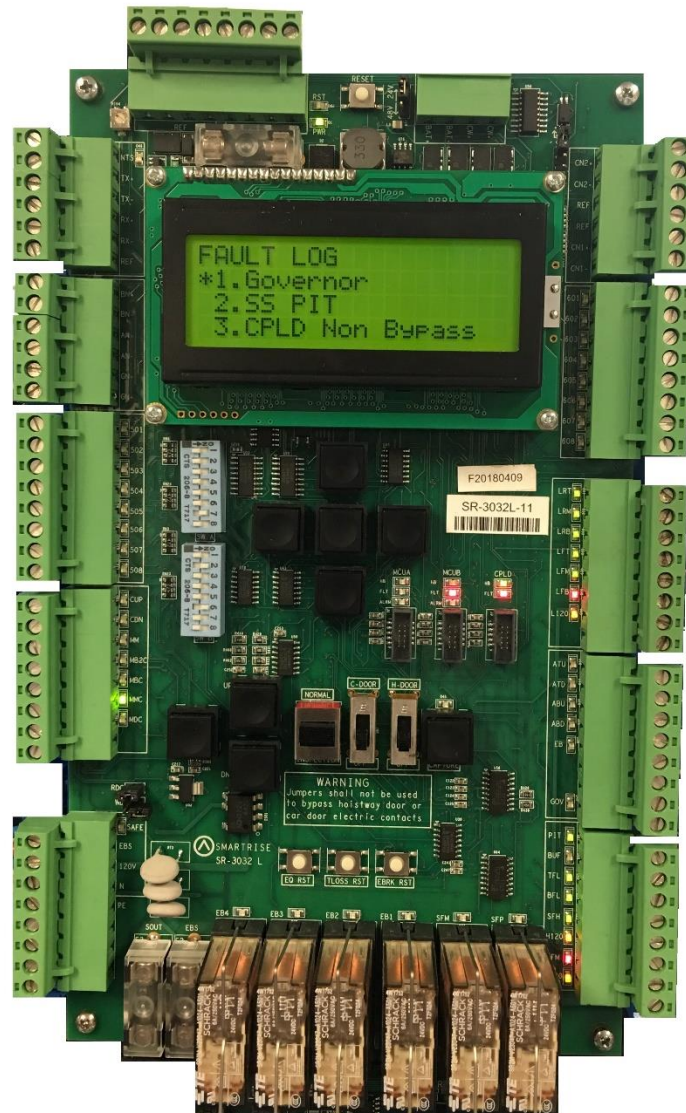




## C4 FAULT/ALARM DESCRIPTION GUIDE



Ver 1.0

## Description:

There are 32 faults stored in the logged faults.

To look at the active faults, go to MAIN MENU | FAULTS | ACTIVE FAULTS.

To look at the history faults, go to MAIN MENU | FAULTS | LOGGED FAULTS.

When looking at the faults inside the logged faults, the user can click the right arrow on the fault the user would like to specifically look at. It will show the user the fault number, this way the user can look up the number easier on the fault table provided in this document. It will also show the user the time, date, speed, and position the fault was logged at.



## Template:

| # – ABBREVIATION OF FAULT/ALARM | FAULT/ALARM TITLE   |
|---------------------------------|---|
| DESCRIPTION                     | This will be the description of the fault/alarm and/or the causes of the fault/alarm. |
| REMEDIES                        | Possible solution(s) to resolving the faults/alarm.                                   |

## Fault Description Index:

| 1 – GOV / 2 – GOV_L                       |  | GOVERNOR / GOVERNOR LATCH                         |
|---|--|---|
| DESCRIPTION                               | The controller detected a loss of power on the governor input. The controller monitors the electrical contact on the governor.   |   |
| REMEDIES                                  | <p>Check the fault log to see what speed the car was at when the fault was recorded. Over speeding can occur if the drive is not properly configured. Try running the car on inspection and verify that the FPM speed feedback tracks the CMD speed. If it does not, check the drive parameters on the drives:</p> <p>Magnetek HPV900: adjust the RPM value of DRIVE A1   CONTRACT MTR SPD.</p> <p>KEB: adjust the LN01   SHEAVE DIAMETER.</p> <p>Magnetek DSD: adjust the RPM value of parameter 11   MOTOR RPM.</p> <p>If this fault occurred while the car was stopped or at low speed, it could be a problem with the governor switch or wiring.</p> |   |
| 3 – EB1_DROP / 4 – EB1_DROP_L             |  | EMERGENCY BRAKE DROP / EMERGENCY BRAKE DROP LATCH |
| DESCRIPTION                               | The emergency brake or rope gripper has dropped.   |   |
| REMEDIES                                  | Locate and press the EBRK RST Button at the bottom of the MR BOARD.  |   |
| 5 – UNINTENDED_MOV / 6 – UNINTENDED_MOV_L |  | UNINTENDED MOVEMENT / UNINTENDED MOVEMENT LATCH   |
| DESCRIPTION                               | Car drifted with GSW and hall locks open out of door zone.   |   |
| REMEDIES                                  | <p>Check wiring and safety contacts.</p> <p>Locate and press the EBRK RST Button at the bottom of the MR BOARD.</p>  |   |
| 7 – TRACTION_LOSS / 8 – TRACTION_LOSS_L   |  | TRACTION LOSS / TRACTION LOSS LATCH               |
| DESCRIPTION                               | The detected car speed has deviated from the motor encoder speed by an adjustable percentage.  |   |
| REMEDIES                                  | <p>Confirm the controller speed matches the drive speed.</p> <p>Check for slippage.</p> <p>Traction loss percentage can be adjusted in SETUP   SAFETY   TRACTION LOSS.</p> <p>Locate and press the TLOSS RST Button at the button of the MR BOARD.</p>   |   |
| 9 – SPEED_DEV                             |  | SPEED DEVIATION                                   |
| DESCRIPTION                               | The detected car speed has deviated from the controller command speed by an adjustable percentage.   |   |
| REMEDIES                                  | <p>Confirm the controller speed matches the controller speed feedback.</p> <p>Confirm the controller speed matches the drive speed back.</p> <p>Clean CEDES tape.</p> <p>Reduce S-Curve Values accordingly.</p>  |   |

