

**Remedy:** Perform Arc Start Height Adjust at the position which the torch never touch the work. If you want to continue Arc Start Height Adjust in this situation, set Contact Before Search item in Arc Start Height Adjust setup screen to WARN.

#### **3.1.3.174 ARC-308 Contact is not detected**

**Cause:** Contact is not detected during the search motion for Arc Start Height Adjust function.

**Remedy:** Perform search motion from closer position against the work. Or change Search Speed or Search Max Distance.

#### **3.1.3.175 ARC-309 Start Height Adjust failed**

**Cause:** Arc Start Height Adjust is failed by some reason.

**Remedy:** Confirm that the settings for Arc Start Height Adjust is proper. If other alarm is posted at the same time, solve the other alarm first. If this problem persists, contact tech support.

#### **3.1.3.176 ARC-310 Too long adjust motion time**

**Cause:** The motion for Arc Start Height Adjust function is too long.

**Remedy:** If Arc Start Height Adjust is performed with very low override, the alarm may be posted. If you encounter the alarm with 100% override,

### **3.1.4 ASBN Alarm Code**

#### **3.1.4.1 ASBN-001 End of File**

**Cause:** The end of the file was found before parsing is complete.

**Remedy:** Fix syntax errors within the file.

#### **3.1.4.2 ASBN-002 Error occurred during load**

**Cause:** An unspecified error occurred while loading the file.

**Remedy:** Fix the syntax errors within the file. The cause code may have additional information.

**3.1.4.3 ASBN-003 File line %4d**

**Cause:** A syntax error was detect on this line.

**Remedy:** Fix the syntax error on this line.

**3.1.4.4 ASBN-008 file '%s'**

**Cause:** An error occurred while loading this file.

**Remedy:** Fix the syntax errors within the file. The cause code may have additional information.

**3.1.4.5 ASBN-009 on line %d, column %d**

**Cause:** A syntax error was detected at the specified line and column.

**Remedy:** Fix the syntax error.

**3.1.4.6 ASBN-010 Memory allocation error**

**Cause:** There is not sufficient free memory to process this file.

**Remedy:** Cycle power on the controller.

**3.1.4.7 ASBN-011 Cannot read ASCII source file**

**Cause:** The POS section of the file is missing.

**Remedy:** Fix the syntax of the file.

**3.1.4.8 ASBN-012 Invalid character**

**Cause:** An invalid character was found.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.9 ASBN-013 Unable to open source file**

**Cause:** The source file could not be opened.

**Remedy:** The file does not exist or is corrupt.

**3.1.4.10 ASBN-015 Press shift with this key**

**Cause:** The weld enable or a wire inch hardkey was pressed without holding the shift key.

**Remedy:** Try again while holding the shift key.

**3.1.4.11 ASBN-016 Weld by Shift FWD is disabled**

**Cause:** A program executing from the teach pendant attempted an Arc Start with welding from the teach pendant disabled.

**Remedy:** Disable the arc for testing from the teach pendant or change the Weld System SETUP to permit welding during teach pendant execution.

**3.1.4.12 ASBN-017 Arc Start was disabled (%s^4,%d^5)**

**Cause:** An Arc Start instruction was executed with welding disabled.

**Remedy:** Welding can be enabled using the teach pendant arc enable key or the remote arc enable input. Also check the machinelock and dry run settings in the Test Cycle screen.

**3.1.4.13 ASBN-018 Lost arc detect (%s^4,%d^5)**

**Cause:** The arc detect signal was lost during a weld.

**Remedy:** Check the wire feeder. Check the welding schedule, speed or arc loss time.

**3.1.4.14 ASBN-019 Can't read arc detect input (%s^4,%d^5)**

**Cause:** The arc detect input could not be read.

**Remedy:** Check the process I/O board connection.

**3.1.4.15 ASBN-020 Invalid section encountered**

**Cause:** An unexpected section was detected within the file.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.16 ASBN-021 Expecting a '['**

