3.15 P

3.15.1 PALL Alarm Code

3.15.1.1 PALL-001 Length must be longer than width

Cause: The length dimension must always be greater than the 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. Specify the correct length or width.

3.15.1.2 PALL-002 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.

3.15.1.3 PALL-003 Cannot Flip Lt or Wd for Unique

Cause: The 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.

3.15.1.4 PALL-004 P1 has not been taught

Cause: Point P1 on the teaching aid was not taught.

Remedy: Teach P1 on the teaching aid.

3.15.1.5 PALL-005 Layer Barrier on last cyc only.

Cause: The layer barrier cannot be selected for anything but the last cycle of a layer.

Remedy: Select the layer barrier for the last cycle only.

3.15.1.6 PALL-006 Layer Barrier not enabled.

Cause: The user selected * or Layer barrier without enabling Configure all layers from the Optimal Path menu.

Remedy: Set Configure All Layers to TRUE in the Optimal Path menu before selecting * for the Sequence.

3.15.1.7 PALL-007 Layer Barrier invalid on top lyr

Cause: The layer barrier cannot be specified for the top layer.

Remedy: This is only a notification.

3.15.1.8 PALL-008 Unit cycle %s not defined.

Cause: The specified sequence number was not found.

Remedy: The sequence should include all the items in the layer.

3.15.1.9 PALL-009 Lyr bar invalid w/ slipsheet enb

Cause: You cannot break the layer barrier if you have a slip sheet between two layers.

Remedy: If you want a layer barrier, remove the slip sheet between the layers by removing the layer spacing between the layers. Or do not use the layer barrier.

3.15.1.10 PALL-010 %s is not reachable

Cause: The position the robot is trying to go to is not reachable. If the preceeding error is: 'Error: Pallet=x Unit=y', it means that the robot was working with pallet x and box y when the error occured.

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.

3.15.1.11 PALL-011 Position has not been taught

Cause: The position has not been taught.

Remedy: Teach the position.

3.15.1.12 PALL-012 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

3.15.1.13 PALL-013 GET_VAR failed %s

Cause: Data in a SETUP menu could not be set.

Remedy: Cold start the controller, and retry the operation.

3.15.1.14 PALL-014 SET_VAR failed %s

Cause: Data in a SETUP menu could not be set.

Remedy: Cold start the controller, and retry the operation.

3.15.1.15 PALL-015 Could not create station file

Cause: An error occurred while creating an infeed or pallet station file.

Remedy: Cold start the controller, and retry the operation.

3.15.1.16 PALL-016 Sequence valid.

Cause: The data in the sequence screen is valid.

Remedy: None.

3.15.1.17 PALL-017 Cycle number %s invalid.

Cause: PalletTool allows initialization of palletizing data by allowing users to pass a cycle number to the CALL PMPROCDT(cycle_number) in some teach pendant programs. If the user passes an invalid cycle number which is less than or equal to zero, or higher than the maximum number of cycles which is 20, or a number higher than the number of cycles in the application, this error will result.

Remedy: Make sure to pass a valid cycle number to the call to PMPROCDT in the teach pendant program used.

3.15.1.18 PALL-018 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.

3.15.1.19 PALL-019 Could not create unit load file

Cause: An error occurred while creating unit load file.

Remedy: Cold start the controller, and retry the operation.

3.15.1.20 PALL-020 Could not open .DT file for read

Cause: An error occurred while opening a .DT file.

Remedy: Cold start the controller, and retry the operation.

3.15.1.21 PALL-021 IO_STATUS error occurred

Cause: An I/O error occurred during the data transfer.

Remedy: Cold start the controller, and retry the operation.

3.15.1.22 PALL-022 Could not save .VR file %s

Cause: Error occurred while saving a .VR file.

Remedy: Cold start the controller, and retry the operation.

3.15.1.23 PALL-024 Could not load file %s

Cause:

1. An error occurred while loading a .VR file.
2. The 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. The error: "VARS-014 Create type - xxxx failed" will be displayed.

Remedy: Cold start the controller and retry the operation if you know you should be able to read the .vr file into PalletTool.

3.15.1.24 PALL-028 Could not access files

Cause: An error occurred while accessing the floppy disk.

Remedy: Make sure the communication is correct, and retry the operation.

3.15.1.25 PALL-029 File transfer not done

Cause: The file transfer was not successful. Some data might not have been transferred.