| 10 – IC_STOP_SW |  | IN CAR STOP SWITCH |
|-----------------|--|--------------------|
| DESCRIPTION     | <p>The In-Car Stop switch is in the Stop position.</p> <p>The In-Car stop switch input on the SRU board (COP-SF2) are not powered or switch is wired incorrectly (reversed).</p> <p>The In-Car Stop switch is not present on car but inputs have not been jumped out.</p>  |                    |
| REMEDIES        | <p>Turn the In-Car Stop switch to the RUN position.</p> <p>Input COP_SF2 must be high when outside of construction mode.</p> <p>Verify the input have power when the switch is in the RUN position and that power is removed in the STOP position.</p> <p>If car does not have an In-Car Stop switch, then the COP_SF2 input must be jumped to the 24VDC Bus.</p> <p>Check input status menu for input state in the software, if the input is present, check communication from COP to CARTOP.</p> |                    |

| 11 THROUGH 49 – REDUNDANCY_XXX |   | REDUNDANT SAFETY INPUTS |
|--------------------------------|---|-------------------------|
| DESCRIPTION                    | <p><b>REDUNDANCY_LRB</b> (LOCK REAR BOTTOM), <b>REDUNDANCY_LRM</b> (LOCK REAR MIDDLE), <b>REDUNDANCY_LRT</b> (LOCK REAR TOP), <b>REDUNDANCY_LFB</b> (LOCK FRONT BOTTOM), <b>REDUNDANCY_LFM</b> (LOCK FRONT MIDDLE), <b>REDUNDANCY_LFT</b> (LOCK FRONT TOP), <b>REDUNDANCY_ATU</b> (ACCESS TOP UP), <b>REDUNDANCY_ATD</b> (ACCESS TOP DOWN), <b>REDUNDANCY_ABU</b> (ACCESS BOTTOM UP), <b>REDUNDANCY_ABD</b> (ACCESS BOTTOM DOWN), <b>REDUNDANCY_CAR_BYP</b> (CAR BYPASS), <b>REDUNDANCY_HA_BYP</b> (HALL BYPASS), <b>REDUNDANCY_MM</b> (MECHANIC MODE), <b>REDUNDANCY_SFM</b> (SF1 RELAY), <b>REDUNDANCY_SFH</b> (SFH RELAY), <b>REDUNDANCY_PIT</b> (PIT SWITCH), <b>REDUNDANCY_IP_INSP</b> (IN PIT INSPECTION), <b>REDUNDANCY_MR_INSP</b> (MR INSPECTION), <b>REDUNDANCY_IL_INSP</b> (IN LEVELING INSPECTION), <b>REDUNDANCY_C_EB2</b> (CONTROL SIGNAL TO EB2 RELAY), <b>REDUNDANCY_C_SFM</b> (CONTROL SIGNAL TO SFM RELAY), <b>REDUNDANCY_M_EB2</b> (MONITOR EB2 RELAY), <b>REDUNDANCY_M_SFM</b> (MONITOR SFM RELAY), <b>REDUNDANCY_M_EB3</b> (MONITOR EB3 RELAY), <b>REDUNDANCY_M_EB1</b> (MONITOR EB1 RELAY), <b>REDUNDANCY_M_SFP</b> (MONITOR SFP RELAY), <b>REDUNDANCY_C_EB3</b> (CONTROL SIGNAL TO EB3 RELAY), <b>REDUNDANCY_C_EB1</b> (CONTROL SIGNAL TO EB1 RELAY), <b>REDUNDANCY_C_SFP</b> (CONTROL SIGNAL TO SFP RELAY), <b>REDUNDANCY_GSWR</b> (GATE SWITCH REAR), <b>REDUNDANCY_GSWF</b> (GATE SWITCH FRONT), <b>REDUNDANCY_CT_INSP</b> (CT INSPECTION), <b>REDUNDANCY_CT_STOP</b> (CT STOP SWITCH), <b>REDUNDANCY_ESC_HATCH</b> (CT ESCAPE HATCH), <b>REDUNDANCY_CAR_SAFE</b> (CAR SAFETIES), <b>REDUNDANCY_FSS</b> (FIRE STOP SWITCH), <b>REDUNDANCY_IC_STOP</b> (IN CAR STOP SWITCH), <b>REDUNDANCY_IC_INSP</b> (IN CAR INSPECTION), <b>REDUNDANCY_HA_INSP</b> (HOISTWAY ACCESS INSPECTION)</p> |                         |
| REMEDIES                       | <p>Verify the MRU board has its RDC jumper on.</p> <p>If the RDC jumper is on, replace MRU Board.</p>   |                         |

| 50 – SFP_STUCK_LO |   | SFP RELAY STUCK LOW |
|-------------------|---|---------------------|
| DESCRIPTION       | SFP relay is stuck in the OFF position.                                   |                     |
| REMEDIES          | Verify the SFP relay is tightly seated on its connector on the MRU Board. |                     |

| 51 – SFP_STUCK_HI |   | SFP RELAY STUCK HIGH |
|-------------------|---|----------------------|
| DESCRIPTION       | SFP relay is stuck in the ON position.                                    |                      |
| REMEDIES          | Verify the SFP relay is tightly seated on its connector on the MRU Board. |                      |

| 52 – SFP_DROPPED |   | SFP RELAY DROPPED |
|------------------|---|-------------------|
| DESCRIPTION      | SFP relay has been dropped.                                   |                   |
| REMEDIES         | Investigate the fault issued by the CPLD in the active fault. |                   |

| 53 – EB3_STUCK_LO |   | EB3 RELAY STUCK LOW |
|-------------------|---|---------------------|
| DESCRIPTION       | EB3 relay is stuck in the OFF position.                                   |                     |
| REMEDIES          | Verify the EB3 relay is tightly seated on its connector on the MRU Board. |                     |

| 54 – EB3_STUCK_HI |   | EB3 RELAY STUCK HIGH |
|-------------------|---|----------------------|
| DESCRIPTION       | EB3 relay is stuck in the ON position.                                    |                      |
| REMEDIES          | Verify the EB3 relay is tightly seated on its connector on the MRU Board. |                      |

| 55 – EB4_STUCK_LOW |   | EB4 RELAY STUCK LOW |
|--------------------|---|---------------------|
| DESCRIPTION        | EB4 relay is stuck in the OFF position.                                   |                     |
| REMEDIES           | Verify the EB4 relay is tightly seated on its connector on the MRU Board. |                     |