**Cause:** A required [ was not found in this context.

**Remedy:** Add [] to this register reference, application modifier, or as otherwise necessary.

**3.1.4.17 ASBN-022 Out of range**

**Cause:** An index or value was specified that is not within acceptable bounds.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.18 ASBN-023 Configuration error**

**Cause:** The configuration string for the position is malformed.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.19 ASBN-024 Expecting a comma**

**Cause:** A comma is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.20 ASBN-025 Expecting a '='**

**Cause:** An equal character, '=' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.21 ASBN-026 Expecting a ']'**

**Cause:** A ']' character is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.22 ASBN-027 Expecting a '('**

**Cause:** A '(' character is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.23 ASBN-028 Expecting a ')'**

**Cause:** A ')' character is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.24 ASBN-029 Expecting ';'**

**Cause:** A ';' character is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.25 ASBN-031 Expecting ':'**

**Cause:** A ':' character is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.26 ASBN-032 Expecting a real number**

**Cause:** A real floating point number is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.27 ASBN-033 Expecting an integer**

**Cause:** An integer value is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.28 ASBN-034 Expecting 'mm'**

**Cause:** 'mm' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.29 ASBN-035 Expecting 'mm/sec'**

**Cause:** 'mm/sec' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.30 ASBN-036 Expecting 'sec'**

**Cause:** 'sec' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.31 ASBN-037 Expecting 'deg'**

**Cause:** 'deg' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.32 ASBN-038 Invalid group number**

**Cause:** An invalid motion group has been specified.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.33 ASBN-039 Invalid combination of AND/OR**

**Cause:** AND/OR operators cannot be mixed within a single instruction.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.34 ASBN-040 Invalid operator combination**

**Cause:** + and - operators cannot be mixed with \* and / operators.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.35 ASBN-041 Too many AND/OR operator**

**Cause:** A maximum of 4 AND/OR operators can be used per line.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.36 ASBN-042 Too many arithmetic operator**

**Cause:** A maximum of 5 +, - or \*, / operations can be used per line.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.37 ASBN-046 Expecting a unit**

**Cause:** A unit declaration is required.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.38 ASBN-047 String argument too long**

**Cause:** The string specified is too long.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.39 ASBN-048 Auto AI/O setup is unsupported**

**Cause:** Auto AI/O setup for the mounted I/O module is not supported. So parameters are not set automatically.

**Remedy:** Verify mounted I/O module and set system variables of \$AWEPRR[] in system variable screen manually if need.

**3.1.4.40 ASBN-049 Process %d switch to %d failed**

**Cause:** ArcTool failed to switch weld processes.

**Remedy:** The weld power supply may be OFF, unconnected, or data in the second process may be incorrect.

**3.1.4.41 ASBN-050 Invalid name in /PROG section**

**Cause:** The program name does not match the filename or has invalid characters.

**Remedy:** Fix the syntax error.

**3.1.4.42 ASBN-051 Invalid subtype /PROG section**

**Cause:** The TP subtype specified is not valid.

**Remedy:** Fix the syntax error.

**3.1.4.43 ASBN-052 Bad %s %s Prc %d**

**Cause:** The indicated parameter is out of range.

**Remedy:** Enter a number within range.

**3.1.4.44 ASBN-053 No ramp at process switch (%s^4,%d^5)**

**Cause:** Ramping is not allowed when switching weld processes.

**Remedy:** Complete the process switch first, then ramp with another arc start instruction.



**3.1.4.45 ASBN-054 No motion while arc welding**

**Cause:** Motion has stopped longer than the time specified in weld schedule and weld setup while welding.

**Remedy:** If no motion is needed during welding, increase the above time in the system variable screen.

**3.1.4.46 ASBN-055 No sync Eq (%s^4,%d^5)**

**Cause:** An Arc Start instruction specifies synchronizing with an Equipment that is not also doing an Arc Start.

**Remedy:** Determine why the sync Equipment is not starting or do not use synchronization.

**3.1.4.47 ASBN-056 Invalid sync (%s^4,%d^5)**

**Cause:** An Arc Start instruction specifies synchronizing with an Equipment that is not also synchronized.

**Remedy:** Edit the synchronization data.

**3.1.4.48 ASBN-057 Cannot ramp t1=%d > t2=%d**

**Cause:** Arc process ramping cannot execute because the delay (t1) to communicate with the welder is larger than the ramping loop time (t2). This may occur with ramping or HeatWave \$awwv\_mode 2.