Remedy: Cold start the controller, and retry the operation.

3.15.1.26 PALL-030 .DT file list is empty

Cause: No .DT files exist on the floppy.

Remedy: .DT files must exist on the floppy in order to perform the transfer.

3.15.1.27 PALL-031 Pallet Stn %s not found

Cause: The specified station number is not loaded.

Remedy: Load the station file, or create one.

3.15.1.28 PALL-032 Pallet stn %s not taught

Cause: The pallet station specified in PalletSystem setup has not been taught.

Remedy: Teach the pallet station specified in PalletSystem setup.

3.15.1.29 PALL-033 Load file %s not found

Cause: The unit load file is not loaded.

Remedy: Perform one of the following:

- Load the Unit load file.
- Transfer the .DT file.
- Create a new .DT file.

Retry the operation.

3.15.1.30 PALL-035 Invalid layer number %s

Cause: An invalid layer number was entered at cycle start or passed from the PLC. Or, PalletTool encountered an invalid layer number while doing its data processing.

Remedy: Make sure to enter a valid layer for each cycle at cycle start or in passing the data to the PLC.

3.15.1.31 PALL-036 Multi-case option not loaded.

Cause: The user is trying to select the multi-case gripper but the multi-case option is not installed.

Remedy: Install the Multi-case gripper option.

3.15.1.32 PALL-037 Fork/Bag option not loaded.

Cause: The user is trying to select fork gripper but the fork gripper option is not installed.

Remedy: Install the fork gripper option.

3.15.1.33 PALL-038 Infeed stn %s not taught

Cause: The infeed station specified in PalletSystem setup has not been taught.

Remedy: Teach the infeed station specified in the PalletSystem setup.

3.15.1.34 PALL-040 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.

3.15.1.35 PALL-041 Infeed stn %s not found

Cause: The specified infeed station is not taught or loaded.

Remedy: Teach or load the infeed station.

3.15.1.36 PALL-044 Unknown unit orientation

Cause: An orientation besides LT_ON_LT or WD_ON_LT for a box in a layer was encountered by PalletTool while either PalletTool PC or PalletPRO data was downloaded to the controller.

Remedy: Make sure to visit the screen in PalletTool PC or PalletPRO where unit orientation for each unit in a layer is defined and make sure that there are no blanks. If this does not resolve the problem while downloading, re-enter the proper orientation for each unit in PalletTool PC or PalletPRO even though the screen might show valid values.

3.15.1.37 PALL-045 Cannot change PC file data

Cause: The unit load data file was created using PalletMate PC.

Remedy: Data created using PalletMate PC cannot be changed in PalletTool. You must go back to the PC to make the changes, and then retransfer the file.

3.15.1.38 PALL-046 Could not run task %s

Cause: An error occurred while PalletTool was internally trying to run another program in multi-tasking mode.

Remedy: Perform an ABORT ALL, and retry the operation.

3.15.1.39 PALL-048 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, and retry the operation.

3.15.1.40 PALL-049 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 the operation.

3.15.1.41 PALL-050 Error closing %s

Cause: An error occurred while PalletTool was trying to open a .TP program.

Remedy: Cold start the controller, and retry the operation.

3.15.1.42 PALL-051 Slip sheet not supported

Cause: Slip sheet support is not provided.

Remedy: Disable slip sheet in the PalletSystem menu.

3.15.1.43 PALL-052 Pattern not supported

Cause: Some patterns from older versions of PalltetTool are no longer supported.

Remedy: Create a new unitload, and select a different pattern.

3.15.1.44 PALL-053 Gripper is not DOUBLE type

Cause: Depalletizing was chosen with a gripper other than single.

Remedy: Choose single gripper for depalletizing, and retry the operation.

3.15.1.45 PALL-054 Invalid parts requested %s

Cause: A request for picking up 0 part was received.

Remedy: Abort all and retry the operation.

3.15.1.46 PALL-055 Error in CNV_STR_CONF

Cause: Internal error occurred.

Remedy: Perform an ABORT ALL, and retry the operation.

3.15.1.47 PALL-057 Gripper type not supported: %s

Cause: The specified gripper is unknown to PalletTool.

Remedy: Check the value of the gripper-id in Optimal path setup. The valid range is 1-9. A value of 10 is also allowed if the multi-case option is loaded. A value of 11 and 12 are also allowed if the fork option is loaded.