| 56 – EB4_STUCK_HIGH |   | EB4 RELAY STUCK HIGH |
|---------------------|---|----------------------|
| DESCRIPTION         | EB4 relay is stuck in the ON position.                                    |                      |
| REMEDIES            | Verify the EB4 relay is tightly seated on its connector on the MRU Board. |                      |

| 57 – EB1_STUCK |   | EB1 RELAY IS STUCK ON/OFF |
|----------------|---|---------------------------|
| DESCRIPTION    | EB1 relay is stuck in the ON/OFF position.                                |                           |
| REMEDIES       | Verify the EB1 relay is tightly seated on its connector on the MRU Board. |                           |

| 58 – M_CONT_STUCK_HI |   | M CONTACTOR STUCK HIGH |
|----------------------|---|------------------------|
| DESCRIPTION          | M contactor is stuck in the ON position.  |                        |
| REMEDIES             | <p>Check the auxiliary contact on M contactor. Verify it is properly seated on the contactor and that no wires have become loose or disconnected on the input MMC on MRU Board.</p> <p>Make sure the MMC input goes high when the car is idle and low when the M contactor is engaged.</p> <p>Check input status for input state in the software for the M Contactor.</p> |                        |

| 59 – M_CONT_STUCK_LOW |   | M CONTACTOR STUCK LOW |
|-----------------------|---|-----------------------|
| DESCRIPTION           | M contactor is stuck in the OFF position.   |                       |
| REMEDIES              | <p>Check the auxiliary contact on M contactor. Verify it is properly seated on the contactor and that no wires have become loose or disconnected on the input MMC on MRU Board.</p> <p>Make sure the MMC input goes high when the car is idle and low when the M contactor is engaged.</p> <p>Check input status for input state in the software for the M Contactor.</p> |                       |

| 60 – B2_CONT_STUCK_HI |  | B2 CONTACTOR STUCK HIGH |
|-----------------------|--|-------------------------|
| DESCRIPTION           | B2 Contactor is stuck in the ON position.  |                         |
| REMEDIES              | <p>Check the auxiliary contact on B2 contactor. Verify it is properly seated on the contactor and that no wires have become loose or disconnected on the input MB2C on MRU Board.</p> <p>Make sure the MB2C input goes low when the car is idle and high when the B2 contactor is engaged.</p> <p>Check input status for input state in the software for the B2 Contactor.</p> |                         |

| 61 – B2_CONT_STUCK_LOW |  | B2 CONTACTOR STUCK LOW |
|------------------------|--|------------------------|
| DESCRIPTION            | B2 Contactor is stuck in the OFF position.   |                        |
| REMEDIES               | <p>Check the auxiliary contact on B2 contactor. Verify it is properly seated on the contactor and that no wires have become loose or disconnected on the input MB2C on MRU Board.</p> <p>Make sure the MB2C input goes low when the car is idle and high when the B2 contactor is engaged.</p> <p>Check input status for input state in the software for the B2 Contactor.</p> |                        |

| 62 – HA_BYPASS |   | HALL DOOR BYPASS |
|----------------|---|------------------|
| DESCRIPTION    | Hall Door Bypass is in the ON position.<br>Attempting to bypass locks when car is not on correct mode of Inspection.  |                  |
| REMEDIES       | If the controller is equipped with Hall Lock Bypass switch, it must be in the off position when not on CT or IC Inspection.<br>If attempting to bypass hall doors, make sure you are on CT Inspection or IC Inspection. |                  |

| 63 – CAR_BYPASS |   | CAR DOOR BYPASS |
|-----------------|---|-----------------|
| DESCRIPTION     | Car Door Bypass is in the ON position.<br>Attempting to bypass car door(s) when car is not on correct mode of Inspection.   |                 |
| REMEDIES        | If the controller is equipped with Car Door Bypass switch, it must be in the off position when not on CT or IC Inspection.<br>If attempting to bypass car door(s), make sure you are on CT Inspection or IC Inspection. |                 |

| 64 – OVERSPEED_GENERAL / 65 – OVERSPEED_GENERAL_L |  | GENERAL OVERSPEED |
|---|--|-------------------|
| DESCRIPTION                                       | True car speed exceeded 110% of Contract Speed.  |                   |
| REMEDIES  | Be sure Contract Speed parameter is set correctly to maximum speed at which the car will run.<br>Check contract motor speed on drive. Reduce the RPM inside the drive to slow car speed down. Reduce the s-curve values. |                   |

| 66 – OVERSPEED_INSPECTION |  | INSPECTION MODE OVERSPEED |
|---------------------------|--|---------------------------|
| DESCRIPTION               | True car speed exceeded 150 FPM in inspection mode.  |                           |
| REMEDIES                  | Be sure Inspection Speed parameter is set correctly to a value not greater than 150 FPM.<br>Check contract motor speed on drive. Reduce the RPM inside the drive to slow car speed down. |                           |



| 67 – OVERSPEED_DOOR_GSWF DOOR OVERSPEED GATE SWITCH FRONT |  |
|---|--|
| DESCRIPTION   | True car speed exceeded 150 FPM with front gate switch open.                         |
| REMEDIES  | Check front gate switch.<br>Confirm the drive and controller contract speed matches. |

| 68 – OVERSPEED_DOOR_LFT DOOR OVERSPEED LOCK FRONT TOP |  |
|---|--|
| DESCRIPTION   | True car speed exceeded 150 FPM with front top locks open.                     |
| REMEDIES  | Check front locks.<br>Confirm the drive and controller contract speed matches. |

| 69 – OVERSPEED_DOOR_LFM DOOR OVERSPEED LOCK FRONT MIDDLE |   |
|--|---|
| DESCRIPTION  | True car speed exceeded 150 FPM with front middle locks open.                         |
| REMEDIES   | Check front middle locks.<br>Confirm the drive and controller contract speed matches. |

| 70 – OVERSPEED_DOORS_LFB DOOR OVERSPEED LOCK FRONT BOTTOM |   |
|---|---|
| DESCRIPTION   | True car speed exceeded 150 FPM with front bottom locks open.                         |
| REMEDIES  | Check front bottom locks.<br>Confirm the drive and controller contract speed matches. |