**Remedy:** Increase \$aweramp[eq].\$time\_factor by 1.

**3.1.4.49 ASBN-058 Wire stick is still detected**

**Cause:** A wire stick is still detected after a system RESET.

**Remedy:** Secure the robot and equipment. Cut the wire.

**3.1.4.50 ASBN-059 Gas purge stopped**

**Cause:** The gas purge operation by the teach pendant key was stopped by either disabling the teach pendant, running a program, or by disabling the gas purge feature.

**Remedy:** Allow the gas purge to complete before doing any of the actions listed to avoid this error.

#### **3.1.4.51 ASBN-060 Invalid attribute syntax**

**Cause:** The program header is invalid or missing

**Remedy:** Repair or provide a valid /ATTR section. Print a program from this robot for an example.

#### **3.1.4.52 ASBN-061 No /ATTR section in file**

**Cause:** The /ATTR section is required.

**Remedy:** Fix the syntax error.

#### **3.1.4.53 ASBN-070 Invalid application syntax**

**Cause:** The /APPL section has a general syntax error.

**Remedy:** Fix the syntax error. The cause code may have additional information.

#### **3.1.4.54 ASBN-073 No /APPL section in file**

**Cause:** The /APPL section is required for this program but none was found.

**Remedy:** Fix the syntax error. The cause code may have additional information.

#### **3.1.4.55 ASBN-080 Duplicated Position data**

**Cause:** A position register has been defined twice.

**Remedy:** Make sure that each entry in the /POS section has a unique P[] number.

#### **3.1.4.56 ASBN-081 Unused Position data**

**Cause:** P[(number)] is referenced somewhere but is not defined in the /POS section.

**Remedy:** Define P[(number)] in /POS section.

**3.1.4.57 ASBN-082 Syntax error in position data**

**Cause:** The position data is not correctly formatted.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.58 ASBN-083 Invalid data in /POS section**

**Cause:** The data in the /POS section is not in the correct format.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.59 ASBN-084 Mismatch unit of joint**

**Cause:** The joint units in the file do not match the units for one or more joints of the robot.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.60 ASBN-085 Mismatch number of joint**

**Cause:** Number of joints specified in the position do not match the robot configuration.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.61 ASBN-086 Invalid of binary data in conversion factor**

**Cause:** The binary data(\$AWEPRR.\$io\_min/max\_bin) is invalid. The difference is zero.

**Remedy:** Please set correct value.

**3.1.4.62 ASBN-087 Invalid conversion factor data**

**Cause:** The conversion factor data is invalid. It must be filled more than 2 tables at least. But the value of the second table is zero.

**Remedy:** Please set conversion factor more than 2 tables

**3.1.4.63 ASBN-088 Over selected AO factor No.**

**Cause:** The selected number of AO conversion factor data is over the number of the actual data array

**Remedy:** Please select the correct number of AO conversion factor data

**3.1.4.64 ASBN-090 Undefined macro**

**Cause:** The macro is not defined.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.65 ASBN-092 Undefined instruction**

**Cause:** The instruction is not defined. Either the instruction is invalid or not used correctly.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.66 ASBN-093 Expecting integer or Register**

**Cause:** A direct or indirect index is expected. An integer constant or register type is required.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.67 ASBN-095 Instruction not supported**

**Cause:** Instruction is not supported on this robot as configured.

**Remedy:** Load or enable the relevant feature. Delete the instruction if unnecessary. Modify the instruction appropriately for the currently configured robot.

**3.1.4.68 ASBN-097 Internal error**

**Cause:** An error occurred that was not anticipated.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.69 ASBN-098 Invalid encoding of line**

**Cause:** There is a syntax error within the line.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.70 ASBN-099 Some Bead Exceeds STOP Limit EQ%d**

**Cause:** The message is posted at the timing of program abort after ARC-095 is posted during welding. This prevents the continues of bad welding.

