT-192 WARN Cannot CALC; TEMP memory low

- **Cause:** Temporary memory is too low to calculate a unit load.

- **Remedy:** Delete any unneeded data and cold start before attempting to calculate the unit load.

PALT-193 WARN File copy not done

- **Cause:** The file was not copied. The file is either in use or there is not enough memory to copy the file.
  - **Remedy:** Cold start the controller and retry the operation.

PALT-194 WARN All units not listed in new column

- **Cause:** All units must be picked up. Not all the units have been listed in the NEW column.
  - **Remedy:** Check that no units have been listed twice, change the NEW info and VERIFY again.

PALT-195 WARN All units not picked up.

- **Cause:** The total of the 'PLACE's must add up to the PICK number for each row of the config table.
  - **Remedy:** Make sure the sum of the PLACEs add up to the PICK.

PALT-196 WARN Pick too big error: row %s

- **Cause:** The PICK size cannot be bigger than the gripper's number of grips.
  - **Remedy:** Check the selected gripper's grip size, and change the PICK info and VERIFY again.

PALT-197 WARN Illegal place sequence: row %s

- **Cause:** The PLACE values must be put into placed into PL1 column first, then PL2, then PL3. The total of the 'PLACE's must add up to the PICK number for each row of the config table.
  - **Remedy:** Make sure the sum of the PLACEs add up to the PICK and in the proper columns.

PALT-198 WARN Other error: row %s

- **Cause:** General Configuration table error.
  - **Remedy:** Check the configuration data.

PALT-199 WARN All units not listed in FlipConfig

- **Cause:** All units must be picked up.
  - **Remedy:** Check that no units have been listed twice, change the NEW info and VERIFY again.

PALT-200 WARN All units not listed in NoFlip

- **Cause:** All units must be picked up.
  - **Remedy:** Check that no units have been listed twice, change the NEW info and VERIFY again.

PALT-201 WARN Too many units picked up.

- **Cause:** The total of the 'PLACE's must add up to the PICK number for each row of the config table. And total number must add up to the number of units in a layer.
    - **Remedy:** Make sure the sum of the PLACEs add up to the PICK.

PALT-202 WARN Illegal. At perch or maintenance

- **Cause:** Part drop recovery: selected option cannot be used when the robot is at perch or at the gripper maintenance position.
    - **Remedy:** Choose another option.

PALT-203 WARN NO boxes are remaining

- **Cause:** Part drop recovery: selected option must have boxes remaining in the gripper.
    - **Remedy:** Choose another option or check gripper sensors.

PALT-204 WARN Illegal:boxes are remaining

- **Cause:** Part drop recovery: selected option cannot have boxes remaining in the gripper.
    - **Remedy:** Choose another option or check gripper sensors.

PALT-205 WARN Error - Processing UL data NOT done

- **Cause:** There are errors in the unit load data so that the CALC calculations failed.
    - **Remedy:** Correct the unit load errors and CALC again.

PALT-205 WARN Processing UL data done - errors

- **Cause:** There are errors in the unit load data so that the CALC calculations failed.
    - **Remedy:** Correct the unit load errors and CALC again.

PALT-206 WARN Invalid Unit load req: ul %s

- **Cause:** The requested unit load's gripper type cannot be run on this controller. That is, a multi-case gripper unit load can only be run if the multi-case option is loaded on the controller.
    - **Remedy:** Choose another unit load.

PALT-207 WARN Item %s : illegal data ignored

- **Cause:** There is something wrong with the data that was entered.
    - **Remedy:** Fix the entered data and try again.

PALT-208 WARN Item %s : duplicate data ignored

- **Cause:** The item in error is a duplicate of another entry on the menu.
    - **Remedy:** Check the entered data. The duplicate is ignored.

PALT-209 WARN Cannot CALC; PTPC production running.

- **Cause:** Cannot calculate this unit load during production when PalletTool PC is set as the data device.
  - **Remedy:** Try again when not running production.

PALT-210 WARN Xfer in process, cannot edit file

- **Cause:** Cannot edit the same unitload as being transferred from PalletTool PC.
  - **Remedy:** Try again when not transferring or running the unitload.

PALT-211 WARN Unitload not replaced.

- **Cause:** Could not read the .dt file - Data error. But a unitload with the same name still exists on the robot.
  - **Remedy:** Check the motet communication and PTPC status.

PALT-212 WARN DT file not read: %s

- **Cause:** The unitload data file transferred from PalletTool PC was not read because there is not enough memory to save the unitload on the robot.
  - **Remedy:** Delete any unneeded data and perform a cold start.

PALT-213 ABORT Dropped part during recovery-abort

- **Cause:** During part drop recovery a part was dropped. PalletTool does not support further recovery.
  - **Remedy:** Check why parts are being dropped. Continue normal restart of palletizing.

PALT-214 WARN The tool pointer length is changed.

- **Cause:** Warning. You have changed the length of the station teaching tool. All station position must be taught using the SAME tool length.
  - **Remedy:** Make sure all station positions are taught with the same tool length.

PALT-215 WARN Moving to maintenance position..

- **Cause:** Notification to user that the robot will move to gripper maintenance position.
  - **Remedy:** This is only a warning message.

PALT-216 ABORT SlipSheet pos. must be cartesian representation

- **Cause:** A slip sheet position registers have positions that are taught in JOINT representation. For the slip sheet logic to work properly, the positions must be taught in Cartesian representation.
  - **Remedy:** Change the position representation to CARTESIAN. Press DATA, [TYPE], Position Regs, select the register, press position, [REPRE], cartesian.

PALT-217 PAUSE Position is not reachable

- **Cause:** The position the robot is trying to go to is not reachable.

- **Remedy:** Verify that the value of $UTOOL and/or $MNUTOOL are correct. If the robot stopped while heading towards the pallet, then check the value of Pallet approach length and width in Optimal path setup. You might have specified large pallet offsets or you might need to specify a correct pallet offset in the Optimal path setup.

PALT-220 WARN Message buffer to PC is full

- **Cause:** More than 20 messages have not been read by PTPC. It seems like the communication is slow or stopped.
  - **Remedy:** Check the MOTET communication and PTPC status.

PALT-221 WARN PTPC message type %s - illegal data received

- **Cause:** Message received from PalletTool-PC/MOTET was not in the proper format.
  PT-PTPC message types: 1-start, 2-cycle stop, 3-pallet stop, 4-status, 5-go, 6-abort, 7-unit data, 8-pallet data, 9-part drop, 10-hold, 11-reset, 12-change done, 13-index, 14-op.grip, 15-cancel, 16-unitload, 17-setup, 18-monitor grip, 19-stop grip, 20-alarms.
  - **Remedy:** Check the MOTET communication and PTPC status.

PALT-222 WARN PTPC command ignored, in wrong mode

- **Cause:** PalletTool is not in the correct mode to act on this message.
  - **Remedy:** Try the operation again.

PALT-223 WARN PTPC %s - ignored, robot busy

- **Cause:** PalletTool is busy and cannot act on this message.
  - **Remedy:** Try the operation again.

PALT-224 WARN Invalid infeed number from PTPC: %s

- **Cause:** PTPC sent an invalid infeed number. The number must be greater than 0 and less than or equal to the 'number of infeeds' setup.
  - **Remedy:** Make sure a valid infeed number was sent by PTPC. Make sure that the robot has current setup data from PTPC. Check the MOTET communication and PTPC status.

PALT-225 WARN Invalid Pallet number from PTPC: %s

- **Cause:** PTPC sent an invalid pallet number. The number must be greater than 0 and less than or equal to the 'number of pallets' setup.
  - **Remedy:** Make sure a valid pallet number was sent by PTPC. Make sure that the robot has current setup data from PTPC. Check the MOTET communication and PTPC status.

PALT-226 WARN Invalid Gripper number from PTPC: %s

- **Cause:** PTPC sent an invalid gripper number. See PALT-165 for legal gripper numbers.
  - **Remedy:** Check the MOTET communication and PTPC status.

PALT-227 WARN Wrong unitload recvd from PTPC: %s

- **Cause:** PTPC sent the wrong unit load. The unitload that was expected is given in the error message.
    - **Remedy:** Check the MOTET communication and PTPC status.

PALT-228 WARN Unitload not recvd from PTPC %s

- **Cause:** PTPC did not send the requested unitload data.
    - **Remedy:** Check the MOTET communication and PTPC status.

PALT-229 WARN Setup data not recvd from PTPC

- **Cause:** PTPC did not sent the requested setup data.
    - **Remedy:** Check the MOTET communication and PTPC status.

PALT-230 WARN using unitload NOT from PTPC

- **Cause:** PalletTool requested a unitload from PTPC that PTPC did not have. However, PalletTool has a copy of the unitload which it will use.
    - **Remedy:** This is a warning only. Make sure the right unitload is being used. Consider changing the control so that Unitload - Use data from: is set to ROBOT/PTPC.

PALT-231 WARN PTPC: must be PAUSED or ABORTED

- **Cause:** PalletTool is not in the correct mode to act on this message.
    - **Remedy:** Pause or abort the robot and try operation again.

PALT-235 ABORT Fork infeed positions not taught

- **Cause:** The conveyor infeed positions must be taught in order to use the fork or bag gripper.
    - **Remedy:** Teach the conveyor infeed positions.

PALT-236 ABORT Errors in infeed positions

- **Cause:** The conveyor infeed positions must be taught correctly in order to use the fork or bag gripper.
    - **Remedy:** Teach the conveyor infeed positions.

PALT-237 ABORT Fork not big enough to pick box

- **Cause:** The boxes are too big for this fork gripper.
    - **Remedy:** Check conveyor infeed positions and gripper utool values.

PALT-240 WARN Infeed %s end-of-batch signal received

- **Cause:** MULTI_IO.TP logic received a signal to perform end of batch processing.
    - **Remedy:** This is a status message only.

PALT-241 WARN Infeed %s IGNORE end-of-batch signal

- **Cause:** Previous end of batch signal processing still in progress, or cycle stop or pallet stop in progress.

- **Remedy:** This is a status message only.

PALT-242 WARN End-of-batch PLC - request infeed number

- **Cause:** Requesting pallet, unitload, and infeed information from PLC.
- **Remedy:** This is a status message only.

PALT-243 WARN End-of-batch PLC - wrong part ID method

- **Cause:** Part ID select method must be set to PLC.
- **Remedy:** Set Part ID method to PLC. (MENUS, SETUP, Pallet System)

PALT-244 WARN Wait for PLC index pallet %s

- **Cause:** End of batch complete. Waiting for PLC to index the pallet.
- **Remedy:** This is a status message only.

PALT-245 WARN End-of-batch processing error

- **Cause:** End of batch request is ignored.
- **Remedy:** This is a status message only.

PALT-246 WARN End-of-batch none at infeed

- **Cause:** Nothing at infeed to pickup.
- **Remedy:** This is a status message only.

PALT-247 WARN End-of-batch enough at infeed

- **Cause:** Expected fewer than needed boxes at infeed.
- **Remedy:** End of batch only when not enough at infeed.

PALT-248 ABORT End-of-batch part drop - abort

- **Cause:** Dropped a box during end of batch logic.
- **Remedy:** Take case of dropped box and continue.

Back to top

PRIO Error Codes

PRIO-001 WARN Illegal port type code

- **Cause:** The port type code specified is invalid. This error code can be returned by several of the Digital I/O-related builtins (e.g. SET_PORT_ASG) when an invalid port type code is supplied.
- **Remedy:** Use one of the port types defined in IOSETUP.KL.

PRIO-002 WARN Illegal port number

- **Cause:** The port number is invalid or not presently assigned. Port numbers must be in the range of 1 - 32767. However, operator panel (SOP) port numbers can be zero. In most cases, the specified port already must be assigned.
  - **Remedy:** Correct the port number.

PRIO-003 SYST No memory available

- **Cause:** Memory required for this operation is not available.
  - **Remedy:** Delete Karel programs and/or variables to free memory.

PRIO-004 WARN Too few ports on module

- **Cause:** There are not enough ports on the specified board or module to make the specified assignments. This error code can be returned from the SET_PORT_ASG builtin.
  - **Remedy:** Correct either the first port number or the number of ports.

PRIO-005 WARN bad port number

- **Cause:** The specified port number in an assignment is invalid; must be in the range 1 - 32767.
  - **Remedy:** Correct the port number so that it is within the valid range.

PRIO-006 WARN bad port number

- **Cause:** The specified port number in an assignment is invalid; must be in the range 1 - 32767.
  - **Remedy:** Correct the logical port number, so that it is within the valid range.

PRIO-007 WARN no match in SET_PORT_ASG de-assign

- **Cause:** This error code is returned by the KAREL built-in SET_PORT_ASG when it is used as a de-assign request (with a physical port type of zero) and the logical ports specified are not presently assigned.
  - **Remedy:** Correct the port number.

PRIO-008 WARN physical ports not found

- **Cause:** The physical port to which ports are being assigned in a SET_PORT_ASSIGN built-in call does not exist.
  - **Remedy:** Correct the rack number, slot number, or port type, or port number.

PRIO-009 WARN number of ports invalid

- **Cause:** The number of ports in a SET_PORT_ASG call is invalid. This must be in the range of 1 - 128 for digital port types (e.g. DIN), 1 - 16 for groups, and 1 for analog port types.
  - **Remedy:** Correct the number of ports, so that it is within the valid range.

PRIO-010 WARN bad physical port number

- **Cause:** An invalid physical port number is specified in a call to the KAREL built-in SET_PORT_ASG. This must be greater than 0.
  - **Remedy:** Correct the physical port number, so that it is greater than 0.

PRIO-011 WARN Assignment overlaps existing one

- **Cause:** The port numbers in a SET_PORT_ASG call overlap existing assignments.
  - **Remedy:** Correct the first port number or number of ports or delete existing assignment using the Digital I/O CONFIG screen or a SET_PORT_ASG call with physical port type zero. .

PRIO-012 WARN bad board address

- **Cause:** The rack and/or slot number specified in a call of the KAREL built-in SET_PORT_ASG is invalid or refers to an unused rack/slot number.
  - **Remedy:** Correct the rack and/or slot number.

PRIO-013 WARN No analog input sequence for bd

- **Cause:** An attempt was made to delete an analog input sequence which has not been defined.
  - **Remedy:** Check the rack and/or slot number and that an analog input sequence has previously been defined.

PRIO-014 WARN Analog input sequence too long

- **Cause:** The specified analog input sequence is too long; sequences must have from 1 to 15 port numbers.
  - **Remedy:** Supply a sequence of an appropriate length.

PRIO-017 WARN I/O point not simulated

- **Cause:** Attempt to set the state of an input port that is not simulated.
  - **Remedy:** Use the I/O menu or the SET_PORT_SIM KAREL built-in to set the port simulated or do not set the port.

PRIO-020 STOP I/O Link comm error %x, %x, %x, %x (hex)

- **Cause:** Indicates that an error has been detected in communication between the MAIN CPU PCB and the process I/O board, Model-A I/O racks, or Model-B I/O interface units. The most common causes of this are the following:
  - Power to a remote I/O rack or Model-B I/O interface unit is interrupted.
  - The cable between the MAIN CPU PCB and the process I/O board, racks, or Model-B interface units has
  been disconnected or is faulty.
  - Electrical interference between the I/O cables and other cables. This can be eliminated by physically
  separating the I/O cables from other wiring. In very electrically noisy environments, it might be necessary
  to use optical isolators with these cables.
  - **Remedy:** Check the cabling between the MAIN CPU PCB (JB-18 connector) and the process I/O board and/or model A or B interface modules. Check power to the remote Model A I/O racks and model B I/O interface modules. If corrections to these do not correct the

problem, check the four numbers displayed in this error message. The first value must be interpreted bit-wise. If a bit is 1, the corresponding condition has been detected:

Bit 0 : (CFER) A CRC or framing error has been detected by the SLC-2 chip on the MAIN CPU PBC. This is most frequently the result of the problems listed above. Otherwise, it might indicate faulty SLC-2 chip, wiring between this and the JB-1B connector on the main PCB, or faulty process I/O, model-A I/O rack, or model-B interface unit.

Bit 1 : (CALM) An error has been detected by a slave SLC-2 (process I/O board, Model-A rack, or Model-B interface unit). More information is provided by the second number displayed with the PRIO-020 error.

Bit 2 : (CMER) A communication error has been detected by a slave SLC-2. The potential causes are similar to those for a CFER.

Bit 3 : (IPRER): Internal parity error accessing SLC-2 internal RAM. This indicates a faulty SLC-2 chip. In this case, the third and fourth numbers displayed with the PRIO-020 error is the address and and data for which the error was detected. This indicates a faulty SLC-2 chip.

Bit 4 : (OPRER): Parity error accessing external RAM by the SLC-2 chip. This might indicate bad DRAM or CMOS memory on the MAIN CPU PCB.

Bit 5 : (ALMI): Indicates an alarm signalled from outside the SLC-2. Check the controller Alarm Log for other errors reported.

Bit 6 : (BSY): Auto scan is running. This might be either 0 or 1 and does not indicate an error.

Bit 7 : (CEND): Auto scan cycle has completed. This might be either 0 or 1 and does not indicate an error. The second number displayed is significant only if the CMER bit above is one.

Bits 0-4 : Indicate the position in the I/O Link chain of the slave unit in which error was detected. A value of 1 indicates the unit connected directly to the I/O LINK connector.

Bit 5 (CFER): Indicates a CRC or framing error detected by the slave SLC-2. The causes are similar to those for a CFER error detected by the MAIN CPU SLC-2.