| 71 – OVERSPEED_DOORS_GSWR DOOR OVERSPEED GATE SWITCH REAR |   |
|---|---|
| DESCRIPTION   | True car speed exceeded 150 FPM with rear gate switch open.                         |
| REMEDIES  | Check rear gate switch.<br>Confirm the drive and controller contract speed matches. |

| 72 – OVERSPEED_DOORS_LRT DOOR OVERSPEED LOCK REAR TOP |   |
|---|---|
| DESCRIPTION   | True car speed exceeded 150 FPM with rear top locks open.                         |
| REMEDIES  | Check rear top locks.<br>Confirm the drive and controller contract speed matches. |

| 73 – OVERSPEED_DOORS_LRM DOORS OVERSPEED LOCK REAR MIDDLE |  |
|---|--|
| DESCRIPTION   | True car speed exceeded 150 FPM with rear middle locks open.                         |
| REMEDIES  | Check rear middle locks.<br>Confirm the drive and controller contract speed matches. |

| 74 – OVERSPEED_DOORS_LRB DOORS OVERSPEED LOCK REAR BOTTOM |  |
|---|--|
| DESCRIPTION   | True car speed exceeded 150 FPM with rear bottom locks open.                         |
| REMEDIES  | Check rear bottom locks.<br>Confirm the drive and controller contract speed matches. |



|   |  |   |
|---|--|---|
| 77 – CPU_STOP_SW_MRA / 78 – CPU_STOP_SW_MRB   |  | MACHINE ROOM BOARD, CPU STOP SWITCH ENABLED |
| DESCRIPTION                                   | Dip Switch 1 on Dip A on the MRU Board is on.  |   |
| REMEDIES                                      | Turn Dip Switch 1 off on Dip A on the MRU Board to enable car to run.  |   |
|   |  |   |
| 79 – CPU_STOP_SW_CTA / 80 – CPU_STOP_SW_CTB   |  | CAR TOP SRU BOARD, CPU STOP SWITCH ENABLED  |
| DESCRIPTION                                   | Dip Switch 1 on Dip A on the CT SRU Board is on.   |   |
| REMEDIES                                      | Turn Dip Switch 1 off on Dip A on the CT SRU Board to enable car to run.   |   |
|   |  |   |
| 81 – CPU_STOP_SW_COPA / 82 – CPU_STOP_SW_COPB |  | COP SRU BOARD, CPU STOP SWITCH ENABLED      |
| DESCRIPTION                                   | Dip Switch 1 on Dip A on the COP SRU Board is on.  |   |
| REMEDIES                                      | Turn Dip Switch 1 off on Dip A on the COP SRU Board to enable car to run.  |   |
|   |  |   |
| 83 – NEED_TO_RESET                            |  | NEED TO RESET                               |
| DESCRIPTION                                   | A system configuration parameter was changed. This system must be power cycled.  |   |
| REMEDIES                                      | Recycle power to the controller.   |   |
|   |  |   |
| 84 – INVALID_NUM_FLOORS                       |  | INVALID NUMBERS OF FLOORS                   |
| DESCRIPTION                                   | Number of floors setting is outside the valid range.   |   |
| REMEDIES                                      | Set number of floors to a value from 2 to 64.<br>To do this go to MAIN MENU   SETUP   FLOOR LEVELS   NUMBER OF FLOORS. |   |
|   |  |   |
| 85 – INVALID_CONTRACT_SPEED                   |  | INVALID CONTRACT SPEED                      |
| DESCRIPTION                                   | Contract speed setting is outside the valid range.   |   |
| REMEDIES                                      | Set contract speed to a value from 10 to 1600.<br>To do this go to MAIN MENU   SETUP   SPEEDS   CONTRACT SPEED.        |   |

| 86 – INVALID_INSP_SPD  |   | INVALID INSPECTION SPEED |
|------------------------|---|--------------------------|
| DESCRIPTION            | Inspection speed setting is outside the valid range.  |                          |
| REMEDIES               | Set inspection speed to a value from 0 to 150.<br>To do this go to MAIN MENU   SETUP   SPEEDS   INSPECTION SPEED.           |                          |
| 87 – INVALID_LEARN_SPD |   | INVALID LEARN SPEED      |
| DESCRIPTION            | Learn speed setting is outside the valid range.   |                          |
| REMEDIES               | Set learn speed to a value from 10 to contract speed.<br>To do this go to MAIN MENU   SETUP   SPEEDS   LEARN SPEED.         |                          |
| 88 – INVALID_TERM_SPD  |   | INVALID TERMINAL SPEED   |
| DESCRIPTION            | Terminal speed setting is outside the valid range.  |                          |
| REMEDIES               | Set terminal speed to a value from 0 to 30.<br>To do this go to MAIN MENU   SETUP   SPEEDS   TERMINAL SPEED.                |                          |
| 89 – INVALID_LEVEL_SPD |   | INVALID LEVELING SPEED   |
| DESCRIPTION            | Leveling speed setting is outside the valid range.  |                          |
| REMEDIES               | Set leveling speed to a value from 1 to 20.<br>To do this go to MAIN MENU   SETUP   SPEEDS   LEVELING SPEED.                |                          |
| 90 – INVALID_NTSD_SPD  |   | INVALID NTSD SPEED       |
| DESCRIPTION            | NTSD speed setting is outside the valid range.  |                          |
| REMEDIES               | Set NTSD speed to a value from 1 to 20.<br>To do this go to MAIN MENU   SETUP   SPEEDS   NTSD SPEED.                        |                          |
| 91 – NEED_TO_LEARN     |   | NEED TO LEARN            |
| DESCRIPTION            | Car needs to learn the hoist way.<br>The positions of the door zone that are stored in the controller's memory are invalid. |                          |
| REMEDIES               | Follow procedure in the manual on learning the hoistway.  |                          |

| 92 THROUGH 95 – INVALID_ETTS_1-4 |   | INVALID ETS POSITIONS |
|----------------------------------|---|-----------------------|
| DESCRIPTION                      | <p>Specific profile ETS points are not of increasing in position/speed value or a speed exceeds contract speed.</p> <p>INVALID_ETTS_1 (NORMAL PROFILE ETS)</p> <p>INVALID_ETTS_2 (INSPECTION PROFILE ETS)</p> <p>INVALID_ETTS_3 (EMERGENCY PROFILE ETS)</p> <p>INVALID_ETTS_4 (SHORT PROFILE ETS)</p> |                       |
| REMEDIES                         | <p>Cycle power to the system or edit an S-Curve parameter to trigger a ETS point recalculation.</p>   |                       |