3.15.1.48 PALL-058 Cannot select PC pattern

Cause: A PalletMate PC pattern cannot be selected while creating or modifying a unit load.

Remedy: Single, Doubleside, DoubleTop, or Unique Other patterns can only be transferred from PalletMate PC.

3.15.1.49 PALL-059 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:

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.

3.15.1.50 PALL-063 Id is uninit in UL %s

Cause: Product-id is not set in the UL file.

Remedy: Set the product_id in the UL file from Unit load SETUP.

3.15.1.51 PALL-064 MOVE TO done

Cause: The motion to P1, P2 or P3 on the teaching aid was successful.

Remedy: None.

3.15.1.52 PALL-065 Invalid reg value %s

Cause: An invalid register value was encountered.

Remedy: From the DATA menu, verify that the register contains the correct value.

3.15.1.53 PALL-066 Reg %s could not be set

Cause: The 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 perform an ABORT ALL and retry the operation.

3.15.1.54 PALL-067 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. Must ABORT ALL and retry.

3.15.1.55 PALL-068 Infeed/Pallet for UL %s unknown

Cause: The infeed on which the unit load enters the workcell was not assigned in the PalletSystem menu.

Remedy: Make the infeed-unit load assignment in the PalletSystem SETUP menu. You must perform an ABORT ALL and retry the operation.

3.15.1.56 PALL-069 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. Perform an ABORT ALL and retry the operation.

3.15.1.57 PALL-071 Not all pallets assigned UL

Cause: Not all the pallets have been assigned a unit load in PalletSystem menu.

Remedy: This is only a warning message. Make sure in PalletSystem menu, that all the pallets have a corresponding unit load assigned.

3.15.1.58 PALL-072 Not all infeeds assigned UL

Cause: Not all of the infeeds have been assigned a unit load in the PalletSystem menu.

Remedy: Make sure that in the PalletSystem menu, all of the infeeds have a corresponding unit load assigned.

3.15.1.59 PALL-073 Station teaching completed

Cause: All the teaching aid points have been taught, and the teaching of the station is complete.

Remedy: None.

3.15.1.60 PALL-074 Perch position not taught

Cause: The perch position is uninitialized (has not been taught).

Remedy:

1. Select PM_MAIN from the SELECT screen.
2. Press DATA.
3. Jog the robot to the perch position.
4. Record the variable perch position.
5. Perform an ABORT ALL and retry the operation.

3.15.1.61 PALL-081 Moving to perch position..

Cause: This is a notification that the robot will move to the perch position.

Remedy: None.

3.15.1.62 PALL-082 Indexing pallet %s

Cause: This is a notification that the pallet is being indexed.

Remedy: None.

3.15.1.63 PALL-083 Placing slip sheet %s

Cause: This is a notification that the slip sheet is being placed.

Remedy: None.

3.15.1.64 PALL-085 Operator Panel E-stop ON

Cause: The program cannot run with the operator panel EMERGENCY STOP button pressed.

Remedy:

1. Release the operator panel EMERGENCY STOP button.
2. Press RESET.
3. Press CYCLE START.

3.15.1.65 PALL-086 Teach pendant E-stop ON

Cause: The program cannot run with the teach pendant EMERGENCY STOP button pressed.

Remedy:

1. Release the teach pendant EMERGENCY STOP button.
2. Press RESET.
3. Press CYCLE START.

3.15.1.66 PALL-087 Teach pendant is enabled

Cause: The program cannot run with teach pendant enabled.

Remedy:

1. Disable the teach pendant.
2. Press RESET.
3. Press CYCLE START.

3.15.1.67 PALL-088 Pal Stop must be disabled

Cause: 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.

3.15.1.68 PALL-089 Cycle Stop must be disabled

Cause: 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.

3.15.1.69 PALL-091 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.

3.15.1.70 PALL-101 File is in use by robot. Cannot transfer

Cause: The robot is attempting to transfer a unit load file that is being used by the robot. It is being used in production, or is being edited using the SETUP UNITLOAD or SETUP OPTIMAL PATH menus.

Remedy:

1. Stop the robot.

2. Peform an ABORT ALL.
3. Try the file transfer again.

3.15.1.71 PALL-105 Station not taught

Cause: Either (P1,P2), (P1, P3), (P2, P3), or (P1,P2,P3) were all taught at the same point.