Bit 6 (ALMI): Indicates an error asserted outside the slave SLC-2. This may indicate a problem with process I/O board, model-B I/O rack, or model-B interface unit hardware.

Bit 7 (SYALM): Indicates a watchdog alarm or parity error detected by the slave SLC-2. This may indicate a problem with the process I/O board, model-A rack, or model-B interface unit.

PRIO-021 SYST Unknown Unknown I/O hardware

- **Cause:** An unknown device is connected to the I/O Link connector. This device is not recognized by the current controller software version.

- **Remedy:** Replace the device with a device that is compatible with the current software or install a version of software that recognizes the device.

PRIO-022 SYST Too much I/O data on I/O link

- **Cause:** The devices connected to the I/O Link exceed the I/O link capacity. A total of 64 bytes of data each are available for input and output devices connected to the I/O link. Process I/O boards typically use 16 bytes of input and 16 bytes of output each. Digital modules generally use one byte for each 8 ports. Analog modules generally use two bytes per port.
  - **Remedy:** Disconnect some devices.

PRIO-023 WARN No ports of this type

- **Cause:** There are no ports of the type (e.g., GIN) specified in an I/O statement or built-in call.
  - **Remedy:** Remedy: Change the port type, add I/O hardware with the required type of ports, or define ports (e.g., GIN or GOUT) of the specified type.

PRIO-033 WARN PLC interface init. fault %d

- **Cause:** The PLC interface board is bad or not installed.
  - **Remedy:** Check that the PLC interface board is properly installed. Check the LED status on PLC interface board. Refer to the FANUC Robotics manual, A User's Guide to the FANUC Robotics SYSTEM R-J3 Controller Remote I/O Interface for an Allen-Bradley PLC or A User's Guide to the FANUC Robotics Genius Network Interface for GE FANUC.

PRIO-034 WARN PLC interface general fault %d

- **Cause:** The PLC interface board is faulted.
  - **Remedy:** Check the LED status on the PLC interface board. Refer to the FANUC Robotics manual, A User's Guide to the FANUC Robotics SYSTEM R-J3 Controller Remote I/O interface for an Allen-Bradley PLC or A User's Guide to the FANUC Robotics Genius Network Interface for GE FANUC.

PRIO-035 WARN PLC interface serial fault %d

- **Cause:** The serial link to the PLC has failed.
  - **Remedy:** Check LED status on PLC interface board. Refer to the FANUC Robotics manual, A User's Guide to the FANUC Robotics SYSTEM R-J3 Controller Remote I/O interface for an Allen-Bradley PLC or A User's Guide to the FANUC Robotics Genius Network Interface for GE FANUC.

PRIO-063 WARN Bad I/O asg: rack %d slot %d

- **Cause:** One or more assignments to the process I/O board or module at specified rack and slot was invalid when the controller was turned on.
  - **Remedy:** Check the connections and power to the rack and that the module(s) are firmly installed. If the board or module has been permanently removed, moved to a different Model A slot, or had its

switch settings changed (Model B), use the CONFIG option on the Digital I/O menu to delete or update the assignment(s).

PRIO-070 WARN PLC interface option not loaded

- **Cause:** An ER-1 or ER-2 board is installed but the PLC software option is not installed. This is only a problem if the board is an ER-1 with a remote I/O daughter board or the board is an ER-2 with a remote I/O chip.
  - **Remedy:** Install the PLC I/O (A-B/GENIUS) option. Refer to the FANUC Robotics manual, a User's Guide to the FANUC Robotics SYSTEM R-J3 Controller Remote I/O Interface for an Allen-Bradley PLC or a User's Guide to the FANUC Robotics Genius Network Interface for GE FANUC.

PRIO-072 WARN Too many pulses active

- **Cause:** The maximum of number of concurrent pulse output statements is 255.
  - **Remedy:** Modify the program logic to ensure that not over 255 pulses are active at one time.

PRIO-074 WARN Illegal pulse ID

- **Cause:** Specified pulse ID does not exist.
  - **Remedy:** Check the pulse ID.

PRIO-076 WARN PLC I/O hardware not installed

- **Cause:** A PLC I/O board is not installed in the backplane.
  - **Remedy:** Install a PLC I/O board into the backplane. Refer to the installation procedure in A User's Guide to the FANUC Robotics SYSTEM R-J3 Controller Remote I/O Interface for an Allen-Bradley PLC or A User's Guide to the FANUC Robotics Genius Network Interface for GE FANUC.

PRIO-078 WARN PLC I/O firmware not loaded

- **Cause:** The PLC I/O firmware was not loaded into the PLC I/O board .
  - **Remedy:** Load the firmware into the PLC I/O board. Refer to one of the following manuals for instructions: A User's Guide to the FANUC Robotics SYSTEM R-J3 Controller Remote I/O Interface for an Allen-Bradley PLC or A User's Guide to the FANUC Robotics Genius Network Interface for GE FANUC.

PRIO-081 STOP I/O is not initialized

- **Cause:** This indicates that a severe error has occurred during I/O initialization at controller power-up. Other messages in the log will indicate the specific problems.
  - **Remedy:** Check other error messages displayed on the TP alarm screen. The conditions indicated by these messages need to be corrected and the controller powered down and up before the robot can be used.

PRIO-083 STOP Digital I/O is not recovered

- **Cause:** Digital output port states are not recovered when semi-hot start is enabled because IO device configuration or assignments have changed. All outputs will be reset to OFF.
    - **Remedy:** Cold start the application.

PRIO-085 SYST BUSY in SLC2 does not turn off

- **Cause:** BUSY bit in SLC2 does not turned off.
    - **Remedy:** Check SLC2 on Main CPU board or I/O device and I/O link cable.

PRIO-100 STOP Model B comm fault %s rack:%d slot:%d

- **Cause:** Communication between Model-B interface unit and DI/DO units, or between DI/DO units, is lost.
    - **Remedy:** Check the power and cabling from Model B interface unit and DI/DO unit, or between DI/DO units.

PRIO-102 WARN Cycle power to restart PLC I/O

- **Cause:** The PLC Interface hardware (ER-1 or ER-2 board) is already running and can not be restarted without cycling power.
    - **Remedy:** Turn off and then turn on the controller.

PRIO-104 STOP Device is off-line

- **Cause:** An attempt has been made to access to a port assigned to a device or board which is offline. This might be the result of an error or device having been set offline manually.
    - **Remedy:** For DeviceNet ports, troubleshoot as follows: Check the status of the DeviceNEt board using the Digital I/O DeviceNet screen. If the status field for the board is OFF, set it ONLINE. If the status is ERROR, check the following:

      1. The daughter board is installed on the Interface board.

      2. There is power on the network.

      If these doe not indicate a problem, set the board ONLINE. If the board is ONLINE, check the DEV LST screen entry for the indicated device. If the status field for the device is OFF, set if ONLINE. If the status is ERROR, check the following:

      1. The device is physically present on the network.

      2. The baud rate is set correctly.

      3. There are not devices with duplicate MAC-Id's on the network.

      4. The device with the required MAC-Id is the device type indicated in the DEV LST screen.

PRIO-106 STOP Device with port is off-line

- **Cause:** An attempt was made to access a port assigned to a device which is offline. For DeviceNet ports, troubleshoot as follows: This might be caused by an error or the device being manually set offline.
  - **Remedy:** First, determine the port type and number being accessed. Then use the appropriate Digital I/O CONFIG screen to determine the DeviceNet board and device MAC-Id to which the port is assigned. Check the status of the DeviceNet board using the Digital I/O DeviceNet screen. If the status field for the board is OFF, set if ONLINE. If the status is ERROR, check the following:

    1. The daughter board is installed on the Interface board.

    2. There is power on the network.

    After the problem is corrected, use the Digital I/O DeviceNet DEV LST screen to set the board ONLINE. If the board is ONLINE, check the DEV LST screen entry for the indicated device. If the status field for the device is OFF, set if ONLINE. If the status is ERROR, check the following:

    1. The device is physically present on the network.

    2. The baud rate is set correctly.

    3. There are not devices with duplicate MAC-ID's on the network.

    4. The device with the required MAC-Id is the device type indicated in the DEV LST screen.

    Once the problem is corrected, use the DEV LST screen to set the device ONLINE.

PRIO-119 WARN Too many DIGITAL I/O ports

- **Cause:** There are too many DIGITAL I/O ports.
  - **Remedy:** Disconnect some DIGITAL I/O devices.

PRIO-121 WARN Stop PMC to change sim

- **Cause:** When a PMC program is running, you can not change simulation status of the port that is used by the PMC program.
  - **Remedy:** Stop PMC execution.

PRIO-125 SYST SLC2 initialization error

- **Cause:** The SLC2 is in an error state at the end of initialization.
  - **Remedy:** Check SYSFAIL of the other PCB. Also check the main PCB.

Back to top

PROG Error Codes

PROG-001 ABORT Invalid pointer is specified

- **Cause:** This indicates an internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

PROG-002 ABORT Invalid task name is specified

- **Cause:** The task name specified is invalid.
  - **Remedy:** Check the task name.

PROG-003 ABORT Invalid prog name is specified

- **Cause:** The program name specified is invalid.
  - **Remedy:** Check the program name.

PROG-005 WARN Program is not found

- **Cause:** The specified program cannot be found.
  - **Remedy:** Check the program name.

PROG-006 WARN Line is not found

- **Cause:** The specified line number cannot be found.
  - **Remedy:** Check the line number.

PROG-007 WARN Program is already running

- **Cause:** The specified program is already being executed.
  - **Remedy:** Check the program name.

PROG-008 WARN In a rtn when creating a task

- **Cause:** Execution cannot be started in sub-routine program.
  - **Remedy:** Check the line number.

PROG-009 WARN Line not same rtn as paused at

- **Cause:** Resumption was attempted at a different line from the paused line.
  - **Remedy:** Check the line number.

PROG-010 WARN Not same prg as paused

- **Cause:** Resumption was attempted in a different program from the paused one.
  - **Remedy:** Check the program name.

PROG-011 PAUSE Cannot get the motion control

- **Cause:** Motion control cannot be obtained.

- **Remedy:** Check the teach pendant enable switch and other running programs to determine who has motion control.

PROG-012 WARN All groups not on the top

- **Cause:** There is paused motion later than motion that was attempted to resume.
  - **Remedy:** Resume the motion paused the last time.

PROG-013 WARN Motion is stopped by program

- **Cause:** This motion was paused by the MOTION PAUSE instruction. Only the RESUME MOTION program instruction can can resume the motion.
  - **Remedy:** Use RESUME MOTION instruction in the program.

PROG-014 WARN Max task number exceed

- **Cause:** The number of programs you attempted to start exceeded the maximum number.
  - **Remedy:** Abort dispensable programs or perform a CTRL start and select PROGRAM INIT option to increase the number of tasks allowed.

PROG-015 WARN Cannot execute backwards

- **Cause:** Backward execution cannot be used.
  - **Remedy:** Do not use backward execution at this point .

PROG-016 WARN Task is not found

- **Cause:** The specified task is not running or paused.
  - **Remedy:** Check the task name. The task name is always the name of the program that was run. The task name will not change even if the running program calls a routine from a different program.

PROG-017 WARN Task is not running

- **Cause:** The specified task is not running.
  - **Remedy:** Check the task name.

PROG-018 ABORT Motion stack overflowed

- **Cause:** Too many programs are paused.
  - **Remedy:** Resume or abort some programs.

PROG-019 WARN Ignore pause request

- **Cause:** The request to pause the program was ignored.
  - **Remedy:** Change the NOPAUSE task attribute or use the KCL PAUSE command with the FORCE option.

PROG-020 WARN Task is already aborted

- **Cause:** The specified program was already aborted.
  - **Remedy:** Check the program name.

PROG-021 WARN Ignore abort request

- **Cause:** The request to abort the program was ignored.
  - **Remedy:** Change the NOABORT task attribute or use the KCL ABORT command with the FORCE option.

PROG-023 WARN Task is not paused

- **Cause:** The specified program is not paused.
  - **Remedy:** Pause the program.

PROG-024 WARN Not have motion history

- **Cause:** The motion path record is lost.
  - **Remedy:** Do not attempt backwards execution at this time.

PROG-025 WARN Cannot execute backwards

- **Cause:** Backward execution cannot be used.
  - **Remedy:** Do not use backwards execution here.

PROG-026 WARN No more motion history

- **Cause:** Backward execution cannot be used any more. The current line is on top of the memorized path.
  - **Remedy:** Do not use backwards execution here.

PROG-027 WARN Invalid task number

- **Cause:** The task number specified is invalid.
  - **Remedy:** Check the task number.

PROG-029 WARN Buffer size is not enough

- **Cause:** This indicates an internal system error.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

PROG-030 WARN Attribute is not found

- **Cause:** The specified task attribute is not found.
  - **Remedy:** Check the attribute.

PROG-031 WARN Attribute is write protected

- **Cause:** The specified task attribute is write protected.
  - **Remedy:** Do not try to change the attribute.

PROG-032 WARN Invalid value for attribute

- **Cause:** The value for the specified attribute is invalid.
  - **Remedy:** Check the attribute value.

PROG-034 WARN Routine not found

- **Cause:** The specified routine cannot be found.
  - **Remedy:** Check the routine name and verify it is loaded.

PROG-035 WARN Not locked the specified group

- **Cause:** Motion control for the specified group cannot be locked.
  - **Remedy:** Check the teach pendant enable switch and other running programs to determine who has motion control.

PROG-036 WARN The length of trace array is 0

- **Cause:** Not enough memory or the task attribute is not set correctly.
  - **Remedy:** Set the trace buffer length using the KCL SET TASK TRACELEN command.

PROG-037 WARN No data in the trace array

- **Cause:** There is no execution record in memory.
  - **Remedy:** Turn on tracing using the KCL SET TRACE ON command.

PROG-039 WARN locked, but not get mctl

- **Cause:** Motion control for the specified group was reserved, but it cannot be obtained.
  - **Remedy:** Check the teach pendant enable switch and other running programs to determine who has motion control.

PROG-040 PAUSE Already locked by other task

- **Cause:** Motion control for the specified group was already reserved by another program.
  - **Remedy:** Check the other running programs to determine who has motion control.

PROG-041 WARN mctl denied because released

- **Cause:** Motion control is released. The teach pendant currently has motion control. The robot cannot be started until motion control is obtained.
  - **Remedy:** Disable the teach pendant.

PROG-042 WARN Already released

- **Cause:** Motion control was already released.
  - **Remedy:** If you had expected that the task may have already released the group, this may not be an error. Otherwise, check UNLOCK_GROUP usage.

PROG-043 WARN Already released by you

- **Cause:** Motion control was already released by request of this program.
  - **Remedy:** If you had expected that the task may have already released the group, this may not be an error. Otherwise, check UNLOCK_GROUP usage.

PROG-044 WARN Arm has not been released yet

- **Cause:** Motion control was not released yet.
  - **Remedy:** If you had expected that the task may have already locked the group, this may not be an error. Otherwise, check LOCK_GROUP usage.

PROG-045 WARN Other than requestor released

- **Cause:** Motion control was already released by the request of another program.
  - **Remedy:** If you had expected that another task may have already released the group, this may not be an error. Otherwise, check UNLOCK_GROUP usage.

PROG-046 PAUSE TP is enabled while running (%s^7)

- **Cause:** The teach pendant was enabled while the program is executing.
  - **Remedy:** Disable the teach pendant and resume the program.

PROG-047 PAUSE TP is disabled while running (%s^7)

- **Cause:** The teach pendant was disabled while the program is executing.
  - **Remedy:** Enable the teach pendant and use shift-FWD to resume execution.

PROG-048 PAUSE Shift released while running (%s^7)

- **Cause:** The shift key was released while the program is executing.
  - **Remedy:** Hold the shift key and press the FWD key to resume execution.

PROG-049 WARN Cannot release, robot moving

- **Cause:** Motion control cannot be released because the robot is moving.
  - **Remedy:** Check the status of robot motion.

PROG-050 WARN Abort still in progress

- **Cause:** The program is in the process of being aborted.
  - **Remedy:** Wait a second. If this error continues to occur, perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your

FANUC
Robotics technical representative.

PROG-051 WARN Cannot skip the return stmt

- **Cause:** The specified lines to which a move was attempted exceed the number of lines in the program.
- **Remedy:** Check the line number.

PROG-052 ABORT Process is aborted while executing

- **Cause:** The user application task was forced to abort while the application is executing. The AMR may not have been completely processed.
- **Remedy:** This requires no special action for the user.

PROG-053 ABORT User AX is not running

- **Cause:** The user application task was not executed.
- **Remedy:** Start the user application task before executing the application.

Back to top

PWD Error Codes

PWD-001 NONE Login (%s) Install

- **Cause:** A user with Install level access logged in.
- **Remedy:** Status message only.

PWD-002 NONE Logout (%s) Install

- **Cause:** A user with Install level access logged out.
- **Remedy:** Status message only.

PWD-003 NONE Login (%s) Setup

- **Cause:** A user with Setup level access logged in.
- **Remedy:** Status message only.

PWD-004 NONE Logout (%s) Setup

- **Cause:** A user with Setup level access logged out.
- **Remedy:** Status message only.

PWD-005 NONE Login (%s) Program

- **Cause:** A user with Program level access logged in.
- **Remedy:** Status message only.

PWD-006 NONE Logout (%s) Program

- **Cause:** A user with Program level access logged out.
  - **Remedy:** Status message only.