| 96 – AT_FLOOR_NO_DZ |   | AT FLOOR NO DOOR ZONE |
|---------------------|---|-----------------------|
| DESCRIPTION         | <p>Car is at a learned floor and missing door zone signal.</p>                        |                       |
| REMEDIES            | <p>Adjusted the learned floor position or door zone magnet at the fault position.</p> |                       |

| 97 – FIRE_STOP_SW |   | FIRE STOP SWITCH |
|-------------------|---|------------------|
| DESCRIPTION       | <p>The Fire Stop Switch is currently in the STOP position.</p> <p>The controller is configured with a Fire Stop Switch, but the input is missing (COP-SF3).</p> |                  |
| REMEDIES          | <p>Turn the Fire Stop Switch to the RUN position.</p> <p>If code does not require a Fire Stop Switch you can jump the input out.</p>                            |                  |

| 98 – DOOR_F_JUMPER_GSW |  | FRONT DOOR JUMPER ON GSW |
|------------------------|--|--------------------------|
| DESCRIPTION            | <p>Gate Switch jumpers were detected. Gate switch input must go low to be cleared.</p>   |                          |
| REMEDIES               | <p>Check for possible jumpers on GSW input.</p> <p>Increase the door jumper timeout setting.</p> <p>Adjust timing of GSW contact making and opening.</p> |                          |

| 99 – DOOR_F_JUMPER_LOCK |   | FRONT DOOR JUMPER ON LOCKS |
|-------------------------|---|----------------------------|
| DESCRIPTION             | <p>Lock jumpers were detected. Lock input must go low to be cleared.</p>                                    |                            |
| REMEDIES                | <p>Check for possible jumpers on the door lock inputs.</p> <p>Increase the door jumper timeout setting.</p> |                            |

| 100 – DOOR_F_LOCKS_OPEN |   | FRONT DOORS LOCKS OPEN |
|-------------------------|---|------------------------|
| DESCRIPTION             | <p>Front doors locks are open when doors are closing.</p>   |                        |
| REMEDIES                | <p>Look at HALL DOOR DATA on the main screen to determine if controller is seeing all door lock signals.</p> <p>Door locks contacts are not making, clean contacts.</p> |                        |

| 101 – DOORS_F_GSW_OPEN | FRONT DOORS GSW OPEN   |
|------------------------|--|
| DESCRIPTION            | Front doors gate switch is open when doors are closing.  |
| REMEDIES               | Look at DOOR DATA on the main screen to determine if controller is seeing GSW.<br>Gate Switch contacts are not making, clean contacts. |

| 102 – DOOR_F_FAIL_OPEN | DOORS FRONT FAILED TO OPEN   |
|------------------------|--|
| DESCRIPTION            | Front doors failed to open, controller did not see DOL signal when doors are fully open.   |
| REMEDIES               | Verify the Door Open Limit (DOL) input goes off when doors fully open.<br>Verify that the time it takes for the doors to open is less than the timeout specified by <b>MAIN MENU   SETUP   DOOR SETUP   DOOR STUCK TIMER</b> . |

| 103 – DOOR_F_FAIL_CLOSE | DOORS FRONT FAILED TO CLOSE  |
|-------------------------|--|
| DESCRIPTION             | Front doors failed to close, controller did not see GSW, DCL and/or DPM when doors are fully closed.   |
| REMEDIES                | Verify the Door Close Limit (DCL) input goes off, and GSW and/or DPM, when doors fully close.<br>Verify that the time it takes for the doors to close is less than the timeout specified by <b>MAIN MENU   SETUP   DOOR SETUP   DOOR STUCK TIMER</b> . |

| 104 – DOOR_F_FAIL_NUDGE | DOORS FRONT FAILED TO NUDGE   |
|-------------------------|---|
| DESCRIPTION             | Front doors failed to nudge closed, controller did not see GSW, DCL and/or DPM when attempting to nudge close.  |
| REMEDIES                | Verify nothing is obstructing the doors to close.<br>Verify PHE input is not stuck.<br>Verify the Door Close Limit (DCL) input goes off, and GSW and/or DPM, when doors fully close.<br>Verify that the time it takes for the doors to nudge is less than the timeout specified by <b>MAIN MENU   SETUP   DOOR SETUP   DOOR NUDGE TIMER</b> . |

| 105 – DOOR_F_STALLED | DOORS FRONT STALLED  |
|----------------------|--|
| DESCRIPTION          | The controller was unable to open or close the doors fully after repeated attempts. Front doors are now in a partially opened state. |
| REMEDIES             | Verify nothing is obstructing the doors to open/close.<br>Verify the doors can mechanically open and close.                          |

| 106 – DOOR_F_LOST_SIGNAL | DOORS FRONT LOST SIGNALS                   |
|--------------------------|--|
| DESCRIPTION              | Door front signals were unexpectedly lost. |
| REMEDIES                 | Check wiring of door operator.             |

| 107 – DOOR_R_JUMPER_GSW  |  | DOORS REAR JUMPER ON GSW   |
|--------------------------|--|----------------------------|
| DESCRIPTION              | Gate Switch jumpers were detected. Gate switch input must go low to be cleared.  |                            |
| REMEDIES                 | Check for possible jumpers on GSW input.<br>Increase the door jumper timeout setting.<br>Adjust timing of GSW contact making and opening.  |                            |
| 108 – DOOR_R_JUMPER_LOCK |  | DOORS REAR JUMPER ON LOCKS |
| DESCRIPTION              | Lock jumpers were detected. Lock input must go low to be cleared.  |                            |
| REMEDIES                 | Check for possible jumpers on the door lock inputs.<br>Increase the door jumper timeout setting.   |                            |
| 109 – DOOR_R_LOCKS_OPEN  |  | DOORS REAR LOCKS OPEN      |
| DESCRIPTION              | Rear doors locks are open when doors are closing.  |                            |
| REMEDIES                 | Look at DOOR DATA on the main screen to determine if controller is seeing GSW.<br>Door locks contacts are not making, clean contacts.  |                            |
| 110 – DOOR_R_GSW_OPEN    |  | DOORS REAR GSW OPEN        |
| DESCRIPTION              | Rear doors gate switch is open when doors are closing.   |                            |
| REMEDIES                 | Look at DOOR DATA on the main screen to determine if controller is seeing GSW.<br>Gate Switch contacts are not making, clean contacts.   |                            |
| 111 – DOOR_R_FAIL_OPEN   |  | DOORS REAR FAILED TO OPEN  |
| DESCRIPTION              | Rear doors failed to open, controller did not see DOL signal when doors are fully open.  |                            |
| REMEDIES                 | Verify the Door Open Limit (DOL) input goes off when doors fully open.<br>Verify that the time it takes for the doors to open is less than the timeout specified by <b>MAIN MENU   SETUP   DOOR SETUP   DOOR STUCK TIMER</b> .                         |                            |
| 112 – DOOR_R_FAIL_CLOSED |  | DOORS REAR FAILED TO CLOSE |
| DESCRIPTION              | Rear doors failed to close, controller did not see GSW, DCL and/or DPM when doors are fully closed.  |                            |
| REMEDIES                 | Verify the Door Close Limit (DCL) input goes off, and GSW and/or DPM, when doors fully close.<br>Verify that the time it takes for the doors to close is less than the timeout specified by <b>MAIN MENU   SETUP   DOOR SETUP   DOOR STUCK TIMER</b> . |                            |