Remedy: Use MODIFY under the Infeed Stn SETUP menu to reteach the frame points P1, P2 and P3 correctly.

3.15.1.72 PALL-106 Cannot switch in 1 Pallet Cell

Cause: There is only one pallet in the workcell.

Remedy: This is only a message. NOSWITCH is the only option allowed for one Pallet cell.

3.15.1.73 PALL-108 Part not present in tool %s

Cause: The robot did not get part presence or faulty part presence sensor.

Remedy: Check if the gripper is in contact with the part and determine why the part presence sensor is not turning on.

3.15.1.74 PALL-109 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.

3.15.1.75 PALL-112 NOSWITCH illegal when pallets > 1

Cause: The number of pallets is greater than 1 (one) and the pallet switch was NOSWITCH. This is not allowed in PalletTool.

Remedy: This is only a message. By default, PalletTool forces PER_PICK. You can change this to other values except NOSWITCH.

3.15.1.76 PALL-113 Please enable teach pendant

Cause: The program cannot run if teach pendant is not enabled.

Remedy: This if for safety reasons. Enable the teach pendant, and press the Tool 1 or Tool 2 hardkey if necessary.

3.15.1.77 PALL-114 Must index pallet before changing product

Cause: A partial or completed pallet is present at the station where you want to change the product. If the existing pallet is not indexed, then the new product will crash with the existing pallet.

Remedy: Choose the Index pallet from the menu and index the existing pallet first.

3.15.1.78 PALL-115 Coldstart setup complete.

Cause: Part of the application setup of a robot is done at the first Cold start. This can take up to 20 seconds. The teach pendant Hints menu will be displayed before PalletTool has loaded all of its .tp programs and macros. NOTE: PalletTool needs an additional Cold start after the application setup Cold start to set up its macros completely.

Remedy: None.

3.15.1.79 PALL-117 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 the operation again. If necessary, Cold start the controller, and retry the operation.

3.15.1.80 PALL-118 Cannot use MODIFY

Cause: The robot could not find the requested data.

Remedy: Teach or load the required data.

3.15.1.81 PALL-119 Stn file not loaded or created

Cause: The specified station is not taught or loaded.

Remedy: Teach or load the station.

3.15.1.82 PALL-121 Could not read %s

Cause: Could not read the unitload .dt file. A Data error exists.

Remedy: Check the MOTET communication and PTPC status.

3.15.1.83 PALL-122 Cannot go to DETAIL page

Cause: Not all the gripper information has been specified in the PalletSystem setup.

Remedy: Display the Gripper MENU, and fill in the gripper information.

3.15.1.84 PALL-123 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.

3.15.1.85 PALL-124 Setting length = width

Cause: The data was not set up properly but was corrected automatically.

Remedy: Make sure the value is set as needed.

3.15.1.86 PALL-125 Setting width = length

Cause: The data was not set up properly, but was corrected automatically.

Remedy: Make sure the value is set as needed.

3.15.1.87 PALL-126 Setting layer = 1

Cause: The data was not set up properly, but was corrected automatically.

Remedy: Make sure the value is set as needed.

3.15.1.88 PALL-127 Flip not allowed

Cause: The data was not set up properly, but was corrected automatically.

Remedy: Make sure the value is set as needed.

3.15.1.89 PALL-128 Pallet Switch type changed

Cause: The data was not set up properly, but was corrected automatically.

Remedy: Make sure the value is set as needed.

3.15.1.90 PALL-131 Layer num outside range (1-40)

Cause: Layer count cannot be more than 40 or less than 1.

Remedy: Pick a legal layer, and retry the operation.

3.15.1.91 PALL-132 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 the error detail.

Remedy: Fix the error condition, and press RESET.

3.15.1.92 PALL-133 Could not clear file

Cause: If the unitload is being used in production it cannot be cleared. 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 a Controlled start, press MENUS, select Clear UnitLd.
3. You will only be able to clear unitloads that were loaded at Controlled start from the Controlled start menu.

3.15.1.93 PALL-137 Unit load num out of range

Cause: Specified Unit load number was out of range.

Remedy: Specify a Unit load number in the range 1-999.

3.15.1.94 PALL-138 Only Pal OR Cycle stop allowed

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.

3.15.1.95 PALL-139 %s :wrist angle correction failed

Cause: The routine that calculates the final destination position while moving from the current source position has failed. The preceeding 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 occured.

Remedy: Check that all positions are in range.