PWD-007 NONE Password Timeout (%s)

- **Cause:** A user was logged out because of a password timeout.
  - **Remedy:** Log in, if required. Adjust the timeout value if it is too short.

PWD-008 NONE Create program %s.TP

- **Cause:** A teach pendant program was created.
  - **Remedy:** Status message only.

PWD-009 NONE Delete program %s.TP

- **Cause:** A teach pendant program was deleted.
  - **Remedy:** Status message only.

PWD-010 NONE Rename %s.TP as %s.TP

- **Cause:** A teach pendant program was renamed.
  - **Remedy:** Status message only.

PWD-011 NONE Set %s.TP subtype from %s to %s

- **Cause:** A teach pendant program subtype was changed. For example, a .TP program was changed to a Macro (.MR).
  - **Remedy:** Status message only.

PWD-012 NONE Set %s.TP comment

- **Cause:** A teach pendant program comment was edited.
  - **Remedy:** Status message only.

PWD-013 NONE Set %s.TP group mask

- **Cause:** The group mask of a teach pendant program was changed.
  - **Remedy:** Status message only.

PWD-014 NONE Set %s.TP write protect on

- **Cause:** Write protection was enabled for the program. This helps prevent mistaken edits of the program.
  - **Remedy:** Status message only.

PWD-015 NONE Set %s.TP write protect off

- **Cause:** Write protection was disabled for the program. The program can be edited.
  - **Remedy:** Status message only.

PWD-016 NONE Set %s.TP ignore pause on

- **Cause:** The ignore pause feature was enabled for the program.
  - **Remedy:** Status message only.

PWD-017 NONE Set %s.TP ignore pause off

- **Cause:** The ignore pause feature was disabled for the program.
  - **Remedy:** Status message only.

PWD-018 NONE Write line %d, %s.TP

- **Cause:** A teach pendant program line was edited.
  - **Remedy:** Status message only.

PWD-019 NONE Delete line %d, %s.TP

- **Cause:** A teach pendant program line was deleted.
  - **Remedy:** Status message only.

PWD-020 NONE Write pos %d, %s.TP

- **Cause:** A teach pendant program position was recorded.
  - **Remedy:** Status message only.

PWD-021 NONE Delete pos %d, %s.TP

- **Cause:** A teach pendant program position was deleted.
  - **Remedy:** Status message only.

PWD-022 NONE Renumber pos %d as %d, %s.TP

- **Cause:** A teach pendant program position number was changed.
  - **Remedy:** Status message only.

PWD-023 NONE Set application data %s.TP

- **Cause:** For some tool products, a teach pendant program may contain application related data. This message indicates the data has changed.
  - **Remedy:** Status message only.

PWD-024 NONE Delete application data %s.TP

- **Cause:** For some tool products, a teach pendant program may contain application related data. This message indicates some data was deleted.
  - **Remedy:** Status message only.

PWD-025 NONE Load %s

- **Cause:** The named file was loaded.
  - **Remedy:** Status message only.

PWD-026 NONE Load %s as Program %s

- **Cause:** The named file was loaded. The program name may differ from the file name.
  - **Remedy:** Status message only.

PWD-027 NONE Edit %s Sch %d %s

- **Cause:** A schedule was edited. Press HELP for more information.
  - **Remedy:** Status message only.

PWD-028 NONE Copy %s Sch %d to %d

- **Cause:** The data in a schedule was copied to another schedule.
  - **Remedy:** Status message only.

PWD-029 NONE Clear %s Sch %d

- **Cause:** The schedule was cleared, meaning the values were set to zero.
  - **Remedy:** Status message only.

PWD-030 NONE (%s to %s)%s

- **Cause:** This message is used to provide detailed information for PWD-027. For example: PWD -027 Edit Weld Sch 1 Voltage PWD -030 (24.0 to 25.0) Volts
  - **Remedy:** Status message only.

PWD-031 WARN QUICK MENUS forced

- **Cause:** The Operator password level does not have access to the FULL MENUS. Either a timeout occurred or a user logged out.
  - **Remedy:** Press the TP MENUS hardkey and select SETUP PASSWORDS. Log in with either the Install, Setup, or Program password level. Press the TP FCTN hardkey and select QUICK/FULL MENUS to return to FULL MENUS.

Back to top

QMGR Error Codes

QMGR-001 WARN Queue is full

- **Cause:** An attempt was made to add entry to a queue when the queue was full.
  - **Remedy:** Use GET_QUEUE to remove entries or use a larger value for queue size in the INIT_QUEUE call.

QMGR-002 WARN Queue is empty

- **Cause:** An Attempt to use GET_QUEUE when there are no entries in the queue This is the normal result when no entries have been added or all have been removed by previous calls.
  - **Remedy:** No remedy is required.

QMGR-003 WARN Bad sequence no

- **Cause:** A bad sequence_no value is used in an INSERT_QUEUE or DELETE_QUEUE call. The value may be less than 1 or greater than the sequence number of the last entry in the queue.
  - **Remedy:** Correct the value

QMGR-004 WARN Bad n_skip value

- **Cause:** n_skip parameter in COPY_QUEUE call is less than zero
  - **Remedy:** Use zero or a positive value

Back to top

ROUT Error Codes

ROUT-022 PAUSE Bad index in ORD

- **Cause:** Incorrect number is specified for ORD builtin routine.
  - **Remedy:** Specify a number less than the string length.

ROUT-023 PAUSE Bad index in SUBSTR

- **Cause:** Incorrect number is specified for SUBSTR builtin routine.
  - **Remedy:** Specify a number less than the string length.

ROUT-024 PAUSE SUBSTR length less than 0

- **Cause:** Negative number is specified for length argument for SUBSTR builtin routine.
  - **Remedy:** Specify a positive number.

ROUT-025 ABORT Illegal semaphore number

- **Cause:** Incorrect number is specified for semaphore id.
  - **Remedy:** Specify a number between 1 and 32.

ROUT-026 WARN Illegal group number

- **Cause:** Invalid group number is specified.
  - **Remedy:** Specify existing group number.

ROUT-027 WARN String size not big enough

- **Cause:** Specified string variable does not have enough room to hold the return data.
  - **Remedy:** Specify larger size string variable.

ROUT-028 ABORT Illegal file attribute number

- **Cause:** Incorrect file attribute id was specified.

- **Remedy:** Specify correct file attribute id.

ROUT-029 ABORT Illegal file attribute value

- **Cause:** Incorrect file attribute value was specified.
  - **Remedy:** Specify correct attribute value.

ROUT-030 WARN Non existent register number

- **Cause:** A non-existent register number is specified.
  - **Remedy:** Specify a correct register number.

ROUT-031 WARN Illegal register type

- **Cause:** Incorrect register type is specified.
  - **Remedy:** Specify the correct register type for the attempted operation.

ROUT-032 ABORT Position type mismatch

- **Cause:** Position type is not correct for the operation.
  - **Remedy:** Specify correct position type.

ROUT-033 ABORT Illegal attribute type

- **Cause:** Illegal attribute id was specified.
  - **Remedy:** Specify correct attribute id.

ROUT-034 WARN Not a TPE program

- **Cause:** A non-tpe is specified.
  - **Remedy:** Specify a program name other than a Karel program.

ROUT-035 WARN Value is out of range

- **Cause:** The specified value is out of range.
  - **Remedy:** Specify a value within the range.

ROUT-036 ABORT Illegal port id value

- **Cause:** Incorrect port id was used
  - **Remedy:** Specify correct port id.

ROUT-037 ABORT Bad TPE header size

- **Cause:** Value used in SET_HEAD_TPE for bfr_size is invalid.
  - **Remedy:** Use buffer size in the range 1-255.

ROUT-038 PAUSE Uninitialized TPE position

- **Cause:** Attempt to access position data or type from TPE program when the position has not been recorded.
  - **Remedy:** Record position data using the TPP TOUCHUP function

ROUT-039 WARN Executing motion exists

- **Cause:** Cannot unlock group while motion is executing.
  - **Remedy:** Wait until executing motion has completed.

ROUT-040 WARN Stopped motion exists

- **Cause:** Cannot unlock group while stopped motion exists.
  - **Remedy:** Resume stopped motion and wait until motion has completed or cancel stopped motion.

ROUT-041 ABORT Dym. disp. var. not static

- **Cause:** Variable displayed for dynamic display is not a static variable. Parameter may be a local or constant. Neither of these is permitted as the displayed variable in INI_DYN_DIS calls.
  - **Remedy:** Copy constant or local variable to static variable and use this ININI_DYN_DIS* call.

Back to top

SCIO Error Codes

SCIO-016 WARN Prog uses un-installed option.

- **Cause:** The TPP program being loaded uses an option which is not installed on the controller where the program is being loaded (target controller).
  - **Remedy:** Determine what options are installed on the controller on which the program was saved (source controller) and are not installed on the target controller. Then, on the source controller, check which of these is used in the program. Assuming the option(s) are authorized for the target controller, install the necessary options. If some of these options are not authorized, it ay be necessary to remove uses of the unauthorized option uses and re-save the program on the source controller.

SCIO-020 WARN LBL[%d] exists in line %d:

- **Cause:** This label number exists in another line.
  - **Remedy:** Select another label number.

Back to top

SRVO Error Codes

SRVO-001 SERVO Operator panel E-stop

- **Cause:** The operator panel emergency stop push button is pressed.
  - **Remedy:** Twist the operator panel emergency stop push button clockwise to release. Press reset.

SRVO-002 SERVO Teach pendant E-stop

- **Cause:** The teach pendant emergency stop push button is pressed.
  - **Remedy:** Twist the teach pendant emergency stop push button clockwise to release. Press reset.

SRVO-003 SERVO Deadman switch released

- **Cause:** The teach pendant deadman switch is released while the teach pendant is enabled.
  - **Remedy:** Press teach pendant deadman switch. Press reset.

SRVO-004 SERVO Fence open

- **Cause:** FENCE1 and FENCE2 circuit open on EMG Control PCB.
  - **Remedy:** Determine the cause of FENCE1 and FENCE2 open circuit and correct. Press reset.

SRVO-005 SERVO Robot overtravel

- **Cause:** A Robot overtravel limit switch, is pressed.
  - **Remedy:** To determine which axis is overtraveled:
    1. Press MENUS.
    2. Select MANUAL FCTNS.
    3. Press F1, [TYPE].
    4. Select OT_RELEASE Menu. The axis that is overtraveled will display TRUE in
    either OT_MINUS or OT_PLUS.
    5. Move the cursor to the OT PLUS or OT MINUS value of the axis in overtravel.
    6. Press F2, RELEASE. The value of the overtraveled axis should change back to
    FALSE.
    7. Press and hold down the SHIFT key until you have completed steps a through d.
    a. Press RESET and wait for servo power.
    b. Press COORD until you select the JOINT coordinate system.
    c. Continuously press and hold the DEADMAN switch and turn the teach
    pendant ON/OFF switch to ON.
    d. Jog the overtraveled axis off the overtravel switch. When you have finished jogging, you can release the SHIFT key.
    8. Turn the teach pendant ON/OFF switch to OFF and release the DEADMAN
    switch.
    9. Check CRM1 connection on axis control PCB if the robot is not in an actual
    overtravel condition. **NOTE:** If you accidently release the SHIFT key during this
    procedure, you will need to repeat Step 7.

SRVO-006 SERVO Hand broken

- **Cause:** The hand broken (*HBK) robot input is asserted.
  - **Remedy:** If using *HBK input, determine the cause of the error and correct. If not, check the position of the *HBK jumper on the axis control

PCB; if on side A, *HBK is checked, if on side B, *HBK is not checked. *HBK originates on the Axis Control PCB.

SRVO-007 SERVO External emergency stops

- **Cause:** The external emergency stop push button is pressed.
  - **Remedy:** If using external emergency stop, clear source of fault, and press reset. If not, check wiring at EMGIN1, EMGIN2, and EMGINC on EMG Control PCB. Check for 100 VAC input to the EMG Control PCB.

SRVO-008 SERVO Brake fuse blown

- **Cause:** The brake fuse is blown on the EMG Control PCB. The FALM light on the EMG Control PCB should also be lit.
  - **Remedy:** Replace fuse on EMG Control PCB. Also see SRVO-018 Brake abnormal.

SRVO-009 SERVO Pneumatic pressure alarm

- **Cause:** The pneumatic pressure (PPABN) robot input is asserted.
  - **Remedy:** If using pneumatic pressure input clear source of fault, press reset. If pneumatic pressure is not used set $PARAM_GROUP[x].$PPABN_ENBL system variable to FALSE. PPABN originates on the Axis Control PCB.

SRVO-010 SERVO Belt broken

- **Cause:** The belt broken robot digital input (RDI7) is asserted.
  - **Remedy:** If using belt broken detection, clear source of fault, press reset. Robot inputs/outputs originate on the Axis Control PCB. Check system variable $PARAM_GROUP.$BELT_ENABLE.

SRVO-011 SERVO TP released while enabled

- **Cause:** Teach pendant was disconnected while it was enabled.
  - **Remedy:** Re-connect the teach pendant, disable the teach pendant, and then disconnect the teach pendant. Note that if the teach pendant emergency stop is pressed when disconnecting the teach pendant, it will be necessary to re-connect to clear the SRVO-002 alarm.

SRVO-012 SERVO Power failure recovery

- **Cause:** Normal power on (hot start).
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SRVO-013 SYSTEM Srvo module config changed

- **Cause:** The configuration of digital servo modules has changed.
  - **Remedy:** Re-configure system with new digital servo module changes. Cycle power.

SRVO-014 WARN Fan motor abnormal

- **Cause:** Card rack fan motor overheat.
  - **Remedy:** Check and/or replace defective fan.

SRVO-015 SERVO System over heat

- **Cause:** Overheat sensor on backplane closed.
  - **Remedy:** The cabinet overheat sensor is located on the backplane. If the internal cabinet temperature is greater than 65 degrees Centigrade, check the cabinet fans for proper operation. Replace the backplane if cabinet temperature is within specification.

SRVO-016 SERVO Cooling water volume drop

- **Cause:** Cooling water volume dropped (L1000 only).
  - **Remedy:** Determine the cause of the problem and repair.

SRVO-017 SERVO No robot internal mirror

- **Cause:** No robot internal mirror (L1000 only).
  - **Remedy:** Determine the cause of the problem and repair.

SRVO-018 SERVO Brake abnormal

- **Cause:** The FET current for brake exceeded the specification.
  - **Remedy:** Check brake for zero or abnormally low impedance. Then check the brake cable. Then check 200VAC. Then check servo amplifier or emergency stop control PCB if brake ports are used.

SRVO-019 SERVO SVON input

- **Cause:** SVON (Servo ON/OFF switch) input asserted.
  - **Remedy:** Determine the cause to input SVON and repair.

SRVO-020 SERVO SRDY off (TP)

- **Cause:** The teach pendant cable is disconnected or a momentary break occurred in any one of the TP emergency stop circuits; TP emergency stop, deadman, or fence.
  - **Remedy:** Check the teach pendant cable and connections.

SRVO-021 SERVO SRDY off/Door open (G:%d A:%d)

- **Cause1:** The axis control asserts *MCON signal to servo amplifier, the servo amplifier asserts *DRDY. If *DRDY can not be asserted and the servo amplifier can not determine the problem, this alarm occurs.
  - **Remedy1:** Check the voltage at 100A and 100B, if this voltage is below 85V, determine the cause and repair. Check the cables and connections between servo amplifier and axis control PCB. Replace Servo Interface (SIF) module on axis control PCB. Replace the servo amplifier.
    - **Cause2:** The controller door is open.
      - **Remedy2:** Close the controller door.

SRVO-022 SERVO SRDY on (Group:%d Axis:%d)

- **Cause:** The axis control asserts *MCON signal to servo amplifier, the servo amplifier asserts *DRDY. If *DRDY is already asserted, this alarm occurs.
    - **Remedy:** Check the cables and connections between servo amplifier and axis control PCB. Replace Servo Interface (SIF) module on axis control PCB. Replace the servo amplifier.

SRVO-023 SERVO Stop error excess(G:%d A:%d)

- **Cause:** When the robot is at rest servo error is too big, greater than acceptable stop error tolerance.
    - **Remedy:** If the robot is loaded beyond specification, the torque necessary to decelerate a overloaded motor may cause this alarm to occur. Check the three phase input to the servo amplifier for voltage within specification; 170 - 253 VAC. Also, check for balanced voltage between all three phases. Check the cables and connections between servo amplifier and axis control PCB. Replace the Servo Interface (SIF) module on axis control PCB. Replace the servo amplifier.

SRVO-024 SERVO Move error excess(G:%d A:%d)

- **Cause:** The servo error is too big when the the robot is moving, or if the robot moves when it is supposed to be stopped. The servo error in this case is greater than acceptable move error tolerance
    - **Remedy:** Same as SRVO-023 Stop error excess.

SRVO-025 SERVO Motn dt overflow (G:%d A:%d)

- **Cause:** The motion command exceeded specification. Internal motion error.
    - **Remedy:** Perform a cold start:
      1. Turn off the robot.
      2. On the teach pendant, press and hold the SHIFT and RESET keys.
      3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
      not cleared, document the events that led to the error and call your FANUC
      Robotics technical representative.

SRVO-026 WARN Motor speed limit(G:%d A:%d)

- **Cause:** Motor can not rotate as fast as the calculated speed required for the current motion.
    - **Remedy:** This is just a notification. However, you should attempt to eliminate this error and not repeat the circumstances that led up to it.