**Remedy:** Please perform the remedy of ARC-095.

**3.1.4.71 ASBN-100 Invalid data in robot configuration file, rerun setrobot program**

**Cause:**Data in robot configuration is invalid.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.72 ASBN-107 Could not open robot configuration file**

**Cause:**Robot configuration file could not be opened.

**Remedy:**Confirm robot configuration file.

**3.1.4.73 ASBN-108 Wire touching before TRS seq**

**Cause:** Wire touching before Touch Retract Start sequence starts.

**Remedy:** Check the wire touches to the work at the arc start position.

**3.1.4.74 ASBN-109 Arc Lost: Voltage < %d V**

**Cause:** Feedback voltage fell down to displayed value over Arc Loss Error Time. Therefore, robot judges that arc is lost.

**Remedy:** Remove the cause of lower voltage. If the weld has no problem, the voltage threshold for arc loss detect may be high. Then, set \$AWEUPR.\$ARC\_LOSS\_V to lower value.

**3.1.4.75 ASBN-110 CS without CD**

**Cause:** CS is only valid with CD or CNT100

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.76 ASBN-111 Assignment of SVT I/O invalid**

**Cause:** ServoTorch I/O assignment is invalid. This assignment is automatically executed after cycle power.

**Remedy:** Please confirm the assignment of signals for arc welding. If you find a wrong assignment, please correct it. After that, please cycle power.

**3.1.4.77 ASBN-115 AutoZone Mastering may be needed**

**Cause:** This is a warning message, Interference Avoidance AutoZone mastering may be needed after ASCII upload.

**Remedy:** This is a warning message, Interference Avoidance AutoZone mastering may be needed after ASCII upload.

**3.1.4.78 ASBN-120 Undefined pallet number**

**Cause:** Pallet number is invalid.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.79 ASBN-121 Wrong route position**

**Cause:** Route position is wrong.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.80 ASBN-122 Duplicated Palletizing data**

**Cause:** Palletizing data is duplicated.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.81 ASBN-123 Duplicated pattern**

**Cause:** Palletizing pattern is duplicated.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.82 ASBN-124 Undefined pattern number**

**Cause:** Pattern number is invalid.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.83 ASBN-125 Wrong route position type**

**Cause:** Route position is wrong.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.84 ASBN-126 Wrong route position number**

**Cause:** Route position number is wrong.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.85 ASBN-127 Wrong bottom position count**

**Cause:** Bottom position count is wrong.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.86 ASBN-128 Pallet register already used**

**Cause:** Pallet register is already used.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.87 ASBN-129 Expecting 'WID'**

**Cause:** 'WID' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.88 ASBN-130 Invalid Backup option**

**Cause:** Stroke condition is invalid.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.89 ASBN-131 Invalid Pressure option**

**Cause:** Pressure condition is invalid.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.90 ASBN-133 Invalid Equipment number**

**Cause:** Equipment number is invalid.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.91 ASBN-135 Expecting 'BU'**

**Cause:** 'BU' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.92 ASBN-136 Expecting 'P'**

**Cause:** 'P' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.



**3.1.4.93 ASBN-137 Expecting 'S'**

**Cause:** 'S' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.94 ASBN-142 SpotTool not configured**

**Cause:** SpotTool is not configured.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.95 ASBN-144 Expecting WC**

**Cause:** 'WC' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.96 ASBN-145 Expecting OPEN, CLOSE, or \***

**Cause:** 'OPEN', 'CLOSE' or '\*' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.97 ASBN-146 Expecting OPEN or CLOSE**

**Cause:** 'OPEN' or 'CLOSE' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.98 ASBN-147 Expecting SV**

**Cause:** 'SV' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.99 ASBN-148 Expecting SN**

**Cause:** 'SN' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.100 ASBN-149 Invalid number**

**Cause:** Number is invalid.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.101 ASBN-150 Invalid Equalization Pressure**

**Cause:** Equalization Pressure is invalid.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.102 ASBN-152 Expecting 'EP'**