3.15.1.96 PALL-140 Cycle power to increase registers

Cause: An old smaller NUMREG.VR or POSREG.VR file was loaded onto the controller. The number of registers or position registers was changed to fewer than what the current version of PalletTool needs.

Remedy: PalletTool logic has automatically set the number of registers to the necessary size again. But a Cold start is needed to increase the register or position register table size. Perform a Cold start.

3.15.1.97 PALL-141 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.

3.15.1.98 PALL-142 Program not selected

Cause: To run a teach pendant program .tp in local mode, you must first select the program.

Remedy: Press the SELECT key and choose a program to run. If you are trying to run PalletTool, the keyswitch must be set to REMOTE. If there is no remote/local keyswitch on the controller you have, go to the MENUS -> System -> Config page, and change the remote/local setting in that menu to Remote.

3.15.1.99 PALL-143 Data in use by Robot

Cause: The robot is in production. Set up data cannot be changed during production.

Remedy: Wait until production is aborted and then make the changes.

3.15.1.100 PALL-144 Visit layer spacing/flip menus

Cause: Number of layers in the unit load was changed.

Remedy: This is only a warning message to remind you to visit the layer flips and layer spacing menus to make sure that flips and spacing are correct for all the layers.

3.15.1.101 PALL-145 %s

Cause: This error is a general purpose text message posted by PalletTool during production runs for displaying status of an event or to show debug information to the user.

Remedy: None

3.15.1.102 PALL-146 UOP Ignored. Wrong Start Mode

Cause: The operator selects which device can be used to start palletizing on the SETUP Pallet System menu. The 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.

3.15.1.103 PALL-147 SOP Ignored. Wrong Start Mode

Cause: The operator must select which device can be used to start palletizing on the SETUP Pallet System menu. The start device can be set to SOP or UOP/PLC or PTPC.

Remedy: The SOP must be set as the start device on the SETUP Pallet System menu or the SOP signal will be ignored.

3.15.1.104 PALL-148 Approach Posn out of range

Cause: The approach position the robot is trying to go to is not reachable. The preceeding error should be : 'Error: Pallet=x Unit=y'. This means that the robot was working with pallet x and box y when the error occured.

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 may need to specify a correct pallet offset in the Optimal path setup.

3.15.1.105 PALL-149 Unit Posn out of range

Cause: The placement 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 may have specified large pallet offsets or you mamight need to specify a correct pallet offset in the Optimal path setup menu.

3.15.1.106 PALL-150 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.

3.15.1.107 PALL-151 %s exists. Not loaded

Cause: The specified file already exists on the controller.

Remedy: Delete the file from the controller before trying to reload it.

3.15.1.108 PALL-152 Warning-ignoring entry where CASE# was 0.

Cause: The gripper's setup information has an illegal (zero) case number.

Remedy: Edit the gripper data and specify a valid case number.

3.15.1.109 PALL-153 Initializing Data

Cause: Initializing data for production.

Remedy: None.

3.15.1.110 PALL-154 Error setting gripper data %s

Cause: The robot could not read or write the gripper data.

Remedy: Check the available memory. Remove unnecessary files, if possible. Try to reload a backup of the gripper data.

3.15.1.111 PALL-155 Register not defined %s

Cause: This is just a debug message

Remedy: None

3.15.1.112 PALL-156 Current pallet unknown

Cause: R[80] is not set up properly when SET UTOOL macros are used.

Remedy: Make sure R[80] contains the number of the desired pallet.

3.15.1.113 PALL-157 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.

3.15.1.114 PALL-158 Last Utool not known

Cause: This is a warning message posted by PalletTool to help debug problems with unit placement on the pallet.

Remedy: None

3.15.1.115 PALL-159 Can change UnitLd on palt %s only

Cause: During product changeovers through the Cycle Stop menu, you are first prompted to enter the pallet number where you want to bring the new unitload. This is followed by another menu where you can enter the unitload for that pallet and also assign the infeed which brings the new unitload. If you enter this information for a pallet other than the one you chose first, you will get this error.

Remedy: Change the unitload number of the selected pallet.

3.15.1.116 PALL-160 PalletTool aborted

Cause: PalletTool production is aborted because of an error.

Remedy: Refer to other errors in the ALARM log for details.

3.15.1.117 PALL-161 '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.

3.15.1.118 PALL-162 Recvd PLC signal for indexing pallet %s

Cause: This is a message to notify the user that PLC data for initiating product changeovers has been received.