SRVO-027 WARN Robot not mastered(Group:%d)

- **Cause:** System variable $master_done set FALSE.
    - **Remedy:** Master robot.

SRVO-028 STOP Servo reset (Group:%d)

- **Cause:** No longer occurs.
    - **Remedy:** N/A

SRVO-029 STOP Robot calibrated (Group:%d)

- **Cause:** No longer occurs.
  - **Remedy:** N/A

SRVO-030 SERVO Brake on hold (Group:%d)

- **Cause:** This alarm occurs when HOLD is pressed with brake on hold option turned on.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SRVO-031 SERVO User servo alarm (Group:%d)

- **Cause:** User servo alarm posted by the user.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SRVO-032 STOP Force follow-up end (Grp:%d)

- **Cause:** No longer occurs.
  - **Remedy:** N/A

SRVO-033 WARN Robot not calibrated(Grp:%d)

- **Cause:** System variable $calibrate set FALSE.
  - **Remedy:** Calibrate the robot.

SRVO-034 WARN Ref pos not set (Group:%d)

- **Cause:** Reference position has not been set when quick mastering.
  - **Remedy:** Quick mastering may not be possible. Fixture or zero master.

SRVO-035 WARN Joint speed limit(G:%d A:%d)

- **Cause:** Joint can not rotate as fast as the calculated speed required for the current motion.
  - **Remedy:** This is just a notification. However, every attempt should be made to eliminate this error.

SRVO-036 SERVO Inpos time over (G:%d A:%d)

- **Cause:** Robot is not in position for the specified period of time.
  - **Remedy:** Check if the robot is loaded beyond specification. The torque necessary to decelerate a overloaded motor may cause this alarm to occur. Check the three phase input to the servo amplifier for voltage within specification; 170 - 253 VAC. Also, check for balanced voltage between all three phases. Check the cables and connections between servo amplifier and axis control PCB. Replace the Servo Interface (SIF) module on axis control PCB. Replace the servo amplifier.

SRVO-037 SERVO IMSTP input (Group:%d)

- **Cause:** IMSTP (immediate stop) UOP input asserted.
  - **Remedy:** If using UOP, determine the cause and repair. If not using UOP, select the I/O menus and zero UOP mapping.

SRVO-038 SERVO Pulse mismatch (G:%d A:%d)

- **Cause:** Pulse counts at power down and at power up are mismatch
  - **Remedy:** This feature is only available after core software version V3.06P. If your software version is V3.06P or V3.06PA set $MCR.$SPC_RESET true from the teach pendant and remaster the robot. If your software version is V3.06PB or greater, press RES_PCA (F3) softkey in the SYSTEM Master/Cal window, and remaster the robot. If this problem occurs repeatedly, replace the pulse coder.

SRVO-039 SERVO Motor speed excess(G:%d A:%d)

- **Cause:** CMC cannot work because the calculated motor speed exceeded specification
  - **Remedy:** Reduce the motion speed or disable CMC.

SRVO-040 WARN Mastered at mark pos(G:%d)

- **Cause:** Zero position master is done with mark position (not with zero position).
  - **Remedy:** This message is only for S-420iR. S-420iR has the mark at non-zero position for J2 and J3. Zero position master is not done with zero pos for S-420iS. Confirm the position of each axis to be at mark position. If the robot is not S-420iR, $SCR_GRP.$robot_model may be wrong. Set correct $SCR_GRP.$robot_model.

SRVO-041 SERVO MOFAL alarm (Grp:%d Ax:%d)

- **Cause:** The motion command after the ramping algorithm in servo software exceeded one word.
  - **Remedy:** Internal motion error. Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

SRVO-042 SERVO MCAL alarm(Group:%d Axis:%d)

- **Cause:** The servo amplifier magnetic contactor (MCC) is welded closed.
  - **Remedy:** If this alarm occurs with a SRVO-049 OHAL1, turn off the controller power for fifteen seconds and turn on again. Check the cable between the servo amplifier and axis control PCB. Replace the servo amplifier.

SRVO-043 SERVO DCAL alarm(Group:%d Axis:%d)

- **Cause:** The regenerative energy produced by the motor, exceeded specification.
  - **Remedy:** If a 4 is indicated on the servo amplifier LED, a DCSW condition exists. DCSW alarm occurs when the regenerative transistor is on for one second or longer. To repair a DCSW, replace the servo amp. If problem persists, the load of the robot may exceed the specification. If a 5 is indicated on the servo amplifier LED, a DCOH

condition exists. DCOH alarm occurs when the regenerative resistor overheats and is sensed by the thermostat. The average regenerative energy is excessive, relax the operating conditions. If using a separate regenerative discharge unit, check the wiring or replace.

SRVO-044 SERVO HVAL alarm(Group:%d Axis:%d)

- **Cause:** The DC voltage on the main power circuit of the servo amplifier exceeded specification.
  - **Remedy:** Check the three phase voltage to the servo amplifier input. It should not exceed 253 VAC phase-to-phase. If the load on the robot exceeds the specification, this alarm could occur. If using a separate regenerative discharge unit, check the wiring or replace. Replace the servo amplifier. For auxiliary axes, the operating condition (duty cycle) may not be appropriate for the specification of the motor or amplifier. If the duty cycle can not be reduced, select a larger motor and amplifier.

SRVO-045 SERVO HCAL alarm(Group:%d Axis:%d)

- **Cause:** The current in the main power circuit of the servo amplifier exceeded specification.
  - **Remedy:** Disconnect the motor power wires from the servo amplifier and turn on power. If an HCAL occurs, replace the transistor module or servo amplifier. Measure the resistance between GND and U, V, W individually on the cable terminals. If shorted, determine if the cable or motor is bad. Check the resistance between U-V, V-W, and W-U using a measuring instrument sensitive enough to detect small resistances at the cable terminations. If the resistances are the same replace the servo amplifier. If the resistances are different, determine if the cable or motor is bad. If the problem persists, replace the SIF module on the axis control for the defective axis.

SRVO-046 SERVO OVC alarm (Group:%d Axis:%d)

- **Cause:** The average current calculated by the servo software exceeded specification.
  - **Remedy:** Make sure the robot is not loaded beyond specification. Check input power to the servo amplifier. It should be greater than 170 VAC phase-to-phase. Replace SIF module on the axis control PCB.

SRVO-047 SERVO LVAL alarm(Group:%d Axis:%d)

- **Cause:** The DC voltage on the main power circuit of the servo amplifier is lower than the specification even though MCC is on.
  - **Remedy:** If a 2 is indicated on the servo amplifier LED, the 5 VDC is 4.6 volts. volts or less. Check input power to the servo amplifier. It should be greater than 170 VAC phase-to-phase. Replace the servo amplifier if the input power is correct. If a 3 is indicated on the servo amplifier LED, the main power is too low. Check input power to the servo amplifier. It should be greater than 170 VAC phase-to- phase. Replace the servo amplifier if the input power is correct. Check to make the circuit breaker is not off. If a 7 is indicated on the servo amplifier LED, MCC is welded closed.

SRVO-048 SERVO MOH alarm (Group:%d Axis:%d)

- **Cause:** Never occurs on R-J3 Robot.

- **Remedy:** None applicable.

SRVO-049 SERVO OHAL1 alarm (Grp:%d Ax:%d)

- **Cause:** The servo amplifier overheated.
  - **Remedy:** If the robot is overloaded or the duty cycle exceeds specification, this alarm occurs. Check regenerative discharge transistor Q1. Check the thermostat on the servo amplifier after the servo amplifier has cooled. It should not be open. If the problem persists, replace the servo amplifier. Check controller cabinet fans for blocked filters, clean if necessary.

SRVO-050 SERVO Collision Detect alarm (G:%d A:%d)

- **Cause:** The servo software detected a disturbance torque that was too high, and tripped a collision detection alarm.
  - **Remedy:** Reset the robot by using the teach pendant reset and JOG the robot away from any obstruction. If no collision, the load on the robot may exceed the specification. Check input power to the servo amplifier. It should be greater than 170 VAC phase-to-phase. Also check the voltage between U-V, V-W, and U-W. Each should measure the same (~210VAC).

SRVO-051 SERVO CUER alarm(Group:%d Axis:%d)

- **Cause:** The feedback current is abnormal.
  - **Remedy:** Replace the SIF module on the axis control PCB. Replace the servo amplifier.

SRVO-052 WARN Discharge excess (Amp:%d)

- **Cause:** NOT used
  - **Remedy:** N/A

SRVO-053 WARN Disturbance excess(G:%d A:%d)

- **Cause:** Disturbance estimated in the software exceed the threshold value. There is the possibility that the load held in the wrist exceed the robot specification.
  - **Remedy:** Reduce the load into the robot spec.

SRVO-054 SERVO DSM memory error (DS:%d)

- **Cause:** The DSP module program memory is defective.
  - **Remedy:** Replace the DSP module.

SRVO-055 SERVO FSSB com error 1 (G:%d A:%d)

- **Cause:** FSSB communication error from SRVO to SLAVE occurred.
  - **Remedy:** Check FSSB hardware connection.

SRVO-056 SERVO FSSB com error 2 (G:%d A:%d)

- **Cause:** FSSB communication error from SLAVE to SRVO occurred.

- **Remedy:** Check FSSB hardware connection.

SRVO-057 SERVO FSSB disconnect (G:%d A:%d)

- **Cause:** N/A
  - **Remedy:** N/A

SRVO-058 SERVO FSSB init error (N:%d)

- **Cause:** FSSB communication error occurred during initialization.
  - **Remedy:** Check FSSB hardware connection.

SRVO-059 SERVO Servo amp init error

- **Cause:** Servo amplifier initialization failed.
  - **Remedy:** Check the servo amplifier or connection of the servo amplifier.

SRVO-061 SERVO CKAL alarm(Group:%d Axis:%d)

- **Cause:** The clock for the rotation counter in the pulse coder is abnormal.
  - **Remedy:** If this alarm occurs along with a SRVO-068 DTERR, SRVO-069 CRCERR, or SRVO-070 STBERR, disregard this alarm and refer to the other three alarm remedies. Replace the pulse coder or motor and master the robot.

SRVO-062 SERVO BZAL alarm(Group:%d Axis:%d)

- **Cause:** The battery voltage for the pulse coder is zero volts.
  - **Remedy:** If this alarm occurs along with a SRVO-068 DTERR, SRVO-069 CRCERR, or SRVO-070 STBERR, disregard this alarm and refer to the other three alarm remedies. If SRVO-047 LVAL occurs before this alarm, batteries are drained to zero. Replace the pulse coder batteries and master the robot. If no SRVO-047 LVAL occurs before, check the battery cables to the motors. You may have to reset the pulse coder to clear this alarm. Refer to the SPC_RESET procedure in SRVO-038 and cycle the controller power. The controller may come back up with a SRVO-038 and require a second SPC_RESET.

SRVO-063 SERVO RCAL alarm(Group:%d Axis:%d)

- **Cause:** The built-in rotation counter on the pulse coder is abnormal.
  - **Remedy:** If this alarm occurs along with a SRVO-068 DTERR, SRVO-069 CRCERR, or SRVO-070 STBERR, disregard this alarm and refer to the other three alarm remedies. Replace the pulse coder or motor and master the robot.

SRVO-064 SERVO PHAL alarm(Group:%d Axis:%d)

- **Cause:** The relationship between the analog signals on the pulse coder are abnormal.
  - **Remedy:** If this alarm occurs along with a SRVO-068 DTERR, SRVO-069 CRCERR, or SRVO-070 STBERR, disregard this alarm and refer to the other three alarm remedies. Replace the pulse coder or motor and master the robot.

SRVO-065 WARN BLAL alarm(Group:%d Axis:%d)

- **Cause:** The pulse coder batteries are low.
  - **Remedy:** If this alarm occurs along with a SRVO-068 DTERR, SRVO-069 CRCERR, or SRVO-070 STBERR, disregard this alarm and refer to the other three alarm remedies. Replace the pulse coder batteries while controller power is turned on.

SRVO-066 SERVO CSAL alarm(Group:%d Axis:%d)

- **Cause:** The pulse coder ROM checksum data are abnormal.
  - **Remedy:** If this alarm occurs along with a SRVO-068 DTERR, SRVO-069 CRCERR, or SRVO-070 STBERR, disregard this alarm and refer to the other three alarm remedies. Replace the pulse coder or motor and master the robot.

SRVO-067 SERVO OHAL2 alarm (Grp:%d Ax:%d)

- **Cause:** The pulse coder or motor overheated.
  - **Remedy:** If this alarm occurs along with a SRVO-068 DTERR, SRVO-069 CRCERR, or SRVO-070 STBERR, disregard this alarm and refer to the other three alarm remedies. If the load on the robot or duty cycle exceeds the specification, this alarm will occur. Allow the motor to cool. If the alarm stills occurs, replace the pulse coder or motor.

SRVO-068 SERVO DTERR alarm (Grp:%d Ax:%d)

- **Cause1:** The axis control PCB sent the request signal, but did not receive serial data from the pulse coder.
  - **Remedy1:** Check pulse coder cables. Replace the SIF module on the axis control PCB. Replace the DSM module on the axis control PCB. Replace the pulse coder. If a serial pulse coder is plugged into a line tracking port, this alarm will occur. Check axis control PCB hardware configuration.
    - **Cause2:** The memory card interface (with an installed memory card) is plugged into the ER-2 printed circuit board while the controller is running and the ER-2 board is connected to the PLC.
      - **Remedy2:** Plug the memory card interface into a different slot. Or, connect the memory card interface directly to the backplane without using a printed circuit board.

SRVO-069 SERVO CRCERR alarm (Grp:%d Ax:%d)

- **Cause:** The serial data from the pulse coder changed during communication to the axis control PCB.
  - **Remedy:** Check pulse coder cables. Make sure the cable shields are grounded. Replace the SIF module on the axis control PCB. Replace the DSM module on the axis control PCB. Replace the axis control PCB. Replace the pulse coder.

SRVO-070 SERVO STBERR alarm (Grp:%d Ax:%d)

- **Cause:** The communication stop and start bits are abnormal.
  - **Remedy:** Check pulse coder cables. Replace the SIF module on the axis control PCB. Replace the DSM module on the axis control PCB. Replace the pulse coder.

SRVO-071 SERVO SPHAL alarm (Grp:%d Ax:%d)

- **Cause:** The feedback velocity exceeds specification.
  - **Remedy:** If this alarm occurs with another pulse coder alarm, refer to the remedy of the other alarm first. If no other alarms, the robot load may exceed the specification. If the load is within specification, replace the serial pulse coder or motor.

SRVO-072 SERVO PMAL alarm(Group:%d Axis:%d)

- **Cause:** The interpolation circuits of the pulse coder are abnormal.
  - **Remedy:** If this alarm occurs along with a SRVO-068 DTERR, SRVO-069 CRCERR, or SRVO-070 STBERR, disregard this alarm and refer to the other three alarm remedies. Replace the pulse coder and master the robot.

SRVO-073 SERVO CMAL alarm(Group:%d Axis:%d)

- **Cause:** Incorrect position data detected in the pulse coder, or abnormal pulse coder data caused by noise.
  - **Remedy:** If this alarm occurs along with a SRVO-068 DTERR, SRVO-069 CRCERR, or SRVO-070 STBERR, disregard this alarm and refer to the other three alarm remedies. Master the robot. Check and strengthen the shield of the pulse coder cable.

SRVO-074 SERVO LDAL alarm(Group:%d Axis:%d)

- **Cause:** LEDs in the pulse coder are disconnected.
  - **Remedy:** If this alarm occurs along with a SRVO-068 DTERR, SRVO-069 CRCERR, or SRVO-070 STBERR, disregard this alarm and refer to the other three alarm remedies. Replace the pulse coder and master the robot.

SRVO-075 WARN Pulse not established(G:%d A:%d)

- **Cause:** The pulse coder does not know its own position yet.
  - **Remedy:** Jog the axis manually by more than one motor rotation.

SRVO-081 WARN EROFL alarm (Track enc:%d)

- **Cause:** Line tracking encoder overflow due to high speed.
  - **Remedy:** None applicable.

SRVO-082 WARN DAL alarm(Track encoder:%d)

- **Cause:** Line tracking pulse coder disconnected.
  - **Remedy:** Check for correct axis control PCB for line tracking and proper connections. Check line tracking pulse coder cables. Replace the SIF module on the axis control PCB. Replace the DSM module on the axis control PCB. Replace the pulse coder.

SRVO-083 WARN CKAL alarm (Track enc:%d)

- **Cause:** The clock for the rotation counter in the line tracking pulse coder is abnormal.

- **Remedy:** Refer to SRVO-061 remedy.

SRVO-084 WARN BZAL alarm (Track enc:%d)

- **Cause:** The battery voltage for the line tracking pulse coder is zero volts.
- **Remedy:** Refer to SRVO-062 remedy.

SRVO-085 WARN RCAL alarm (Track enc:%d)

- **Cause:** The built-in rotation counter on the line tracking pulse coder is abnormal.
- **Remedy:** Refer to SRVO-063 remedy.

SRVO-086 WARN PHAL alarm (Track enc:%d)

- **Cause:** The relationship between the analog signals on the line tracking pulse coder are abnormal.
- **Remedy:** Refer to SRVO-064 remedy.

SRVO-087 WARN BLAL alarm (Track enc:%d)

- **Cause:** The line tracking pulse coder batteries are low.
- **Remedy:** Refer to SRVO-065 remedy.