**Cause:** 'EP' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.103 ASBN-154 Expecting unit**

**Cause:** Unit is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.104 ASBN-155 Expecting 'ED'**

**Cause:** 'ED' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.105 ASBN-156 Expecting 'SD'**

**Cause:** 'SD' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.106 ASBN-157 Invalid distance schedule**

**Cause:** Tip distance schedule is invalid.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.107 ASBN-158 Expecting 'SEL'**

**Cause:** SEL' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.108 ASBN-159 Expecting 't'**

**Cause:** 't' is expected.

**Remedy:** Fix the syntax error. The cause code may have additional information.

**3.1.4.109 ASBN-163 Start signal error(E:%d)**

**Cause:** Detect start signal abnormal.

**Remedy:** Check start signal.

**3.1.4.110 ASBN-164 Power source error(E:%d)**

**Cause:** Detect 3-phase power source abnormal.

**Remedy:** Check 3-phase power source.

**3.1.4.111 ASBN-165 EQ is detached(E:%d)**

**Cause:** RoboWeld is detached.

**Remedy:** Confirm port setup.

**3.1.4.112 ASBN-166 Comm. stopped in weld(E:%d)**

**Cause:** Communication with RoboWeld power source stopped in welding.

**Remedy:** Confirm another error message and port, cable setup.

**3.1.4.113 ASBN-167 I/O assignment overlap(%d)(E:%d)**

**Cause:** I/O space for RoboWeld is already in use.

**Remedy:** Confirm another I/O device and \$IO\_START in \$RBWLD.

**3.1.4.114 ASBN-168 I/O error(%d)(%d, E:%d)**

**Cause:** I/O initialization error.

**Remedy:** Confirm another I/O device and \$IO\_START in \$RBWLD.

**3.1.4.115 ASBN-169 Invalid wire op.(E:%d)**

**Cause:** Detect invalid wire FWD/BWD operation.

**Remedy:** Confirm wire control sequence.

**3.1.4.116 ASBN-172 Warning, Rcv(0x%X)(E:%d)**

**Cause:** Receive invalid command from power source.

**Remedy:** Confirm noise environment, cable setting.

**3.1.4.117 ASBN-173 Warning, Retry(0x%X)(E:%d)**

**Cause:** Retry to send the command to power source.

**Remedy:** Confirm noise environment, cable setting.

**3.1.4.118 ASBN-174 Warning, NAK for(0x%X)(E:%d)**

**Cause:** Receive NAK from power source.

**Remedy:** Confirm noise environment, cable setting.

**3.1.4.119 ASBN-175 Signal change is ignored(E:%d)**

**Cause:** Communication with power source is stopped.

**Remedy:** Confirm welding setup, cable connection, then reset.

**3.1.4.120 ASBN-176 No sysvar \$RBWLD for E:%d**

**Cause:** Sysvar \$RBWLD is not setup for new EQ number.

**Remedy:** Confirm \$RBWLD and \$RBWLD\_CFG setup.

**3.1.4.121 ASBN-177 RoboWeld(E:%d) reset complete**

**Cause:** RoboWeld reset sequence is complete.

**Remedy:** Arc welding is now available.

**3.1.4.122 ASBN-179 Power supply com alarm(E:%d)**

**Cause:** This alarm is occurred when communication between the welding equipment control board and the robot controller stops.

**Remedy:** 1.If this alarm occurred with ARC-143, please perform the remedy for ARC-143. 2.If this alarm is still occurred after restarting the system, check the wiring between the controller and welding power supply. If problem is not found, check the power supply control board.

**3.1.4.123 ASBN-191 Memory alarm(E:%d)**

**Cause:** Power supply control memory error

**Remedy:** Turn off the power then try again. If the same alarm occurs again, inform of the service.

**3.1.4.124 ASBN-192 CPU alarm(E:%d)**

**Cause:** Weld power supply CPU error

**Remedy:** Turn off the power then try again. If the same alarm occurs again, inform of the service.

**3.1.4.125 ASBN-193 Arc start alarm(E:%d)**

**Cause:** Torch switch was turned ON but the arc could not started within 4sec.

**Remedy:** - By turning off Torch switch, the alarm will be disappeared. - Confirm the weld power lines are connected correctly.