Remedy: None.

3.15.1.119 PALL-163 Infeed I/O undefined-OKTOPICK.TP

Cause: The infeed I/O must be set up.

Remedy: Make sure the infeed I/O is set up properly:

1. Press MENUS.
2. Select SETUP.
3. Select INFEED STN.
4. SET IO.

3.15.1.120 PALL-164 Gripper number not set in register

Cause: R[15] is not set up properly when gripper macros are used.

Remedy: Make sure R[15] contains the number of the desired gripper.

3.15.1.121 PALL-165 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.

3.15.1.122 PALL-166 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: None.

3.15.1.123 PALL-167 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: None.

3.15.1.124 PALL-168 Units/layer %s exceeds allowed maximum

Cause: One of the following has occurred:

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 valid number of layers.

3.15.1.125 PALL-169 Number of layers %s exceeds allowed maximum

Cause: One of the following has occurred:

- The number of units in the unitload is less than the start unit entered.
- The number of units is greater than the maximum allowed (50).

Remedy: Enter a valid number of layers.

3.15.1.126 PALL-170 Invalid pattern type in data file

Cause: An illegal matrix type was received from PalletTool PC.

Remedy: Check the MOTET communication and PTPC status.

3.15.1.127 PALL-171 System still in fault state

Cause: An error condition exists such that the robot cannot be reset.

Remedy: Fix the error condition, and press RESET.

3.15.1.128 PALL-172 Invalid infeed number from PLC %s

Cause: The PLC sent an invalid infeed number. The number must be greater than 0, and less than or equal to the 'number of infeeds' set up.

Remedy: Make sure a valid infeed number was sent by PLC. Check the PLC communication status.

3.15.1.129 PALL-173 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' set up.

Remedy: Make sure a valid pallet number was sent by the PLC. Check the PLC communication status.

3.15.1.130 PALL-174 Setup Application Completed

Cause: This indicates that PalletTool Controlled start setup is complete.

Remedy: None.

3.15.1.131 PALL-175 Can’t use labels-out for triple gripper

Cause: Labels out is supported only for the single and double case gripper.

Remedy: None.

3.15.1.132 PALL-176 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 variable file.

3.15.1.133 PALL-177 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.

3.15.1.134 PALL-178 Data not calculated for UL %s

Cause: To run in production, you must calculate each unitload's optimal path data.

Remedy: Display the SETUP OPTIMAL PATH screen for this unitload, and press the CALC key.

3.15.1.135 PALL-179 GETINF.TP not setup correctly

Cause: GETINF.TP returned an infeed number which is assigned ul = 0. In other words, PalletTool received an invalid infeed number, most likely 0 from GETINF.TP.

Remedy: Check GETINF.TP for infeed/unitload data. Check production setup data. GETINF.TP is used to return an infeed number for the current cycle. You should modify this program if more than one infeed brought the same unitload to the workcell. In this case, you have to tell PalletTool which infeed to pickup a unit from when both the infeeds have units present. There is an error in the logic of GETINF.TP. Alternatively, you might have provided incorrect assignments at the Cycle Start menu.

3.15.1.136 PALL-180 Label data may need updating

Cause: The optimal path data was automatically updated.

Remedy: Check the labels out data for completeness.

3.15.1.137 PALL-181 Labels-out disabled

Cause: Labels out was selected for a gripper that is not supported.

Remedy: None.

3.15.1.138 PALL-182 Not allowed for this gripper type

Cause: Labels out is supported only for the single and double case gripper. –OR– 'Place remaining boxes' is not allowed for single case grippers.

Remedy: None.

3.15.1.139 PALL-183 Cycle stop disabled

Cause: The CYCLE STOP option has been disabled.

Remedy: None.

3.15.1.140 PALL-184 Cycle stop enabled

Cause: The CYCLE STOP option has been enabled.

Remedy: None.

3.15.1.141 PALL-185 Pallet stop disabled

Cause: The PALLET STOP option has been disabled.

Remedy: None.

3.15.1.142 PALL-186 Pallet stop enabled

Cause: The PALLET STOP option has been enabled.

Remedy: None.

3.15.1.143 PALL-187 Active only during palletizing

Cause: CYCLE STOP and PALLET STOP functions are only available when the robot is palletizing.

Remedy: None.