SRVO-088 WARN CSAL alarm (Track enc:%d)

- **Cause:** The line tracking pulse coder ROM checksum data are abnormal.
- **Remedy:** Refer to SRVO-066 remedy.

SRVO-089 WARN OHAL2 alarm (Track enc:%d)

- **Cause:** The line tracking pulse coder overheated.
- **Remedy:** Refer to SRVO-067 remedy.

SRVO-090 WARN DTERR alarm (Track enc:%d)

- **Cause:** The axis control PCB sent the request signal, but did not receive serial data from the line tracking pulse coder.
- **Remedy:** Refer to SRVO-068 remedy.

SRVO-091 WARN CRCERR alarm (Track enc:%d)

- **Cause:** The serial data from the line tracking pulse coder changed during communication to the axis control PCB.
- **Remedy:** Refer to SRVO-069 remedy.

SRVO-092 WARN STBERR alarm (Track enc:%d)

- **Cause:** The communication stop and start bits for line tracking axis are abnormal.
- **Remedy:** Refer to SRVO-070 remedy.

SRVO-093 WARN SPHAL alarm (Track enc:%d)

- **Cause:** The feedback velocity exceeds specification for line tracking axis.
  - **Remedy:** Refer to SRVO-071 remedy.

SRVO-094 WARN PMAL alarm (Track enc:%d)

- **Cause:** The interpolation circuits of the pulse coder are abnormal.
  - **Remedy:** Refer to SRVO-072 remedy.

SRVO-095 WARN CMAL alarm (Track enc:%d)

- **Cause:** Line tracking encoder: Incorrect position data detected in the pulse coder, or abnormal pulse coder data caused by noise.
  - **Remedy:** Refer to SRVO-073 remedy.

SRVO-096 WARN LDAL alarm (Track enc:%d)

- **Cause:** LEDs in the pulse corder are disconnected.
  - **Remedy:** Refer to SRVO-074 remedy.

SRVO-097 WARN Pulse not established(Enc:%d)

- **Cause:** For line tracking encoder, the pulse coder does not its own position yet (due to improper installation).
  - **Remedy:** Refer to SRVO-075 remedy.

SRVO-101 SERVO Robot overtravel(Robot:%d)

- **Cause:** A Robot overtravel limit switch, is pressed.
  - **Remedy:** Select the OT_RELEASE menus. Cursor to the axis that is overtraveled, OT_MINUS or OT_PLUS is TRUE, and press RELEASE. Press reset, wait for servo power to engage, and jog the robot off the overtravel switch. Check CRM11 connection on emergency stop control PCB.

SRVO-102 SERVO Hand broken (Robot:%d)

- **Cause:** The hand broken (*HBK) robot input is asserted.
  - **Remedy:** If using *HBK input, determine the cause of the error and correct. If not, check the position of the *HBK jumper on the emergency stop control PCB; if on side A, *HBK is checked if on side B, *HBK is not checked *HBK originates on Main CPU PCB.

SRVO-103 SERVO Air pressure alarm(Rbt:%d)

- **Cause:** The pneumatic pressure (PPABN) robot input is asserted.
  - **Remedy:** If using pneumatic pressure input clear source of fault, press reset. If pneumatic pressure is not used set $PPABN_ENBL system variable to FALSE. PPABN originates on the Main CPU PCB.

SRVO-104 SERVO Welding electrode

- **Cause:** No longer occurs Welding electrode of controller. This occurs only for the R-J2 Dual arm controller.
  - **Remedy:** Contact the FANUC Robotics hotline.

SRVO-105 SERVO Door open or E.Stop

- **Cause:** Controller door is opened or E.Stop signals are detected for a quite short time or mis-wiring of hardware connection.
  - **Remedy:** Close the controller door and press RESET. If reset is not effective, correct the hardware connection.

SRVO-111 SERVO Softfloat time out(G:%d)

- **Cause:** Follow-up time is over when softfloat is ON.
  - **Remedy:** Make $SFLT_FUPTIM larger.

SRVO-112 PAUSE Softfloat time out(G:%d)

- **Cause:** Follow-up time is over when softfloat is ON.
  - **Remedy:** Make $SFLT_FUPTIM larger.

SRVO-121 SERVO Excessive acc/dec time(G:%d)

- **Cause:** Acceleration time is much longer for TurboMove case.
  - **Remedy:** Contact the FANUC Robotics hotline.

SRVO-122 SERVO Bad last ang(internal)(G:%d)

- **Cause:** Last angle update request does not match current angle.
  - **Remedy:** Contact the FANUC Robotics hotline.

SRVO-125 WARN Quick stop speed over (G:%d)

- **Cause:** Motion speed is too high to perform quick stop.
  - **Remedy:** Reduce the motion speed.

SRVO-126 WARN Quick stop error (G:%d)

- **Cause:** A program was aborted during the servo quick stop process.
  - **Remedy:** Reset the system.

SRVO-130 SERVO OHAL1 (PSM) alarm (G:%d A:%d)

- **Cause:** The servo amplifier (PMS) overheated.
  - **Remedy:** If the robot is overloaded or the duty cycle exceeds specification, this alarm occurs. Check regenerative discharge transistor Q1. Check the thermostat on the servo amplifier after the servo amplifier has cooled.

SRVO-131 SERVO LVAL (PSM) alarm (G:%d A:%d)

- **Cause:** The DC voltage on the main power circuit of the servo amplifier is lower than the specification even though MCC is on.
  - **Remedy:** If a 2 is indicated on the servo amplifier LED, the 5 VDC is 4.6 volts or less. Check input power to the servo amplifier. It should be greater than 170 VAC phase-to-phase. Replace the servo amplifier if the input power is correct. If a 3 is indicated on the servo amplifier LED, the main power is too low. Check input power to the servo amplifier. It

should be greater than 170 VAC phase-to-phase. Replace the servo amplifier if the input power is correct. Check to make the circuit breaker is not off. If a 7 is indicated on the servo amplifier LED, MCC is welded closed.

SRVO-132 SERVO HCAL (PSM) alarm (G:%d A:%d)

- **Cause:** The current in the main power circuit of the servo amplifier exceeded specification.
  - **Remedy:** Disconnect the motor power wires from the servo amplifier and turn on power. If an HCAL occurs, replace the transistor module or servo amplifier. Measure the resistance between GND and U, V, W individually on the cable terminals. If shorted, determine if the cable or motor is bad. Check the resistance between U-V, V-W, and W-U using a measuring instrument sensitive enough to detect small resistances at the cable terminations. If the resistances are the same replace the servo amplifier. If the resistances are different, determine if the cable or motor is bad. If the problem persists, replace the SIF module on the axis control for the defective axis.

SRVO-133 SERVO FSAL (PSM) alarm (G:%d A:%d)

- **Cause:** Cooling fan for Control circuit stops.
  - **Remedy:** Check or Replace the fan.

SRVO-134 SERVO DCLVAL (PSM) alarm (G:%d A:%d)

- **Cause:** Back-up charge circuit for amplifier has trouble.
  - **Remedy:** Check the cables and connections between amplifier (CN1) and MCC. Check the fuse (F1,F3) in transformer. If using a B-cabinet, replace the EMG Control printed circuit board. Replace the amplifier.

SRVO-135 SERVO FSAL alarm (G:%d A:%d)

- **Cause:** Cooling fan for Control circuit stops.
  - **Remedy:** Check or replace the fan.

SRVO-136 SERVO DCLVAL alarm (G:%d A:%d)

- **Cause:** Back-up charge circuit for amplifier has trouble.
  - **Remedy:** Check the cables and connections between amplifier (CN1) and MCC. Check the fuse (F1,F3) in transformer. If using a B-cabinet replace the EMG Control printed circuit board. Replace the amplifier.

SRVO-141 SERVO OHAL1(CNV) alarm (G:%d A:%d)

- **Cause:** Refer to SRVO-049.
  - **Remedy:** Refer to SRVO-049.

SRVO-142 SERVO OHAL1(INV) alarm (G:%d A:%d)

- **Cause:** The servo amplifier overheated.
  - **Remedy:** If the robot is overloaded or the duty cycle exceeds specification, this alarm occurs. Check the regenerative discharge transistor. Check the thermostat on the servo amplifier after the servo

amplifier has cooled. It should not be open. If the problem persists, replace the servo amplifier. Check controller cabinet fans for blocked filters; clean if necessary.

SRVO-143 SERVO PSFLAL(CNV) alarm (G:%d A:%d)

- **Cause:** Input power applied to amplifier is lost.
  - **Remedy:** Check the connections and cables of input power.

SRVO-144 SERVO LVAL(INV) alarm (G:%d A:%d)

- **Cause:** Refer to SRVO-047.
  - **Remedy:** Refer to SRVO-047.

SRVO-145 SERVO LVAL(CNV-DC) alarm(G:%d A:%d)

- **Cause:** Refer to SRVO-147.
  - **Remedy:** Refer to SRVO-147.

SRVO-146 SERVO LVAL(INV-DC) alarm(G:%d A:%d)

- **Cause:** The DC voltage of the main circuit power supply is excessively low.
  - **Remedy:** Check each interphase voltage of the three-phase voltage (200 VAC) applied to the servo amplifier. If the applied voltage is found to be 170 VAC or less, check the input power supply voltage. Replace the servo amplifier.

SRVO-147 SERVO LVAL(DCLK) alarm (G:%d A:%d)

- **Cause:** Back-up charge circuit for amplifier have trouble.
  - **Remedy:** Check the cables and connections between amplifier(CN1) and MCC. Check the fuse (F1,F3) in transformer. If using B-cabinet Replace the EMG Control printed circuit board. Replace the amplifier.

SRVO-148 SERVO HCAL(CNV) alarm (G:%d A:%d)

- **Cause:** The current in the main power circuit of the servo amplifier exceeded specification.
  - **Remedy:** Disconnect the motor power wires from the servo amplifier and turn on power. If an HCAL occurs, replace the transistor module or servo amplifier. Measure the resistance between GND and U, V, W individually on the cable terminals. If shorted, determine if the cable or motor is bad. Check the resistance between U-V, V-W, and W-U using a measuring instrument sensitive enough to detect small resistances at the cable terminations. If the resistances are the same replace the servo amplifier. If the resistances are different, determine if the cable or motor is bad. If the problem persists, replace the SIF module on the axis control for the defective axis.

SRVO-149 SERVO HCAL(INV) alarm (G:%d A:%d)

- **Cause:** Refer to SRVO-045.
  - **Remedy:** Refer to SRVO-045.

SRVO-150 SERVO FSAL(CNV) alarm (G:%d A:%d)

- **Cause:** Cooling fan for Control circuit stops.
  - **Remedy:** Check or Replace the fan.

SRVO-151 SERVO FSAL(INV) alarm (G:%d A:%d)

- **Cause:** Cooling fan for Control circuit stops.
  - **Remedy:** Check or replace the fan.

SRVO-152 SERVO IPMAL(INV) alarm (G:%d A:%d)

- **Cause:** IPM module has trouble.
  - **Remedy:** IPM might be overheated. Reset the emergency stop after approximately ten minutes. Disconnect the power lines from the terminals on the amplifier, and check the insulation of PE from U, V and W. If there are short-circuits, disconnect the motor connector power lines and check the insulation of PE from U, V and W.
    1. Replace the motor if U, V and W short-circuit with PE.
    2. Replace the power lines if U, V and W do not short-circuit with PE. Noise on
    the actual current(IR,IS) running in amplifier module might cause this alarm.
    Remove this noise such as with taking ground of sealed earth.
    3. Replace the amplifier.

SRVO-153 SERVO CHGAL(CNV) alarm (G:%d A:%d)

- **Cause:** Charge of the main circuit could not finish within specified time.
  - **Remedy:** DC link may short-circuit. Check the connections. Electric resistance to restrict charge current may be defective. Replace the wiring board.

SRVO-154 SERVO HVAL(CNV-DC) alarm (G:%d A:%d)

- **Cause:** Refer to SRVO-044.
  - **Remedy:** Refer to SRVO-044.

SRVO-155 SERVO DCAL(CNV) alarm (G:%d A:%d)

- **Cause:** Refer to SRVO-043.
  - **Remedy:** Refer to SRVO-043.

SRVO-156 SERVO IPMAL alarm (G:%d A:%d)

- **Cause:** IPM module has trouble.
  - **Remedy:** IPM might be overheated. Reset the emergency stop after approximately ten minutes. Disconnect the power lines from the terminals on the amplifier, and check the insulation of PE from U, V and W. If there are short-circuits, disconnect the motor connector power lines and check the insulation of PE from U, V and W. 1. Replace the motor if U, V and W short-circuit with PE. 2. Replace the power lines if U, V and W do not short-circuit with PE. Noise on the actual current (IR,IS) running in amplifier module might cause this alarm. Remove this noise such as with taking ground of sealed earth. Replace the amplifier.

SRVO-157 SERVO CHGAL alarm (G:%d A:%d)

- **Cause:** Charge of the main circuit could not finish within specified time.
  - **Remedy:** DC link might short-circuit. Check the connections. Electric resistance to restrict charge current might be defective. Replace the wiring board.

SRVO-160 SERVO Panel/External E-stop

- **Cause:** Either the operator panel emergency stop button was pressed, or the external emergency stop DI is input. This occurs only for R-J2 Mate.
  - **Remedy:** Twist the operator panel emergency stop button clockwise to release it.
    -If you are using external emergency stop, clear the source of the fault and press
    RESET.
    -If not, check the wiring at EMGIN1, EMGIN2, and EMGINC on the EMG Control PCB.
    Check for 100 VAC input to the EMG Control PCB.

SRVO-161 SERVO Fence open or Deadman SW

- **Cause:** The teach pendant deadman switch is released or fence circuit is open.
  - **Remedy:** Press teach pendant deadman switch or determine the cause of the fence open and
    press RESET.

SRVO-162 SERVO Deadman/Fence or Panel/External E-stop

- **Cause:** The deadman switch is released or fence circuit is open or the operator panel ESTOP button is pressed or external ESTOP signal is received.
  - **Remedy:** Remove the cause then press RESET.

SRVO-163 SYSTEM DSM hardware mismatch

- **Cause:** Different DSM (Digital Servo Module) are mounted on controller.
  - **Remedy:** Change DSM hardware to be same.

SRVO-164 SYSTEM DSM/Servo param mismatch

- **Cause:** DSM (Digital Servo Module) type is mismatched to servo parameter version.
  - **Remedy:** Change current DSP IV (4) to DSP V (5) or initialize robot library again to load correct servo parameter file.

SRVO-165 SYSTEM Panel(SVON abnormal) E-stop

- **Cause:** The operator panel emergency stop push button is pressed and mis-wiring on SVON2 or EMG2 is detected.
  - **Remedy:** Power off. Correct the wiring on SVON2 or EMG2. Power on. Twist the operator panel emergency stop push button clockwise to release. Press RESET.

SRVO-166 SYSTEM TP(SVON abnormal) E-stop

- **Cause:** The teach pendant emergency stop push button is pressed and miswiring on SVON2 or EMG2 is detected.
    - **Remedy:** Power off. Correct the wiring on SVON2 or EMG2. Power on. Twist the teach pendant emergency stop push button clockwise to release. Press RESET.

SRVO-167 SYSTEM Deadman switch (SVON abnormal)

- **Cause:** The teach pendant deadman switch is released while the teach pendant is enabled. Miswiring on SVON2 or EMG2 is detected.
    - **Remedy:** Power off. Correct the wiring on SVON2 or EMG2. Power on. Press teach pendant deadman switch. Press RESET.

SRVO-168 SYSTEM External/SVON (SVON abnormal) E-stop

- **Cause:** Refer SRVO-007 or SRVO-019. Also miswiring on SVON2 or EMG2 is detected.
    - **Remedy:** Power off. Correct the wiring on SVON2 or EMG2. Power on. Refer SRVO-007 or SRVO-019.

SRVO-171 WARN MotorSpd lim/DVC(G:%d A:%d)

- **Cause:** Motor can not rotate as fast as the calculated speed required for the current motion.
    - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SRVO-172 WARN MotorSpd lim/DVC0(G:%d A:%d)

- **Cause:** Motor can not rotate as fast as the calculated speed required for the current motion.
    - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SRVO-173 WARN MotorSpd lim/DVC1(G:%d A:%d)

- **Cause:** Motor can not rotate as fast as the calculated speed required for the current motion.
    - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SRVO-174 WARN MotorAcc lim/DVC(G:%d A:%d)

- **Cause:** Motor can not accelerate as much as the calculated acceleration required to for the current motion.
    - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SRVO-181 SERVO Mcmd input while estimating(G:%d)

- **Cause:** Robot was going to move while identifying the payload.
    - **Remedy:** Do not move the robot while identifying the payload. Press RESET.

SRVO-192 SERVO Fence open/SVON input

- **Cause:** The fence circuit is open or SVON input circuit is open.
  - **Remedy:** Close the fence circuit or SVON input circuit, and then press RESET.

SRVO-193 SERVO SVON input

- **Cause:** The SVON input circuit is open.
  - **Remedy:** Close the SVON input circuit and then press RESET.

SRVO-194 SERVO Servo disconnect

- **Cause:** Servo is disconnected.
  - **Remedy:** Connect servo and then press RESET.

SRVO-195 SERVO NTED/Servo disconnect

- **Cause:** Non Teacher Enabling Device is released or servo is disconnected.
  - **Remedy:** Press Non Teacher Enabling Device or connect servo, and then press RESET.