**3.1.4.126 ASBN-195 Tool frame number mismatch**

**Cause:** The tool frame number in /MN is different from that in /POS.

**Remedy:** Use the same tool frame number in both /MN and /POS section.

**3.1.4.127 ASBN-196 Duplicated Position ID**

**Cause:** Same position ID has been used twice in /MN.

**Remedy:** Make sure that each entry in the /MN section has a unique Positon ID.

**3.1.4.128 ASBN-197 Too many Positions are taught**

**Cause:** More than 9999 positions are taught in the program.

**Remedy:** Reduce the number of teach positions in the program.

**3.1.4.129 ASBN-198 Too many I/Os are specified**

**Cause:** More than 64 I/Os are specified in one line.

**Remedy:** Reduce the specified I/Os in the line.

**3.1.4.130 ASBN-199 This weld EQ isn't supported(E:%d)**

**Cause:** The connected weld equipment is not supported.

**Remedy:** Check the weld equipment.

**3.1.4.131 ASBN-200 Arclink ch%d heartbeat timeout**

**Cause:** The Arclink bus master did not respond to a heartbeat request within the maximum time period. The channel has been reset.

**Remedy:** Check the Arclink connections and the weld controller devices that are on the Arclink network.

**3.1.4.132 ASBN-201 Arclink ch%d obj #%d no resp**

**Cause:** A device on the Arclink did not respond to a request within the maximum time period. The channel has been reset.

**Remedy:** Check the Arclink connections and the weld controller devices that are on the Arclink network.

**3.1.4.133 ASBN-202 Arclink ch%d obj #%d error resp**

**Cause:** A device on the Arclink sent an unexpected error response to a request message. The channel has been reset.

**Remedy:** Check the Arclink connections and the weld controller devices that are on the Arclink network.

**3.1.4.134 ASBN-203 Arclink ch%d reset by master**

**Cause:** The Arclink bus master has detected an error or other condition that requires the Arclink network to be reset. This may be a normal event if a new device has been plugged into the network.

**Remedy:** If this is unexpected, then check the connections and other devices on the Arclink network.

**3.1.4.135 ASBN-204 Arclink ch%d available**

**Cause:** The Arclink reset and initialization sequence is complete.

**Remedy:** The Arclink network is ready for welding.

**3.1.4.136 ASBN-205 Arclink ch%d h/s event lost**

**Cause:** The high speed event message expected during welding failed to arrive in time.

**Remedy:** The Arclink network is automatically reset. If this error persists, it indicates a problem with the communications network or welding equipment.

**3.1.4.137 ASBN-206 Arclink ch%d too many errors**

**Cause:** The Arclink interface detected too many errors on the CANbus network. This is usually caused by noise or bad connections.

**Remedy:** Check Arclink network connections and shielding.

**3.1.4.138 ASBN-207 Arclink ch%d no bus power**

**Cause:** The Arclink interface detected too many errors on the CANbus network. This is usually caused by noise or bad connections.

**Remedy:** Check Arclink network connections and shielding.

**3.1.4.139 ASBN-208 Arclink ch%d no nodes on bus**

**Cause:** The Arclink interface is not detecting any other devices on the CANbus network.



**Remedy:** Check the Arclink cable connections and make sure that the welding equipment is also connected and powered on.

#### **3.1.4.140 ASBN-209 Arclink ch%d bus errors**

**Cause:** The Arclink interface is detecting a high number of errors on the network. This is not fatal right now, but indicates potential problems on the network.