3.15.1.144 PALL-188 Palletizing:STEP mode not allowed

Cause: The STEP key was pressed before entering or while in palletizing mode.

Remedy: None. The STEP mode is automatically cleared by the system.

3.15.1.145 PALL-189 Unit load data error.

Cause: Unit load gripper data has not been completely set up.

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. See the FANUC America Corporation PalletTool Setup and Operations manual for details on accessing these variables.

3.15.1.146 PALL-190 .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 the unneeded data and try again.

3.15.1.147 PALL-191 TEMP DRAM memory is low

Cause: Temporary memory is getting too low to download more unitload files.

Remedy: Delete any unneeded data before downloading more unitload files.

3.15.1.148 PALL-192 Cannot CALC; TEMP memory low

Cause: Temporary memory is too low to calculate a unitload.

Remedy: Delete any unneeded data and perform a Cold start before attempting to calculate the unit load.

3.15.1.149 PALL-193 File copy not done

Cause: The file was not copied. The file is either in use, or there's not enough memory to copy the file.

Remedy: Cold start the controller, and retry the operation.

3.15.1.150 PALL-194 Units missing in sequence.

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.

3.15.1.151 PALL-195 All units not picked up.

Cause: The total number of PLACEs must add up to the number of PICKs for each row of the config table.

Remedy: Make sure the sum of the PLACEs adds up to the same number of PICKs.

3.15.1.152 PALL-196 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, change the PICK info, and VERIFY again.

3.15.1.153 PALL-197 Illegal place sequence: row %s

Cause: The PLACE values must be placed into the PL1 column first, then PL2, then PL3. The total of the PLACEs must add up to the number of PICKs for each row of the config table.

Remedy: Make sure the sum of the PLACEs adds up to the number of PICKs, and are in the proper columns.

3.15.1.154 PALL-198 Other error: row %s

Cause: This is a general configuration table error.

Remedy: In the Sequence menu, you need to make sure that for the total number of picks, you clearly indicate how all the units are put down. Ex: Pick 3, place_1_1_1.

3.15.1.155 PALL-199 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.

3.15.1.156 PALL-200 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.

3.15.1.157 PALL-201 Too many units picked up.

Cause: The total of the PLACEs must add up to the number of PICKs for each row of the config table. And, the total number must add up to the number of units in a layer.

Remedy: Make sure the sum of the PLACEs adds up to the number of PICKs.

3.15.1.158 PALL-202 Illegal. At perch or maintenance.

Cause: Part drop recovery: the selected option cannot be used when the robot is at perch or at the gripper maintenance position.

Remedy: Choose another option.

3.15.1.159 PALL-203 NO boxes are remaining.

Cause: Part drop recovery: the selected option must have boxes remaining in the gripper.

Remedy: Choose another option, or check the gripper sensors.

3.15.1.160 PALL-204 Illegal:boxes are remaining!

Cause: Part drop recovery: the selected option cannot have boxes remaining in the gripper.

Remedy: Choose another option, or check the gripper sensors.

3.15.1.161 PALL-205 Error - Processing UL data NOT done

Cause: There are errors in the unitload data that caused the CALC calculations failed.

Remedy: Correct the unit load errors, and try the CALC operation again.

3.15.1.162 PALL-206 Invalid Unit load req: ul %s

Cause: The requested unitload gripper type cannot be run on this controller. That is, a multi-case gripper unitload can only be run if the multi- case option is loaded on the controller.

Remedy: Choose another unitload.

3.15.1.163 PALL-207 Item %s : illegal data ignored

Cause: There is something wrong with the data that was entered.

Remedy: Retype the data, and try the operation again.

3.15.1.164 PALL-208 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 will be ignored.

3.15.1.165 PALL-209 Cannot CALC; PTPC production running.

Cause: This unitload cannot be calculated during production when PalletTool PC is set as the data device.

Remedy: Try this operation again when you are not running production.

3.15.1.166 PALL-210 Xfer in process, cannot edit file

Cause: The same unitload as being transferred from PalletTool PC cannot be edited.

Remedy: Try the operation again when not transferring or running the unitload.

3.15.1.167 PALL-211 Unitload not replaced.

Cause: The controller could not read the .dt file. This is a data error. However, a unitload with the same name still exists on the robot.

Remedy: Check the MOTET communication and PTPC status.