| 113 – DOOR_R_FAIL_NUDGE |   | DOORS REAR FAILED TO NUDGE |  |
|-------------------------|---|----------------------------|--|
| DESCRIPTION             | Rear doors failed to nudge closed, controller did not see GSW, DCL and/or DPM when attempting to nudge close.   |                            |  |
| REMEDIES                | Verify nothing is obstructing the doors to close.<br>Verify PHE input is not stuck.<br>Verify the Door Close Limit (DCL) input goes off, and GSW and/or DPM, when doors fully close.<br>Verify that the time it takes for the doors to nudge is less than the timeout specified by <b>MAIN MENU   SETUP   DOOR SETUP   DOOR NUDGE TIMER</b> . |                            |  |

| 114 – DOOR_R_STALLED |   | DOORS REAR STALLED |  |
|----------------------|---|--------------------|--|
| DESCRIPTION          | The controller was unable to open or close the doors fully after repeated attempts. Rear doors are now in a partially opened state. |                    |  |
| REMEDIES             | Verify nothing is obstructing the doors to open/close.<br>Verify the doors can mechanically open and close.                         |                    |  |

| 115 – DOOR_R_LOST_SIGNAL |   | DOORS REAR LOST SIGNAL |  |
|--------------------------|---|------------------------|--|
| DESCRIPTION              | Door rear signals were unexpectedly lost. |                        |  |
| REMEDIES                 | Check wiring of door operator.            |                        |  |

| 116 – MAX_RUNTIME |  | MAX RUN TIME |  |
|-------------------|--|--------------|--|
| DESCRIPTION       | Car made a single run that exceeded the max run timer.   |              |  |
| REMEDIES          | Adjust the speed or slowdown of the car.<br>Increase the max runtime setting by <b>MAIN MENU   SETUP   MISC   MAX RUN TIME</b> . |              |  |

| 117 – EB_BYPASSED |  | EB3 OR EB4 BYPASS RELAY IS STUCK ON |  |
|-------------------|--|-------------------------------------|--|
| DESCRIPTION       | EB3 or EB4 Relay is stuck in the ON position.                                    |                                     |  |
| REMEDIES          | Verify the EB3 or EB4 relay is tightly seated on its connector on the MRU Board. |                                     |  |

| 118 THROUGH 123 – PARAM_QUEUE_XXX |  | MR/CT/COP A OR B PROCESSOR PARAMETER EDIT BUFFER OVERFLOWED. |  |
|-----------------------------------|--|--|--|
| DESCRIPTION                       | PROCESSORS: MRA (MACHINE ROOM A), MRB (MACHINE ROOM B), CTA (CAR TOP A), CTB (CAR TOP B), COPA (CAR OPERATING PANEL A), COPB (CAR OPERATING PANEL B) are overflowed by the request of parameter changes. |  |  |
| REMEDIES                          | Reduce rate of parameter edit requests.  |  |  |

| <b>124 THROUGH 135 –<br/>OFFLINE_XXX_XXX</b> |   | <b>MR/CT/COP PROCESSOR WAS REPORTED BY ANOTHER<br/>MR/CT/COP PROCESSOR TO BE OFFLINE</b> |
|--|---|--|
| DESCRIPTION                                  | MR/CT/COP A or B processor was reported offline by MR/CT/COP A or B processor.  |  |
| REMEDIES                                     | Check wiring of communication lines.<br>Check for stalled HB (Heartbeat) LEDS on the SRU Boards. If any of the SRU HB LED is stalled, recycle power to SRU Board. |  |

| <b>156 – SAFETY_STR_PIT</b> |  | <b>SAFETY STRING PIT SWITCH</b> |
|-----------------------------|--|---------------------------------|
| DESCRIPTION                 | Pit Switch in the safety string is open. (MR-PIT) input is missing on the MRU Board. |                                 |
| REMEDIES                    | Check wiring of the Pit Switch.<br>Check the input (MR-PIT) to make sure it is on.   |                                 |

| <b>157 – SAFETY_STR_BUF</b> |   | <b>SAFETY STRING BUF SWITCH</b> |
|-----------------------------|---|---------------------------------|
| DESCRIPTION                 | Buffer Switch in the safety string is open. (MR-BUF) input is missing on the MRU Board. |                                 |
| REMEDIES                    | Check wiring of the Buffer Switch.<br>Check the input (MR-BUF) to make sure it is on.   |                                 |

| <b>158 – SAFETY_STR_TFL</b> |   | <b>SAFETY STRING TFL SWITCH</b> |
|-----------------------------|---|---------------------------------|
| DESCRIPTION                 | Top Final Limit in the safety string is open. (MR-TFL) input is missing on the MRU Board. |                                 |
| REMEDIES                    | Check wiring of the Top Final Limit.<br>Check the input (MR-TFL) to make sure it is on.   |                                 |

| <b>159 – SAFETY_STR_BFL</b> |  | <b>SAFETY STRING BFL SWITCH</b> |
|-----------------------------|--|---------------------------------|
| DESCRIPTION                 | Bottom Final Limit in the safety string is open. (MR-BFL) input is missing on the MRU Board. |                                 |
| REMEDIES                    | Check wiring of the Bottom Final Limit.<br>Check the input (MR-BFL) to make sure it is on.   |                                 |