**Remedy:** Check the Arclink cable connections and noise sources.

#### **3.1.4.141 ASBN-210 Arclink ch%d network flooded**

**Cause:** The Arclink interface is unable to send messages due to too much traffic on the network.

**Remedy:** Cycle power on the robot controller and weld controller.

#### **3.1.4.142 ASBN-211 Arclink ch%d comm error %d**

**Cause:** The Arclink interface has detected a fatal error condition and has reset the communications network.

**Remedy:** If this problem persists, contact tech support.

#### **3.1.4.143 ASBN-212 Arclink ch%d CAN-Enet conflict**

**Cause:** A CANbus card has been detected for an Arclink communications channel that has already been assigned as an Arclink-over-Ethernet channel.

**Remedy:** Assign the Ethernet connection to a different channel to make this channel available for use by the CANbus card.

#### **3.1.4.144 ASBN-213 %s: Invalid Arclink I/O EQ%d**

**Cause:** The assignment of Arclink I/O is wrong.

**Remedy:** Check Arclink I/O assignment on DI/DO assignment screen or AI/AO assignment screen. If you only want to jog or run programs without arc before solving this alarm, turn the weld equipment off.

**3.1.4.145 ASBN-250 Process active ON after weld**

**Cause:** After the weld ended the process active input remained ON longer than the specified maximum time.

**Remedy:** Increase the process active timeout on the robot (\$aweupr[eq].\$max\_end\_time [seconds]) or decrease the weld end time values on the power supply.

**3.1.4.146 ASBN-251 Arc detect ON after weld**

**Cause:** After the weld ended the arc detect input remained ON longer than the specified maximum time.

**Remedy:** Increase the process active timeout on the robot (\$aweupr[eq].\$max\_end\_time [seconds]) or decrease the weld end time values on the power supply.

**3.1.4.147 ASBN-300 Argument is not integer**

**Cause:** The argjment for Adjust Start Height macro is not integer.

**Remedy:** Use integer value for Adjust Start Height macro.

**3.1.4.148 ASBN-301 Invalid EQ number**

**Cause:** The specified equipment number for Arc Start Height Adjust is invalid.

**Remedy:** Specify the existed equipment number by Adjust Start Height macro.

**3.1.4.149 ASBN-302 Invalid robot group number**

**Cause:** The specified robot group number for Arc Start Height Adjust is invalid.

**Remedy:** Specify the proper robot group number in Arc Start Height Adjust setup screen.

**3.1.4.150 ASBN-303 Invalid I/O assignment**

**Cause:** The specified I/O assignment for Arc Start Height Adjust is invalid.

**Remedy:** Specify the proper I/O assignment in Arc Start Height Adjust setup screen.

**3.1.4.151 ASBN-304 Cannot use same PR number**

**Cause:** In Arc Start Height Adjust function, You cannot use same PR number for both Touch Command Signal and Touch Detect Signal.

**Remedy:** Use different PR number for Touch Command Signal and Touch Detect Signal.

**3.1.4.152 ASBN-305 Other task adjusts height**

**Cause:** Other task has already start Arc Start Height Adjust for the specified equipment.

**Remedy:** Do not perform Arc Start Height Adjust for one equipment at the same timing.

**3.1.4.153 ASBN-306 Start Height Adjust is ignored**

**Cause:** Arc Start Height Adjust is ignored because of Single Step, Dry Run. Or because of Weld Disabled when \$AWSTHOF.\$CHK\_WLD\_ENB is TRUE. If Lincoln welder is used, ArcLink may be disconnect.

**Remedy:** Release Single Step or Dry Run or set Weld Enabled to perform Arc Start Height Adjust. If you are using Lincoln welder, establish the ArcLink connection. If you do not want to post the warning message, set \$AWSTHOF.\$POST\_WARN to FALSE.

**3.1.4.154 ASBN-307 Contact before search**

**Cause:** Contact has already detected before search is started for Arc Start Height Adjust function.

**Remedy:** Perform Arc Start Height Adjust at the position which the torch never touch the work. If you want to continue Arc Start Height Adjust in this situation, set Contact Before Search item in Arc Start Height Adjust setup screen to WARN.

**3.1.4.155 ASBN-308 Contact is not detected**

**Cause:** Contact is not detected during the search motion for Arc Start Height Adjust function.

**Remedy:** Perform search motion from closer position against the work. Or change Search Speed or Search Max Distance.