3.15.1.168 PALL-212 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.

3.15.1.169 PALL-213 Dropped part during recovery-abort

Cause: A part was dropped during part drop recovery. PalletTool does not support further recovery.

Remedy: Check why parts are being dropped. Continue normal restart of palletizing.

3.15.1.170 PALL-214 The tool pointer length is changed.

Cause: You have changed the length of the station teaching tool. All station positions must be taught using the SAME tool length.

Remedy: Make sure all station positions are taught with the same tool length.

3.15.1.171 PALL-215 Moving to maintenance position..

Cause: The robot is moving to the gripper maintenance position.

Remedy: None.

3.15.1.172 PALL-216 SlipSheet pos. must be cartesian representation

Cause: The 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:

1. Press DATA.
2. Press F1, [TYPE].
3. Select Position Regs.
4. Select the register.
5. Select POSITION.
6. Press [REPRE].
7. Select Cartesian.

3.15.1.173 PALL-217 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 the Optimal path SETUP menu. You might have specified large pallet offsets or you might need to specify a correct pallet offset in the Optimal path SETUP menu.

3.15.1.174 PALL-220 Message buffer to PC is full

Cause: More than 20 messages have not been read by PTPC. The communication is slow, or has stopped.

Remedy: Check the MOTET communication and PTPC status.

3.15.1.175 PALL-221 PTPC message type %s - illegal data received

Cause: Message received from PalletTool-PC/MOTET was not in the proper format. The PT-PTPC message types are:

- 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.

3.15.1.176 PALL-222 PTPC command ignored, in wrong mode

Cause: PalletTool is not in the correct mode to act on this message.

Remedy: Try the operation again.

3.15.1.177 PALL-223 PTPC %s - ignored, robot busy

Cause: PalletTool is busy and cannot act on this message.

Remedy: Try the operation again.

3.15.1.178 PALL-224 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' set up.

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.

3.15.1.179 PALL-225 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' set up.

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.

3.15.1.180 PALL-226 Invalid Gripper number from PTPC: %s

Cause: PTPC sent an invalid gripper number. 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: Check the MOTET communication and PTPC status.

3.15.1.181 PALL-227 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.

3.15.1.182 PALL-228 Unitload not recvd from PTPC %s

Cause: PTPC did not send the requested unitload data.

Remedy: Check the MOTET communication and PTPC status.

3.15.1.183 PALL-229 Setup data not recvd from PTPC

Cause: PTPC did not sent the requested setup data.

Remedy: Check the MOTET communication and PTPC status.

3.15.1.184 PALL-230 using unitload NOT from PTPC

Cause: PalletTool requested a unitload from PTPC that PTPC did not have. But PalletTool has a copy of the unitload which it will use.

Remedy: Make sure the right unitload is being used. Consider changing the control so that Unitload - Use data from: is set to ROBOT/PTPC.

3.15.1.185 PALL-231 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 the operation again.

3.15.1.186 PALL-235 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.

3.15.1.187 PALL-236 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.

3.15.1.188 PALL-237 Fork not big enough to pick box

Cause: The boxes are too big for this fork gripper.

Remedy: Check the conveyor infeed positions and gripper UTOOL values.

3.15.1.189 PALL-240 Infeed %s end-of-batch signal received

Cause: MULTI_IO.TP logic received a signal to perform end of batch processing.

Remedy: None.

3.15.1.190 PALL-241 Infeed %s IGNORE end-of-batch signal

Cause: Previous end of batch signal processing is still in progress, or a CYCLE STOP or PALLET STOP is still in progress.

Remedy: None.

3.15.1.191 PALL-242 End-of-batch PLC - request infeed number

Cause: The robot is requesting pallet, unitload and infeed information from PLC.

Remedy: None.

3.15.1.192 PALL-243 End-of-batch PLC - wrong part ID method

Cause: Part ID select method must be set to PLC.

Remedy: Set the Part ID method to PLC:

1. Press MENUS.
2. Select SETUP.
3. Select PalletSystem.
4. Set the Part ID method to PLC.

3.15.1.193 PALL-244 Wait for PLC index pallet %s

Cause: The end of batch is complete. The robot is waiting for the PLC to index the pallet.

Remedy: None.

3.15.1.194 PALL-245 End-of-batch processing error

Cause: The end of batch request was ignored.

Remedy: None.

3.15.1.195 PALL-246 End-of-batch none at infeed

Cause: Nothing exists at the infeed to pick up.

Remedy: None.