| <b>160 – SAFETY_STR_CT_SW</b> |  | <b>SAFETY STRING CT STOP SWITCH</b> |
|-------------------------------|--|-------------------------------------|
| DESCRIPTION                   | Car Top Stop Switch in the safety string is open. (CT_SF1) input is missing on the CT SRU Board. |                                     |
| REMEDIES                      | Check wiring of the Car Top Stop Switch.<br>Check the input (CT_SF1) to make sure it is on.      |                                     |

| <b>161 – SAFETY_STR_ESC_HATCH</b> |   | <b>SAFETY STRING ESCAPE HATCH</b> |
|-----------------------------------|---|-----------------------------------|
| DESCRIPTION                       | Escape Hatch Contact in the safety string is open. (CT_SF2) input is missing on the CT SRU Board. |                                   |
| REMEDIES                          | Check wiring of the Escape Hatch Contact.<br>Check the input (CT_SF2) to make sure it is on.      |                                   |



| 162 – SAFETY_STR_CAR_SAFE SAFETY STRING CAR SAFETIES |   |
|--|---|
| DESCRIPTION  | Car Safeties in the safety string is open. (CT_SF3) input is missing on the CT SRU Board. |
| REMEDIES   | Check wiring of the Car Safeties.<br>Check the input (CT_SF3) to make sure it is on.      |

| 163 – LTF_OPEN LOCK TOP FRONT OPEN |  |
|------------------------------------|--|
| DESCRIPTION                        | This fault will occur when the top front hall door lock is clipped or open during car operation.   |
| REMEDIES                           | Check wiring of top front locks.<br>Check contacts of top front lock make sure they are making up when hall doors are closed.<br>Make sure input (MR_LTF) is on. |

| 164 – LMF_OPEN LOCK MIDDLE FRONT OPEN |  |
|---------------------------------------|--|
| DESCRIPTION                           | This fault will occur when the middle front hall door lock is clipped or open during car operation.  |
| REMEDIES                              | Check wiring of middle front locks.<br>Check contacts of middle front lock make sure they are making up when hall doors are closed.<br>Make sure input (MR-LMF) is on. |

| 165 – LBF_OPEN LOCK BOTTOM FRONT OPEN |  |
|---------------------------------------|--|
| DESCRIPTION                           | This fault will occur when the bottom front hall door lock is clipped or open during car operation.  |
| REMEDIES                              | Check wiring of bottom front locks.<br>Check contacts of bottom front lock make sure they are making up when hall doors are closed.<br>Make sure input (MR-LBF) is on. |

| 166 – LTR_OPEN LOCK TOP REAR OPEN |  |
|-----------------------------------|--|
| DESCRIPTION                       | This fault will occur when the top rear hall door lock is clipped or open during car operation.  |
| REMEDIES                          | Check wiring of top rear locks.<br>Check contacts of top rear lock make sure they are making up when hall doors are closed.<br>Make sure input (MR_LTR) is on. |

| <b>167 – LMR_OPEN</b> |  | <b>LOCK MIDDLE REAR OPEN</b> |
|-----------------------|--|------------------------------|
| DESCRIPTION           | This fault will occur when the middle rear hall door lock is clipped or open during car operation.   |                              |
| REMEDIES              | Check wiring of middle rear locks.<br>Check contacts of middle rear lock make sure they are making up when hall doors are closed.<br>Make sure input (MR-LMR) is on. |                              |

| <b>168 – LBR_OPEN</b> |  | <b>LOCK BOTTOM REAR OPEN</b> |
|-----------------------|--|------------------------------|
| DESCRIPTION           | This fault will occur when the bottom rear hall door lock is clipped or open during car operation.   |                              |
| REMEDIES              | Check wiring of bottom rear locks.<br>Check contacts of bottom rear lock make sure they are making up when hall doors are closed.<br>Make sure input (MR-LBR) is on. |                              |

| <b>169 – GSWF_OPEN</b> |  | <b>GATE SWITCH FRONT OPEN</b> |
|------------------------|--|-------------------------------|
| DESCRIPTION            | Controller not seeing Gate Switch Front input when doors are fully closed.   |                               |
| REMEDIES               | Car is on inspection, Front GSW is not made, and the Car Door Bypass enable switch is not active.<br>Check wiring of the Front GSW input.<br>Check contact of the Front GSW. |                               |

| <b>170 – GSWR_OPEN</b> |   | <b>GATE SWITCH REAR OPEN</b> |
|------------------------|---|------------------------------|
| DESCRIPTION            | Controller not seeing Gate Switch rear input when doors are fully closed.   |                              |
| REMEDIES               | Car is on inspection, Rear GSW is not made, and the Car Door Bypass enable switch is not active.<br>Check wiring of the Rear GSW input.<br>Check contact of the Rear GSW. |                              |

| <b>174 – 120VAC</b> |  | <b>MACHINE ROOM 120VAC LOSS</b> |
|---------------------|--|---------------------------------|
| DESCRIPTION         | Machine Room 120VAC supply is missing.                   |                                 |
| REMEDIES            | Check wiring going into the MRU Board on the 120V input. |                                 |

| <b>176 – MOTION_PREPARE_RUN</b> |   | <b>MOTION START SEQUENCE ABORTED DOOR STATE</b> |
|---------------------------------|---|---|
| DESCRIPTION                     | Motion start sequence was aborted due to unsafe door state.   |   |
| REMEDIES                        | Check wiring of door contacts.<br>Make sure all door signals are present when doors are fully closed. |   |

| 178 – MOTION_PICK_M |   | MOTION START SEQUENCE ABORTED M CONTACTOR |
|---------------------|---|---|
| DESCRIPTION         | Motion start sequence was aborted due to missing M contactor feedback.  |   |
| REMEDIES            | Check wiring of M contactor.<br>Make sure MMC input on the MRU Board is in the correct state.<br>When idle, MMC input is on. When M contactor is pulled in, MMC input is low. |   |