SRVO-196 SYSTEM Fence open/SVON input (SVON abnormal)

- **Cause:** The fence circuit is open or the SVON input circuit is open and mis-wiring on SVON is detected.
  - **Remedy:** Power off. Correct the wiring on SVON. Close the fence circuit or SVON input circuit, and then press RESET.

SRVO-197 SYSTEM SVON input (SVON abnormal)

- **Cause:** The SVON input circuit is open and mis-wiring on SVON is detected.
  - **Remedy:** Power off. Correct the wiring on SVON. Close the SVON input circuit, and then press RESET.

SRVO-198 SYSTEM External E-stop (SVON abnormal)

- **Cause:** The external emergency stop push button is pressed and mis-wiring on SVON is detected.
  - **Remedy:** Power off. Correct the wiring on SVON. If using external emergency stop, clear the source of the fault and press RESET. If not, check the wiring at EMGIN1, EMGIN2, and EMGINC on the EMG control PCB. Check for 100 VAC input to the EMG control PCB.

SRVO-199 PAUSE Control Stop

- **Cause:** Control Stop is detected.
  - **Remedy:** After this alarm, Fence open or SVON input alarm is detected. See the remedy of the next alarm.

SRVO-200 WARN Control box fan abnormal

- **Cause:** The control box fan motor has failed.
  - **Remedy:** Check and/or replace the fan.

SRVO-201 SERVO Panel E-stop or SVEMG abnormal

- **Cause:** The operator panel emergency stop push button is pressed and miswiring on SVEMG is detected. Or the operator panel emergency stop push button is pressed slowly so that the SVEMG signal is delayed.
    - **Remedy:** Check the wiring of SVEMG. If the wiring of SVEMG is not connected, correct the wiring of SVEMG. If the wiring has no problem, twist the operator panel emergency stop push button clockwise to release. Press reset.

SRVO-202 SERVO TP E-stop or SVEMG abnormal

- **Cause:** The teach pendant emergency stop push button is pressed and miswiring on SVEMG is detected. Or the teach pendant emergency stop push button is pressed slowly so that the SVEMG signal is delayed.
    - **Remedy:** Check the wiring of SVEMG. If the wiring of SVEMG is not connected, correct the wiring of SVEMG. If the wiring has no problem, twist the teach pendant emergency stop push button clockwise to release. Press reset.

SRVO-203 SYSTEM SVON input (SVEMG abnormal)

- **Cause:** N/A
    - **Remedy:** N/A

SRVO-204 SYSTEM External (SVEMG abnormal) E-stop

- **Cause:** The external emergency stop push button is pressed and miswiring on SVEMG is detected.
    - **Remedy:** Power off. Correct the wiring on SVEMG. If using external emergency stop, clear the source of the fault, and press reset. If not, check the wiring at EMGIN1, EMGIN2, and EMGINC on the EMG Control PCB. Check for 100 VAC input to the EMG Control PCB.

SRVO-205 SYSTEM Fence open (SVEMG abnormal)

- **Cause:** The fence circuit is open and miswiring on SVEMG is detected.
    - **Remedy:** Power off. Correct the wiring on SVEMG. Close the fence circuit and then press reset.

SRVO-206 SYSTEM Deadman switch (SVEMG abnormal)

- **Cause:** The teach pendant deadman switch is released while the teach pendant is enabled, and miswiring on SVEMG is detected.
    - **Remedy:** Power off. Correct the wiring on SVEMG. Power on. Press the teach pendant deadman switch. Press reset.

SRVO-207 SERVO TP switch abnormal or Door open

- **Cause:** The SVEMG signal is detected while the fence is opened and the teach pendant is enabled and Deadman switch is not released, or the controller door is opened while the fence is opened and the teach pendant is enabled and the Deadman switch is not released.
    - **Remedy:** Close the controller door. If the door is not opened, correct the wiring on SVEMG. Of correct the enable switch and deadman switch on the teach pendant and press RESET.

SRVO-208 SERVO Extended axis brake abnormal

- **Cause:** The FET current for brake of extended axis (brake number 2 or greater) exceeded the specification.
  - **Remedy:** Check brake for zero or abnormally low impedence. Then check the brake cable. Then check 200VAC. Then check servo amplifier or emergency stop control PCB if brake ports are used.

SRVO-230 SERVO Chain 1 (+24v) abnormal

- **Cause:** Single chain 1 (+24V) failure occurred on AUTO stop.
  - **Remedy:** Repair the circuit of the chain 1 (+24V) on hardware. Set TRUE to reset chain failure on maintenance/SETUP screen and push reset button on the teach pendant.

SRVO-231 SERVO Chain 2 (0v) abnormal

- **Cause:** Single chain 2 (0V) failure occurred on AUTO stop.
  - **Remedy:** Repair the circuit of the chain 1 (0V) on hardware. Set TRUE to reset chain failure on maintenance/SETUP screen and push reset button on the teach pendant.

SRVO-232 SERVO NTED input

- **Cause:** Non Teacher Enabling Device is released.
  - **Remedy:** Press Non Teacher Enabling Device and then press reset.

Back to top

SYST Error Codes

SYST-001 PAUSE HOLD button is being pressed

- **Cause:** You attempted an operation while the hold button (input) is pressed.
  - **Remedy:** Clear the hold button (input), and try the same operation.

SYST-002 PAUSE HOLD is locked by program

- **Cause:** The condition that the robot is being held is locked by the program, and it could not be cleared. If a HOLD statement is executed in a Karel program, the held condition can only be cleared by the same program using the UNHOLD statement/action, or by aborting the program. If a motion is attempted in such condition, this error message is displayed.
  - **Remedy:** Wait until the UNHOLD statement is executed by the karel program, or abort the KAREL program.

SYST-003 WARN TP is enabled

- **Cause:** The attempted operation could not be done because the teach pendant is enabled.
  - **Remedy:** Disable the teach pendant, and try the same operation again.

SYST-004 WARN SOP is enabled

- **Cause:** The attempted operation could not be done because the System Operator Panel is enabled.
  - **Remedy:** Turn the REMOTE switch on the SOP to REMOTE side, and try the same operation again.

SYST-005 WARN UOP is the master device

- **Cause:** The attempted operation could not be done because the User Operator Panel is enabled.
  - **Remedy:** Turn the REMOTE switch to local (if the operation is attempted from the SOP), or set the $RMT_MASTER system variable correctly. Refer to the *SYSTEM R-J3 Software Reference Manual* , Chapter 2 "System Variables", for more information on system variables.

SYST-006 WARN KCL is the master device

- **Cause:** The attempted operation could not be done because KCL is the master device.
  - **Remedy:** Turn the REMOTE switch to local (if the operation is attempted from the SOP), or set the $RMT_MASTER system variable correctly. Refer to the *SYSTEM R-J3 Software Reference Manual* , Chapter 2 "System Variables", for more information on system variables.

SYST-007 WARN NETWORK is the master device

- **Cause:** The attempted operation could not be done because the NETWORK command processor is the master device.
  - **Remedy:** Turn the REMOTE switch to local (if the operation is attempted from the SOP), or set the $RMT_MASTER system variable correctly. Refer to the *SYSTEM R-J3 Software Reference Manual,* Chapter 2 "System Variables", for more information on system variables.

SYST-008 WARN Nothing is the master device

- **Cause:** The system variable $RMT_MASTER is set to disable all devices. Therefore, no remote device can issue motion.
  - **Remedy:** Turn the REMOTE switch to local (if the operation is attempted from the SOP), or set the $RMT_MASTER system variable correctly. Refer to the *SYSTEM R-J3 Software Reference Manual* , Chapter 2 "System Variables", for more information on system variables.

SYST-009 WARN Safety Fence open

- **Cause:** The attempted operation could not be done because the safety fence is open.
  - **Remedy:** Close the safety fence, and try the same operation again.

SYST-010 WARN Max num task reached

- **Cause:** The number of task has reached the maximum.
  - **Remedy:** Abort one of the running task.

SYST-011 WARN Failed to run task

- **Cause:** The system has failed to run the program.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

SYST-012 WARN Not in remote

- **Cause:** Remote condition is not satisfied.
  - **Remedy:** Turn the remote switch on.

SYST-013 WARN Invalid program number

- **Cause:** The specified PNS number is not in the range of 1 to 9999.
  - **Remedy:** Specify correct program number.

SYST-014 WARN Program select failed

- **Cause:** PNS operation has failed by some reason.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

SYST-015 WARN Robot Service Request failed

- **Cause:** RSR operation has failed by some reason.
  - **Remedy:** Refer to the error cause code. Use MENU to display the Alarm Log screen.

SYST-016 WARN ENBL signal is off

- **Cause:** ENBL signal in UOP is off.
  - **Remedy:** Set ENBL signal ON.

SYST-017 WARN Single step operation effective

- **Cause:** Single step operation is effective.
  - **Remedy:** Disable single step switch.

SYST-018 WARN Continuing from different line

- **Cause:** Attempt to continue program from different line from paused line.
  - **Remedy:** Respond YES or NO in the prompt box on at the teach pendant.

SYST-019 WARN Program not selected

- **Cause:** Program has not been selected.
  - **Remedy:** Select a program from the program select menu on the teach pendant, or using PNS.

SYST-020 WARN Program not verified by PNS

- **Cause:** Program specified by PNS is different from current selected program. This error occurs in R-J2 Mate only.
  - **Remedy:** Select a correct program from the program select menu on the teach pendant.

SYST-021 WARN System not ready, press reset

- **Cause:** An error has been detected by the system.
  - **Remedy:** Press RESET to clear error condition.

SYST-022 WARN PNS not zero, cannot continue

- **Cause:** Paused program cannot be continued if PNS input ports are not zero. This error occurs in R-J2 Mate only.
  - **Remedy:** Set all PNS input ports to OFF.

SYST-023 SYSTEM Teach Pendant communication error

- **Cause:** A communication cable is broken.
  - **Remedy:** Check the teach pendant cable. Replace the cable if necessary.

SYST-024 WARN PNSTROBE is OFF. Cannot start exec

- **Cause:** Because PNSTROBE is off, prod_start could not be processed.
  - **Remedy:** Set PNSTROBE input to ON.

SYST-025 WARN Teach Pendant is different type

- **Cause:** The type of teach pendant being connected, is different from the one that was disconnected.
  - **Remedy:** Connect the same type of teach pendant as disconnected.

SYST-026 WARN System normal power up

- **Cause:** System has executed normal power startup.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SYST-027 PAUSE HOT start failed (Error:%d)

- **Cause:** HOT start has failed for one of the following reasons:
  1. Power failed during system start up.
  2. Flash ROM module was changed.
  3. A run-time error occurred.
  4. System internal error 1.
  5. System internal error 2.
  - **Remedy:** COLD start is selected automatically.

SYST-028 WARN (%s) Program timed out

- **Cause:** $PWR_HOT,$PWR_SEMI program has been aborted by the system due to time out (40sec).
  - **Remedy:** Decrease program size so that it can be executed within the time out limit.

SYST-029 PAUSE Robot was connected (Group:%d)

- **Cause:** The connect/isolate key was turn to the connect side.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SYST-030 PAUSE Robot was isolated (Group:%d)

- **Cause:** The connect/isolate key was turn to the isolate side.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SYST-031 SYSTEM F-ROM parity

- **Cause:** An error has occurred accessing FROM.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

SYST-032 WARN ENBL signal from UOP is lost

- **Cause:** ENBL input signal from UOP is lost.
  - **Remedy:** Determine and correct the cause of loss of this signal.

SYST-033 WARN SFSPD signal from UOP is lost

- **Cause:** SFSPD input signal from UOP is lost.
  - **Remedy:** Determine and correct the cause of loss of this signal.

SYST-034 WARN HOLD signal from SOP/UOP is lost

- **Cause:** HOLD input signal from SOP/UOP is lost.
  - **Remedy:** Determine and correct the cause of loss of this signal.

SYST-035 WARN Low or No Battery Power in PSU.

- **Cause:** Battery in PSU board is low in power.
  - **Remedy:** Replace the Old Battery with a new battery of same kind.

SYST-036 WARN Semi power failure recovery

- **Cause:** System did semi-hot start.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SYST-037 ABORT Key switch broken

- **Cause:** Improper input from Key switch.
  - **Remedy:** Fix the CE Sign key switch.

SYST-038 PAUSE Operation mode T1 Selected

- **Cause:** Operation mode T1 Selected.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SYST-039 PAUSE Operation mode T2 Selected

- **Cause:** Operation mode T2 Selected.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SYST-040 PAUSE Operation mode AUTO Selected

- **Cause:** Operation mode AUTO Selected.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

SYST-042 PAUSE DEADMAN defeated

- **Cause:** The mode switch was changed from T1 or T2 mode to AUTO mode and the DEADMAN was already pressed. The DEADMAN must be released when switching to AUTO mode.
  - **Remedy:** Release the DEADMAN and press RESET.

SYST-043 PAUSE TP disabled in T1/T2 mode

- **Cause:** The mode selector is in T1 or T2 and the TP ON/OFF switch is in the OFF position.
  - **Remedy:** Turn the TP ON/OFF switch to ON. Press RESET.

SYST-044 SYSTEM (Abnormal) TP disabled in T1/T2 mode

- **Cause:** The mode selector is in T1 or T2 and the TP ON/OFF switch is in the OFF position and SVON is ON. This is an abnormal condition.
  - **Remedy:** Call your FANUC Robotics technical representative.

SYST-045 PAUSE TP enabled in AUTO mode

- **Cause:** The mode selector is in AUTO and the TP ON/OFF switch is in the ON position.
  - **Remedy:** Turn the TP ON/OFF switch to OFF. Press RESET.

SYST-046 SYSTEM Control Reliable config mismatch

- **Cause:** Either 1. Control Reliable hardware exists but the option has not been loaded, or 2. The Control Reliable option has been loaded but hardware is not available.

- **Remedy:** If the option has not been loaded, load the Control Reliable option. If it has been loaded then this is a system without the Control Reliable hardware and the system must be totally reloaded WITHOUT the Control Reliable option.

SYST-047 WARN Continuing from distant position

- **Cause:** Attempt to continue the program from a distant position from the stopped position.
  - **Remedy:** Select ABORT or CONTINUE in the prompt box displayed on the teach pendant.

SYST-048 ABORT NECALC couldn't get work memory

- **Cause:** The OS couldn't give NECALC soft part enough memory.
  - **Remedy:** Please increase Controller's memory.

SYST-049 ABORT SFCALC couldn't get work memory

- **Cause:** The OS couldn't give SFCALC soft part enough memory.
  - **Remedy:** Please increase Controller's memory.

SYST-050 WARN Invalid time in trigger request

- **Cause:** Invalid time used in TG request.
  - **Remedy:** Time must be less than 6,000,000 us.

SYST-051 WARN SYTG overrun: %d %d %x %d %d

- **Cause:** Excessive time in trigger routines. The first number indicates event routine (1) or scan routine (2). The second number indicates individual overrun (1) or excessive cumulative CPU use (2). The third number indicates the event number (hexadecimal) or scan routine address. The fourth number indicates the limit (microseconds or 100ths of one percent). The fifth number indicates the time used (microseconds or 100ths of one percent).
  - **Remedy:** The event or scan routine needs to be made more efficient, scan rate reduced, or system variable values increased to permit more CPU usage.

SYST-052 WARN Trigger slot already used: %d

- **Cause:** The specified entry is already used.
  - **Remedy:** Use the cancel request to delete the old entry.

SYST-053 WARN Invalid fast_DIN no: %d

- **Cause:** The specified Fast-DIN number is invalid.
  - **Remedy:** Use a valid Fast-DIN number.

SYST-054 WARN Event-ID already used: %d

- **Cause:** The specified event ID is already in use.
  - **Remedy:** Use a unique event ID or cancel the previous request.

SYST-055 WARN Event-ID not found: %d

- **Cause:** The specified event ID is not presently in use.
  - **Remedy:** Check the event ID.

SYST-056 WARN Scan routine list full

- **Cause:** A call to syscnrtn was made when the scan list was full. A maximum of 10 scan routines, including the standard table scanning routine, may be active at one time.
  - **Remedy:** Either cancel scan routines that are no longer needed or combine scan routines.

SYST-057 WARN Illegal interval

- **Cause:** The interval parameter in a call to syscnrtn was greater than 1000000 (1 second).
  - **Remedy:** Use a value in the range 1-1000000.

SYST-058 WARN Duplicate scan routine

- **Cause:** syscnrtn was called specifying a routine and data_p that is already being scanned.
  - **Remedy:** Don't request the same rtn/data_p twice.

SYST-059 WARN Scan routine not active

- **Cause:** syclclsc was called with a routine and data_p that do not match any active scans.
  - **Remedy:** Don't cancel a non-existent scan.

SYST-060 WARN Duplicate cond/act table

- **Cause:** syaddtbl called with pointer to table that is already in the scan list.
  - **Remedy:** Add table only once.

SYST-061 WARN Scan table list full

- **Cause:** syaddtbl called when all 10 condition/action table slots are already in use.
  - **Remedy:** Cancel tables that are no longer needed or combine tables.

SYST-062 WARN Scan table not active

- **Cause:** sycncltb called with cond/act table that is not active.
  - **Remedy:** Check for duplicate sycncltb call or wrong table pointer.

SYST-063 WARN Scan time record seq error

- **Cause:** System error: consecutive time interval start calls.
  - **Remedy:** Contact FANUC Robotics with information on events leading up to the error.

SYST-064 WARN Bad scan table data

- **Cause:** System error: Invalid data in scan table. The following can result in this error: Too many cond/action sets (max = 10), Invalid condition code, Invalid action code, Too many actions (max = 3).
  - **Remedy:** Contact Fanuc Robotcs wth information on events leading up to error.

SYST-065 ABORT SFCALC overrun

- **Cause:** SFCALC task can't get enough MPU power.
  - **Remedy:** Please reduce some software options or disable some motion groups that had been enabled.

Back to top

TPIF Error Codes

TPIF-001 WARN Mnemonic editor error (%s^1)

- **Cause:** Illegal case occurred on software.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

TPIF-002 WARN Operating system error (%s^1)

- **Cause:** Illegal case occurred on software.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

TPIF-003 WARN Window I/O error (%s^1)

- **Cause:** Illegal case occurred on software.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

TPIF-004 WARN Memory write error

- **Cause:** Illegal case occurred on software.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

TPIF-005 WARN Program is not selected

- **Cause:** The program was not selected yet, when the program was displayed at the TEACH screen.
  - **Remedy:** Select a program in the SELECT screen.

TPIF-006 WARN SELECT is not taught

- **Cause:** This taught statement needed the SELECT statement before the current line.
  - **Remedy:** Teach the SELECT statement before the current line.

TPIF-007 WARN Robot is not calibrated

- **Cause:** The robot has not been calibrated properly.
  - **Remedy:** Calibrate the robot properly.

TPIF-008 WARN Memory protect violation

- **Cause:** The program is write protected.
  - **Remedy:** Release protection of the program on the SELECT screen.

TPIF-009 WARN Cancel delete by application

- **Cause:** Program is protected.
  - **Remedy:** Release protection of the program on the SELECT screen then delete the program.

TPIF-010 WARN Cancel enter by application

- **Cause:** Program is protected.
  - **Remedy:** Try edit after release protection by application.

TPIF-011 WARN Item is not found

- **Cause:** Item is not found below this line.
  - **Remedy:** Try another item or close search function.

TPIF-012 WARN Kinematics solution is invalid

- **Cause:** Cannot translate position data.

- **Remedy:** Check the configuration of robot and $MNUTOOL/$MNUFRAM system variables.

TPIF-013 WARN Other program is running

- **Cause:** You cannot select a program when another program is running or paused.
  - **Remedy:** Select a program after aborting the program which is currently running or paused.

TPIF-014 WARN Teach pendant is disabled

- **Cause:** You cannot edit a program when the teach pendant is disabled.
  - **Remedy:** First enable the teach pendant, then edit the program.

TPIF-015 WARN Bad position register index

- **Cause:** Specified a invalid index of position register.
  - **Remedy:** Check the index of position register.

TPIF-016 WARN Memory access failed (%s^1)

- **Cause:** Illegal case occurred on software.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

TPIF-017 WARN Memory read failed

- **Cause:** Illegal case occurred on software.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

TPIF-018 WARN Unspecified index value

- **Cause:** Specified index value is invalid.
  - **Remedy:** Check specified index value.

TPIF-019 WARN This item cannot be replaced

- **Cause:** This item cannot be replaced.
  - **Remedy:** Try another item or close replace function.

TPIF-020 NONE Mnaction search error

- **Cause:** Illegal case occurred on software.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

TPIF-021 NONE Mnteach software error

- **Cause:** Illegal case occurred in software.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

TPIF-023 WARN WJNT and RTCP are not compatible

- **Cause:** Wjnt and RTCP are not compatible.
  - **Remedy:** Remove Wjnt or RTCP before adding the other.

TPIF-030 WARN Program name is NULL

- **Cause:** Program name is not set properly.
  - **Remedy:** Set a proper program name.

TPIF-031 WARN Remove num from start of Program name

- **Cause:** Start of program name is numeric.
  - **Remedy:** Remove numeric value from beginning of program name.

TPIF-032 WARN Remove space from Program name

- **Cause:** Space is included in program name.
  - **Remedy:** Remove space from program name.

TPIF-033 WARN Remove comma from Program name

- **Cause:** Comma is included in program name.
  - **Remedy:** Remove comma from program name.

TPIF-034 WARN Remove dot from Program name

- **Cause:** Dot is included in program name.
  - **Remedy:** Remove dot from program name.

TPIF-035 WARN Remove minus from Program name

- **Cause:** Minus is included in program name.
  - **Remedy:** Remove minus from program name.

TPIF-036 WARN Not enough memory

- **Cause:** There is not enough memory available.
  - **Remedy:** Delete unused program.

TPIF-037 WARN Program must be selected by TP

- **Cause:** Only the Teach Pendant default program can be edited on the CRT.
  - **Remedy:** Select the program on the Teach Pendant before editing on the CRT.

TPIF-038 WARN Invalid char in program name

- **Cause:** Invalid character in program name.
  - **Remedy:** Remove invalid character from program name.

TPIF-040 WARN Label already exists

- **Cause:** Same label No. already exists.
  - **Remedy:** Change to different label No.

TPIF-041 WARN MNUTOOLNUM number is invalid

- **Cause:** Specified MNUTOOLNUM number is invalid.
  - **Remedy:** Check system variable $MNUTOOLNUM.

TPIF-042 WARN MNUFRAMENUM number is invalid

- **Cause:** Specified MNUFRAMNUM number is invalid.
  - **Remedy:** Check system variable $MNUFRAMNUM.

TPIF-043 WARN External change is valid

- **Cause:** You cannot change the robot (group), because the function that select robot by external DI is valid.
  - **Remedy:** Set system variable $MULTI_ROBO.CHANGE_SDI to ZERO.

TPIF-044 WARN Program is unsuitable for robot

- **Cause:** The group mask of program differs from selected robot (group).
  - **Remedy:** Check selected robot (group) or check program attributes group mask.

TPIF-045 WARN Pallet number is over max

- **Cause:** Cannot teach more than 16 Palletizing instructions in one program.
  - **Remedy:** Teach another program.

TPIF-046 WARN Motion option is over max

- **Cause:** Too many motion options for default motion.
  - **Remedy:** Decrease motion options for default motion.

TPIF-047 WARN Invalid program is selected

- **Cause:** Program type is wrong.
  - **Remedy:** Select TPE program.

TPIF-048 WARN Running program is not found

- **Cause:** There is currently no program running that can be monitored.
  - **Remedy:** Run program before attempting to monitor.

TPIF-049 WARN Port number is invalid

- **Cause:** Port is not set for outside device.
  - **Remedy:** Set port for outside device.

TPIF-050 WARN Macro does not exist

- **Cause:** A program is not assigned to this macro command.
  - **Remedy:** Assign a program to this macro command.

TPIF-051 WARN Program has been selected by PNS

- **Cause:** When a program has been selected by PNS, you cannot select program from SELECT screen.
  - **Remedy:** Turn off the PNSTROBE signal.

TPIF-052 WARN FWD/BWD is disabled

- **Cause:** When the Disabled FWD function has been selected, you cannot execute the program from the teach pendant.
  - **Remedy:** Select the Disabled FWD in the function menu, then you can release from the Disable FWD.

TPIF-053 WARN Not editing background program

- **Cause:** The program has not been selected by BACKGROUND editing.
  - **Remedy:** Select the BACKGROUND program in the SELECT screen.

TPIF-054 WARN Could not end editing

- **Cause:** 1. There is not enough memory.
  2. The background program is invalid.
  - **Remedy:** 1. Delete unnecessary programs.
    2. Confirm the background program.

TPIF-055 WARN Could not recovery original program

- **Cause:** Failed recovering original program which has been selected by the BACKGROUND.

- **Remedy:** End editing by the END_EDIT of [EDCMD] again before executing the original program which has been selected by the BACKGROUND.

TPIF-056 WARN This program is used by the CRT

- **Cause:** The program of BACKGROUND cannot be selected by the CRT and TP at the same time.
  - **Remedy:** End editing by the END_EDIT of [EDCMD] at the CRT.

TPIF-057 WARN This program is used by the TP

- **Cause:** The program of BACKGROUND cannot be selected by the CRT and TP at the same time.
  - **Remedy:** End editing by the END_EDIT of [EDCMD] at the TP.

TPIF-060 WARN Can't record on cartesian (G:%d)

- **Cause:** This current position is in singularity.
  - **Remedy:** You can record this position on joint type only by selecting the function key.

TPIF-061 WARN Group[%s] has not recorded

- **Cause:** This position data has not been changed to displayed groups because you selected the function key which did not record the position, when checking in singularity.
  - **Remedy:** Check this recorded position again before execution.

TPIF-062 WARN AND operator was replaced to OR

- **Cause:** All AND operators on this line were replaced with OR operators.
  - **Remedy:** You cannot mix AND and OR operator on a the same line. Verify that all logical operators on this line are the same before execution.

TPIF-063 WARN OR operator was replaced to AND

- **Cause:** All OR operator on this line were replaced by AND operators. You cannot mix AND OR operator on a the same line.
  - **Remedy:** Verify all logical operators on this line before execution.

TPIF-064 WARN Too many AND/OR operator(Max.4)

- **Cause:** Too many AND/OR operators (Max.4 on a single line).
  - **Remedy:** Teach the logical operation on another line.

TPIF-065 WARN Arithmetic operator was unified to +- or */

- **Cause:** Arithmetic operator on this line was changed to + - or * /. Cannot mix arithmetic + and - operators with * and / operators on the same line.
  - **Remedy:** Verify all arithmetic operators on this line before execution.

TPIF-066 WARN Too many arithmetic operator(Max.5)

- **Cause:** Too many arithmetic operators (Max.5 on a single line).
  - **Remedy:** Teach the arithmetic operation on another line.

TPIF-067 WARN Too many arguments (Max.10)

- **Cause:** Too many arguments (Max. 10 for a program or a macro).
  - **Remedy:** Check arguments of the program/macro.

TPIF-070 WARN Cannot teach the instruction

- **Cause:** Cannot teach the instruction.
  - **Remedy:** Check the sub type of the program.

TPIF-071 WARN Cannot change sub type

- **Cause:** Cannot change sub type.
  - **Remedy:** Check sub type of the program.

TPIF-072 WARN Cannot change motion group

- **Cause:** Cannot change motion group.
  - **Remedy:** Check sub type of the program.

TPIF-090 WARN This program has motion group

- **Cause:** The program specified in $PWR_HOT, $PWR_SEMI and $PWR_NORMAL must not have motion group.
  - **Remedy:** Set * to all motion group in program detail screen on the teach pendant.

TPIF-091 WARN PREG access error

- **Cause:** An error occurred when accessing a position register.
  - **Remedy:** Refer to the error cause code on the ALARM log screen.

TPIF-092 WARN Value %d expected %s

- **Cause:** The value_array that was passed to a built-in was incorrectly specified. The error line shows the index into value_array where the error occurred and the type expected by the built-in.
  - **Remedy:** Make sure the value_array specifies the correct names for the variables and that the types expected are correct.

TPIF-093 WARN USER menu must be selected

- **Cause:** A KAREL program called a user interface built-in which required the USER menu to be displayed on the teach pendant or CRT.
  - **Remedy:** Use FORCE_SPMENU(tp_panel, SPI_TPUSER, 1) before calling the user interface built-in on the teach pendant.
    Use FORCE_SPMENU(crt_panel, SPI_TPUSER, 1) before calling the user interface built-in on the CRT.

TPIF-094 WARN USER2 menu must be selected

- **Cause:** A KAREL program called a user interface built-in which required the USER2 menu to be displayed on the teach pendant or CRT.
  - **Remedy:** Use FORCE_SPMENU(tp_panel, SPI_TPUSER2, 1) before calling the user interface built-in on the teach pendant.
    Use FORCE_SPMENU(crt_panel, SPI_TPUSER2, 1) before calling the user interface built-in on the CRT.

TPIF-095 WARN Execution history table error

- **Cause:** Software internal error.
  - **Remedy:** Perform a controlled start (it isn't necessary to re-set the new item).

TPIF-097 WARN Can't display running task's history

- **Cause:** The execution history of the executing program cannot be displayed.
  - **Remedy:** Use this screen when the program is paused or aborted.

TPIF-098 WARN %s was not run

- **Cause:** The program of $PWR_HOT, $PWR_SEMI or $PWR_NORMAL is not executed.
  - **Remedy:** Refer to the error cause code. Use the Alarm Log screen.

TPIF-099 WARN This program is being edited

- **Cause:** The program specified in $PWR_HOT, $PWR_SEMI and $PWR_NORMAL is not executed, when the program is in editing.
  - **Remedy:** Select the other program.

TPIF-100 WARN No vacant table space

- **Cause:** Illegal case occurred on software.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

TPIF-101 WARN No such menu

- **Cause:** Illegal case occurred on software.
  - **Remedy:** Perform a cold start:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
    not cleared, document the events that led to the error and call your FANUC
    Robotics technical representative.

TPIF-102 WARN E.STOP is asserted

- **Cause:** FWD execution is selected while, E-STOP is asserted.
  - **Remedy:** Turn the E-STOP off. Then select FWD execution.

TPIF-103 WARN Dead man is released

- **Cause:** FWD execution is selected while, DEADMAN switch is released.
  - **Remedy:** Press and hold down the DEADMAN, then select FWD execution

TPIF-104 WARN Teach Pendant is disabled

- **Cause:** FWD execution is selected while, TP is disabled.
  - **Remedy:** Enable the teach pendant. Then select FWD execution.

TPIF-105 WARN Program is not selected

- **Cause:** FWD execution is requested without selection of program.
  - **Remedy:** Select a program for execution. Then select FWD execution

TPIF-106 WARN Program is already running

- **Cause:** FWD execution is requested when program is running.
  - **Remedy:** Abort the running program before requesting FWD execution.

TPIF-107 WARN FWD/BWD is disabled

- **Cause:** When the Disabled FWD function has been selected, you cannot execute the program from the teach pendant.
  - **Remedy:** Select the Disabled FWD in the function menu, then you can release from the Disable FWD

TPIF-108 WARN Form error, line %d, item %d

- **Cause:** The Form Manager detected an error on the specified line with the specified item.
  - **Remedy:** Refer to the cause code on the ALARM log screen for the actual error.

TPIF-109 WARN %v not specified correctly

- **Cause:** The Form Manager detected an error when displaying a %v item.
  - **Remedy:** To specify the %v enumeration type in a form dictionary, use lower case v followed by the dictionary element which specifies the program name and variable name of the variable which contains the display values. For example: "Enum Type: " "-%6v(enum_fkey)" $-,enum_fkey "TPEX" &new_line "CHOICE_ARRAY" In the above example, CHOICE_ARRAY is a KAREL string array variable in program TPEX which contains the enumeration choices. The enumeration choices are displayed in a subwindow.

TPIF-110 WARN Screen used by other device

- **Cause:** The screen you are attempting to use on the teach pendant is currently displayed on the CRT. Or the screen you are attempting to use on the CRT is currently displayed on TP
    - **Remedy:** Exit from the screen on the other device.

TPIF-116 WARN System variable error: %s

- **Cause:** System variable name is invalid.
    - **Remedy:** Check the spelling and format of the name.

TPIF-117 WARN Cannot backup to device: %s

- **Cause:** The default device is not valid for backup.
    - **Remedy:** Select a valid device and try again.

TPIF-118 WARN File error for %s

- **Cause:** File error.
    - **Remedy:** Perform a cold start:
      1. Turn off the robot.
      2. On the teach pendant, press and hold the SHIFT and RESET keys.
      3. While still pressing the SHIFT and RESET keys, turn on the robot. If the error is
      not cleared, document the events that led to the error and call your FANUC
      Robotics technical representative.

TPIF-119 WARN File compression failed

- **Cause:** Failed creating compressed file.
    - **Remedy:** Check backup device.

TPIF-120 WARN Device failure

- **Cause:** Device failure.
    - **Remedy:** Check device and try again.

TPIF-121 WARN Invalid copy. Use MOVE key.

- **Cause:** Cannot COPY a file on a Memory device to the same Memory device.
    - **Remedy:** Use the MOVE key and try again.

TPIF-128 WARN Verify logic of pasted line(s).

- **Cause:** The reverse motion copy function does not support the following motion option instructions:
- • Application command
- • Skip, Quick Skip
- • Incremental
- • Continuous turn
- • Time before/Time after
    - **Remedy:** Check the above motion instructions and modify the copied statement correctly.

TPIF-129 WARN Group motion inst. is pasted

- **Cause:** The group motion instruction is copied. The reverse motion copy function does not support group motion instructions.
  - **Remedy:** Check the motion instruction and modify the copied statement correctly.

TPIF-132 WARN Can't recover this operation

- **Cause:** Because the data for UNDO cannot be saved, this operation cannot be recovered by the UNDO function.
  - **Remedy:** Check the cause code. If the memory is full, please delete the program, or disable the UNDO function.

TPIF-133 WARN Can't recover this command

- **Cause:** Palletizing command and compliance control cannot be recovered by the UNDO function.
  - **Remedy:** This message is for information purposes only.

Back to top

VARS Error Codes

VARS-001 WARN Corrupt variable file

- **Cause:** An error has occurred trying to read specified file. This file is corrupt or the media is bad.
  - **Remedy:** Try a different file.

VARS-002 WARN Open Error on File

- **Cause:** The variable file does not exist on the device, director or media.
  - **Remedy:** Place correct media in drive or select the proper device/directory and try again.

VARS-003 WARN %s array length updated

- **Cause:** A variable being loaded from a variable file exists in memory. The array length reflects what was in the variable file.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

VARS-004 WARN %s memory not updated

- **Cause:** A variable being loaded from a variable file exists in memory. The variable file data cannot be loaded.
  - **Remedy:** Clear the program and load the variables first before loading program.

VARS-005 WARN %s PC array length ignored

- **Cause:** A variable being loaded from a variable file exists in memory. The array length reflects what was in the variable file.
    - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

VARS-006 WARN Unknown Variable Name

- **Cause:** Referenced variable does not exist.
    - **Remedy:** Load PC file or VR file to create the variable.

VARS-007 WARN Unknown Type Code

- **Cause:** Referenced type code does not exist.
    - **Remedy:** Load PC file or VR file to create the type.

VARS-008 WARN Type Name not found

- **Cause:** Referenced type name does not exist.
    - **Remedy:** Load PC file or VR file to create the named type.

VARS-009 WARN SV Load at CTRL Start Only

- **Cause:** A variable load has been requested while controller is capable of motion.
    - **Remedy:** Create an error condition such as E-stop and load of variables is allowed.

VARS-010 WARN Variable/field write-protected

- **Cause:** The variable or field you are trying to access is write protected.
    - **Remedy:** This variable is not to be changed by customer for safety or other reasons. If you are trying to change $SCR variables just change $PARAM_GROUP and cold start.

VARS-011 WARN No data defined for program

- **Cause:** Referenced program name does not have variables.
    - **Remedy:** Load PC file or VR file to create the named program.

VARS-012 WARN Create var - %s failed

- **Cause:** Named variable could not be created.
    - **Remedy:** Refer to the error cause code. Use the Alarm Log screen to display the cause code.

VARS-013 WARN Variable Already Exists

- **Cause:** Referenced variable already exist in memory.
    - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

VARS-014 WARN Create type - %s failed

- **Cause:** Named type could not be create.

- **Remedy:** Refer to the error cause code. Use the Alarm Log screen to display the cause code.

VARS-015 WARN Too many vars/nodes/programs

- **Cause:** The limit of variables types, programs or nodes has been reached.
  - **Remedy:** You must delete some programs or reorganize programs to make more room.

VARS-016 WARN Axis configuration mismatch

- **Cause:** The variables you are trying to load are were created on a controller with a different axis configuration.
  - **Remedy:** These variable cannot be used on this controller.

VARS-017 WARN Sysvar version mismatch

- **Cause:** The system variable file you are attempting to load is not compatible with the loaded software version.
  - **Remedy:** You must use the default system variable file supplied with your version of software.

VARS-018 WARN Compatible Type Already Exists

- **Cause:** Referenced type already exists in memory.
  - **Remedy:** This is just a notification. You do not have to do anything for this warning message.

VARS-019 WARN Rename target exists

- **Cause:** You are attempting to rename a program to a program which already exists.
  - **Remedy:** Use a different program name or delete the program and and variables from existing program.

VARS-020 WARN [%s]%s not fnd

- **Cause:** Referenced variable is not found in the system.
  - **Remedy:** Load PC file or VR file to create the variable.

VARS-021 WARN Memory allocation failure

- **Cause:** There is no more permanent memory available in the system.
  - **Remedy:** You must delete unneeded programs, dictionaries or variables to make room.

VARS-022 WARN Duplicate creation TYPE mismatch

- **Cause:** Variable that is being created already exists but is of a different type than what you are attempting to load/create.
  - **Remedy:** Delete existing variable before creating it as a different type.

VARS-023 WARN Array len creation mismatch

- **Cause:** Variable that is being created already exists but has different dimensions than what you are attempting to load/create.
    - **Remedy:** Delete existing variable before creating it with conflicting dimensions.

VARS-024 WARN Bad variable or register index

- **Cause:** You are attempting to use an invalid index into an array or path.
    - **Remedy:** Use a valid index.

VARS-025 WARN Vision reference error

- **Cause:** Do not have vision hardware on this system so cannot load vision variables.
    - **Remedy:** Load these variables on an appropriate system.

VARS-026 WARN File sequence error

- **Cause:** The file which has been loaded is:
  - Not a variable file
  - A file on bad media
  - A file not compatible with your current software.
    - **Remedy:** Try a different file or convert the current file to an updated version.

VARS-027 WARN Variable used by other program

- **Cause:** Variable is used by another program .
    - **Remedy:** Delete other program which references these variables.

VARS-028 WARN Value out of range

- **Cause:** Value that you entered is not a valid value. It is either too big or too small.
    - **Remedy:** Consult your *SYSTEM R-J3 Controller Software Reference Manual* for valid values for the variable you are changing.

VARS-029 WARN Requires PROGRAM password

- **Cause:** The operation that you are attempting is password protected.
    - **Remedy:** You must go to the password setup screen and enter the PROGRAM password.

VARS-030 WARN Requires SETUP password

- **Cause:** The operation that you are attempting is password protected.
    - **Remedy:** You must go to the password setup screen and enter the SETUP password.

VARS-031 WARN Requires INSTALL password

- **Cause:** The operation that you are attempting is password protected.
    - **Remedy:** You must go to the password setup screen and enter the INSTALL password.

VARS-032 WARN Variable size too big

- **Cause:** The variable you are loading is larger than 65,535 bytes or has an array element larger than 32,767 bytes.
  - **Remedy:** Make the array size smaller or use a path data type for large arrayed variables Maximum path length is 2,007 Maximum node size is 32,767.

VARS-033 WARN Maximum path length exceeded

- **Cause:** A path can only contain 2,007 nodes.
  - **Remedy:** You must break up the large path into smaller paths

VARS-034 WARN Variable cannot be accessed

- **Cause:** The CMOS variable you tried to delete was created at controlled start, or a variable in the program you were trying to access had another read write operation in progress. This could be because a KAREL program, Network or KCL was adding deleting or doing a node operation when access was attempted.
  - **Remedy:** Delete the variable in the start mode in which it was created. Attempt the operation again when no other variable accesses are in progress.

VARS-036 WARN CMOS memory is corrupt

- **Cause:** CMOS memory has been destroyed.
  - **Remedy:** Controller initial start must be performed .

VARS-037 WARN Position register is locked

- **Cause:** Position register is locked by program operation.
  - **Remedy:** Wait until program is finished.

VARS-038 WARN Cannot change CMOS/DRAM type

- **Cause:** An existing variable is being created in a different memory area (CMOS vs DRAM).
  - **Remedy:** Delete the variable or change the memory type to be used.

VARS-039 WARN Data set created

- **Cause:** Permanent memory was successfully allocated.
  - **Remedy:** This is just a notification. You do not have to do anything for this message.

VARS-040 WARN Cannot load at CONTROL START 2

- **Cause:** Variables may not be properly created if loaded at this time.
  - **Remedy:** Load variables at COLD start or at CONTROLLED START 1 before save image operation.

VARS-041 WARN Invalid Node Number

- **Cause:** Path insertion or delete of a node occurred with node number which exceeded the number of nodes in a path.
    - **Remedy:** Perform operation with a valid node number.

VARS-042 WARN TEMP type invalid for CMOS create

- **Cause:** The type definition for the variable being created is in temporary DRAM memory. This means variable cannot be remembered after power off.
    - **Remedy:** The program with the type definition for the variable you are creating must be loaded at controlled start. This implies the type definition is image.

VARS-043 WARN Variable memory pool is invalid

- **Cause:** The memory pool for this variable does not exists on the controller. An auxiliary board has probably been removed or replaced.
    - **Remedy:** Put the old board in back into the controller. If this board is not not available then an INITIAL START is required .

VARS-044 WARN Group number mismatch on load

- **Cause:** The variable file has different number of groups defined than the controller.
    - **Remedy:** You must configure the groups from controlled start setup before loading variable files.

VARS-045 WARN Mismatch SV - %s System %s

- **Cause:** The robot type referenced in the loaded SV file is different than the type that the controller is setup for.
    - **Remedy:** Setup the controller for the proper robot type and load system variables which were saved on a compatible robot.

VARS-046 WARN Buffer size mismatch

- **Cause:** N/A
    - **Remedy:** N/A

VARS-047 WARN Incompatible var file version

- **Cause:** N/A
    - **Remedy:** N/A

VARS-048 WARN Name is too big

- **Cause:** N/A
    - **Remedy:** N/A

VARS-049 WARN Bad Element in a Structure

- **Cause:** N/A
    - **Remedy:** N/A

VARS-050 WARN PC Revision mismatch %s

- **Cause:** The version of the saved PC image and saved VR imaged are different. This is probably because power was removed in the middle of the operation.
  - **Remedy:** Load the PC file again.

VARS-051 WARN Illegal operation

- **Cause:** N/A
  - **Remedy:** N/A

VARS-052 WARN Variable %s converted

- **Cause:** A system variable file created on an earlier version has been loaded. The specified variable changed since that early release so it has been converted. Some information in the system variable may have been lost.
  - **Remedy:** This is informational.

VARS-054 WARN Sysvars - %s loaded

- **Cause:** A system variable file created on an earlier version has been loaded.
  - **Remedy:** This is informational.

VARS-055 WARN Program name is not unique

- **Cause:** Another program exists with the same program name in the first eight characters. Program name must be unique in the first eight characters.
  - **Remedy:** Change the name of the program.

Back to top

WNDW Error Codes

WNDW-001 WARN Invalid screen name format

- **Cause:** Format of screen name in DEF_SCREEN, ACT_SCREEN, or ATT_WINDOW_S call is invalid.
  - **Remedy:** Screen names must be 1-4 alpha characters Supply a valid screen name.

WNDW-002 WARN Invalid window name format

- **Cause:** Format of window name in ATT_WINDOW_D, ATT_WINDOW_S, or DET_WINDOW call or an OPEN statement is invalid.
  - **Remedy:** Window names must be 1-4 alpha characters Supply a valid window name.

WNDW-003 WARN Invalid keybd. name format

- **Cause:** Invalid display device name in DEF_SCREEN or ATT_WINDOW_D call.
  - **Remedy:** Use TP for teach pendant screen or CRT for KCL screen.

WNDW-004 WARN Invalid disp dev name format

- **Cause:** Invalid format of display device name in DEF_SCREEN or ATT_WINDOW_D call.
  - **Remedy:** Device names must be 1-4 alpha characters Supply a valid device name.

WNDW-005 WARN Bad number of rows

- **Cause:** Invalid n_rows in DEF_WINDOW call.
  - **Remedy:** n_rows value must be 1 to 50 Correct the value.

WNDW-006 WARN Bad number of cols

- **Cause:** Invalid n_cols in DEF_WINDOW call.
  - **Remedy:** n_cols value must be 1 to 132 Correct the value.

WNDW-007 WARN Bad row number

- **Cause:** Invalid value of row parameter in ATT_WINDOW_S, AT_WINDOW_D, or SET_CURSOR call.
  - **Remedy:** For ATWINDOW_S or AT_WINDOW_D calls, row must be in the range 1-(display_device_size-window_size+1) Correct the row parameter value For SET_CURSOR calls, the value must be in the range 1-50.

WNDW-008 WARN Bad col number

- **Cause:** Invalid value of col parameter in ATT_WINDOW_S, AT_WINDOW_D, or SET_CURSOR call.
  - **Remedy:** For ATWINDOW_S or AT_WINDOW_D calls, col must be in the range 1-(display_device_size-window_size+1) Correct the col parameter value For SET_CURSOR calls, the value must be in the range 1-132.

WNDW-011 WARN Unk. disp dev name

- **Cause:** Unknown display device name in DEF_SCREEN or ATT_WINDOW_D call.
  - **Remedy:** Use TP for teach pendant screen or CRT for KCL screen.

WNDW-012 WARN Unk k/b dev name

- **Cause:** Keyboard device specified in a PUSH_KEY_RD or POP_KEY_RD call or OPEN statement is invalid.
  - **Remedy:** Use `TP' for teach pendant keys or `CRT' for KCL keyboard.

WNDW-013 WARN Duplicate screen name

- **Cause:** Screen name specified in DEF_SCREEN call is already defined.
  - **Remedy:** If the screen is system defined, it cannot be redefined. If the existing screen definition is not being changed, this may not be a problem. Otherwise, it may be necessary to cold-start the controller to delete the existing definition:
    1. Turn off the robot.

2. On the teach pendant, press and hold the SHIFT and RESET keys.
3. While still pressing the SHIFT and RESET keys, turn on the robot.

WNDW-014 WARN Duplicate window name

- **Cause:** Window name specified in DEF_WINDOW call is already defined.
  - **Remedy:** If the window is a system defined window, it cannot be redefined. If the existing window definition is not being changed, this may not be a problem. Otherwise, it may be necessary to cold-start the controller to delete the existing definition:
    1. Turn off the robot.
    2. On the teach pendant, press and hold the SHIFT and RESET keys.
    3. While still pressing the SHIFT and RESET keys, turn on the robot.

WNDW-015 WARN Unknown screen name

- **Cause:** The screen name specified in a ATT_WINDOW_S, DET_WINDOW, or ACT_WINDOW call is not defined.
  - **Remedy:** Use the name of a defined screen.

WNDW-016 WARN Unknown window name

- **Cause:** The window name specified in a ATT_WINDOW_S, ATT_WINDOW_D, or DET_WINDOW call or an OPEN statement is not defined.
  - **Remedy:** Use the name of a defined window.

WNDW-017 WARN Window already attchd to scrn

- **Cause:** The window name specified in a ATT_WINDOW_S, ATT_WINDOW_D is ready attached to the specified screen.
  - **Remedy:** If the present attach is acceptable, this may not be a problem. Otherwise, it will be necessary to call DET_WINDOW.

WNDW-018 WARN Invalid file name string

- **Cause:** The file name in an OPEN statement begins WD: or KB: but is not a valid format.
  - **Remedy:** The following forms are valid:
    WD:wnam
    KB:knam
    WD:wnam/knam
    KB:knam/wnam where wnam and knam are 1-4 alpha numeric characters. Correct the format of the file name.

WNDW-019 WARN Write to file w/o window

- **Cause:** A write was issued to a file opened to a keyboard (KB:knam), but not a window.
  - **Remedy:** Either change the OPEN to specify a window or do not WRITE to the file.

WNDW-020 WARN Bad buffer length on read

- **Cause:** The buffer_size parameter in a INI_DYN_DISI INI_DYN_DISR, INI_DYN_DISS or READ_KB call is invalid.
    - **Remedy:** Specify a value in the range 10-128 for INI_DYN_DISx calls; for READ_KB calls, specify a range of 1-128, unless the accept mask is zero, when a buffer_size value of zero is permitted.

WNDW-021 WARN Invalid timeout value

- **Cause:** The time_out value in a READ_KB call is Invalid.
    - **Remedy:** The value must be less than 65535000. Use a valid value.

WNDW-022 WARN Zero term char mask in read

- **Cause:** The terminate character mask in a keyboard read is zero.
    - **Remedy:** Use a non-zero value for the terminate character mask.

WNDW-023 WARN Initial data too long

- **Cause:** The init_data value is longer than the buffer size parameter.
    - **Remedy:** Either increase the value of buffer_size or specify a shorter string for init_value.

WNDW-024 WARN Attempt to read with no kb

- **Cause:** A READ_KB call or READ statement was executed on a file that was OPENed to a window but not a keyboard.
    - **Remedy:** Either modify the OPEN FILE statement to specify a keyboard or do not use the file in a READ_KB call or READ statement.

WNDW-025 WARN Echo window for read not act

- **Cause:** A READ_KB call was executed where the specified file is opened to a window that is not attached to the active screen and the terminate mask included the no_window bit.
    - **Remedy:** This may be a normal result if the user intended READ_KB requests to fail if the required window is not displayed. Otherwise, either modify the terminate mask or use ATT_WINDOW_D or ATT_WINDOW_S to attach the required window.

WNDW-026 WARN Read for same keys/kbd active

- **Cause:** A READ_KB call was executed where the the keyboard for the specified file currently has another READ_KB call or READ statement that accepts some of the same classes of keys and the terminate mask included the kbd_busy bit.
    - **Remedy:** This may be a normal result if the user intended READ_KB requests to fail if the keyboard is in use. Otherwise, modify the terminate mask, modify the accept mask of this or the conflicting read, or use a PUSH_KEY_RD call to suspend conflicting reads.

WNDW-027 WARN Too many pushes active

- **Cause:** The maximum depth of key read PUSH operations has been exceeded.

- **Remedy:** Check for situations in which a PUSH_KEY may be executed and no POP_KEY is executed.

WNDW-028 WARN Mis-match on push/pop seq

- **Cause:** This indicates that the pop_index specified in a POP_KEY_RD call is not the expected value, indicating that call are being made out of order.
  - **Remedy:** Check the logic in use of PUSH_KEY_RD and POP_KEY_RD to ensure that the pop_index values are being supplied in the correct order. If more than one task is issuing PUSH_KEY_RD and POP_KEY_RD calls, extra care is required.

WNDW-030 WARN Invalid time

- **Cause:** The interval parameter in a INI_DYN_DISI, INI_DYN_DISR, or INI_DYN_DISS call is invalid.
  - **Remedy:** This must be in the range 1-32767 (ms).

WNDW-032 WARN No match on var disp cncl

- **Cause:** There is no currently active dynamic display for variable and window specified in a CNC_DYN_DISI, CNC_DYN_DISR, or CNC_DYN_DISS call.
  - **Remedy:** Check the variable and window names. Also check logic to see that dynamic display had been started and not already cancelled.

WNDW-033 WARN Field width invalid

- **Cause:** The field_width parameter in a call to one of the INI_DYN_DIS builtin routines is invalid.
  - **Remedy:** Value must be in the range of 0-255.