| 179 – MOTION_SPEED_REG |   | MOTION START SEQUENCE ABORTED SPEED REG RLS |
|------------------------|---|---|
| DESCRIPTION            | Motion start sequence was aborted due to missing B contactor feedback or drive control feedback.  |   |
| REMEDIES               | Check wiring of B contactor.<br>Make sure MBC input on the MRU Board is in the correct state.<br>When idle, MBC input is off. When B contactor is pulled in, MBC input is on.<br>Make sure the drive is not faulted out when giving a command to run. |   |

| 180 – MOTION_PICK_B2 |  | MOTION START SEQUENCE ABORTED B2 CONTACTOR |
|----------------------|--|--|
| DESCRIPTION          | Motion start sequence was aborted due to missing B2 contactor feedback.  |  |
| REMEDIES             | Check wiring of B2 contactor.<br>Make sure MB2C input on the MRU Board is in the correct state.<br>When idle, MB2C input is off. When B2 contactor is pulled in, MB2C input is on. |  |

| 181 – MOTION_LIFT_BRAKE |  | MOTION START SEQUENCE ABORTED BRAKE PICK SWITCH |
|-------------------------|--|---|
| DESCRIPTION             | Motion start sequence was aborted due to missing BPS signal.   |   |
| REMEDIES                | Check wiring of brake pick switch.<br>Invert the signal of the brake pick switch if needed via parameters. |   |

| 182 – MOTION_ACCEL_DELAY |  | REQUESTED RUN DISTANCE IS TOO SHORT |
|--------------------------|--|-------------------------------------|
| DESCRIPTION              | Requested run distance is shorter than 0.25 inches causing a rollback. |                                     |
| REMEDIES                 | Adjusted timers of the start of the run to reduce rollback.            |                                     |

| 183 – MOTION_RAMP_TO_ZERO |  | MOTION STOP SEQUENCE ABORTED ENCODER FEEDBACK |
|---------------------------|--|---|
| DESCRIPTION               | Motion stop sequence was aborted due to failing to ramp to zero speed.   |   |
| REMEDIES                  | Verify the car is not rolling back. If it is, adjust timers for the end of the run.<br>Adjust brakes if necessary if sliding through brakes with no command. |   |

| 184 – MOTION_HOLD_ZERO |   | MOTION STOP SEQUENCE ABORTED B2 CONTACTOR |
|------------------------|---|---|
| DESCRIPTION            | Motion stop sequence was aborted due to failing to achieve encoder speed of or below 1 fpm.                           |   |
| REMEDIES               | Adjust timers of controller or drive to hold zero speed at the end of the run.<br>Adjust mechanical brakes if needed. |   |

| 185 – MOTION_CHECK_BPS |  | MOTION STOP SEQUENCE ABORTED BRAKE PICK SWITCH |
|------------------------|--|--|
| DESCRIPTION            | Motion stop sequence was aborted due to missing BPS signal.  |  |
| REMEDIES               | Check wiring of brake pick switch.<br>Invert the signal of the brake pick switch if needed via parameters. |  |

| 187 – MOTION_DROP_M |   | MOTION STOP SEQUENCE ABORTED M CONTACTOR |
|---------------------|---|--|
| DESCRIPTION         | Motion stop sequence was aborted due to failing to drop the M contactor.  |  |
| REMEDIES            | Verify the M contactor is dropping out after command to run drops out.<br>Verify MMC input is coming on when the M contactor drops out. |  |

| 188 – MOTION_PREFLIGHT |   | MOTION STOP SEQUENCE ABORTED PRE-FLIGHT CHECK |
|------------------------|---|---|
| DESCRIPTION            | The system runs a preflight check of all safety connections/relays/inputs/outputs prior to car leaving a landing.<br>Only required in Canada. |   |
| REMEDIES               | Verify wiring of all safety connections/relays/inputs/outputs on the preflight requirement.   |   |

| 189 – BPS_STUCK_LO |  | BRAKE PICK SWITCH STUCK LOW |
|--------------------|--|-----------------------------|
| DESCRIPTION        | Brake pick switch is stuck low during a run.   |                             |
| REMEDIES           | Check brake pick switch.<br>Reset machine room board to clear.<br>Check brake pick switch wiring.<br>Make sure BPS setting is set to NC by going to <b>MAIN MENU   SETUP   BRAKE SETUP   PRIMARY SETUP   BPS NC.</b> |                             |

| 190 – BPS_STUCK_HI |  | BRAKE PICK SWITCH STUCK HIGH |
|--------------------|--|------------------------------|
| DESCRIPTION        | Brake pick switch is stuck high while the car is stopped.  |                              |
| REMEDIES           | Check brake pick switch.<br>Reset machine room board to clear.<br>Check brake pick switch wiring.<br>Make sure BPS setting is set to NC by going to <b>MAIN MENU   SETUP   BRAKE SETUP   PRIMARY SETUP   BPS NC.</b> |                              |

| 191 – EB2_DROPPED |   | EB2 (ROPE GRIPPER) RELAY WAS DROPPED |  |
|-------------------|---|--------------------------------------|--|
| DESCRIPTION       | EB2 (ROPE GRIPPER) relay was dropped.                               |                                      |  |
| REMEDIES          | Locate and press the EBRK RST Button at the bottom of the MR BOARD. |                                      |  |

| 192 – EB2_STUCK |   | EB2 (ROPE GRIPPER) RELAY IS STUCK ON/OFF |  |
|-----------------|---|--|--|
| DESCRIPTION     | EB2 (ROPE GRIPPER) relay is stuck on/off.   |  |  |
| REMEDIES        | Verify the EB2 relay is tightly seated on its connector.<br>Locate and press the EBRK RST Button at the bottom of the MR BOARD. |  |  |

| 193 – BRAKE_OFFLINE |   | BRAKE BOARD OFFLINE |  |
|---------------------|---|---------------------|--|
| DESCRIPTION         | Brake board communication was lost.   |                     |  |
| REMEDIES            | Check CAN bus wiring.<br>Make sure CAN termination jumpers are set correctly to the prints. |                     |  |

| 194 – BRAKE_UNK |   | BRAKE BOARD UNKNOWN |  |
|-----------------|---|---------------------|--|
| DESCRIPTION     | Brake board reporting an unknown state.   |                     |  |
| REMEDIES        | Recycle power to the brake board.<br>If still reporting unknown state, replace brake board. |                     |  |

| 197 – BRAKE_COM |   | BRAKE BOARD COMMUNICATION |  |
|-----------------|---|---------------------------|--|
| DESCRIPTION     | Brake board reporting communication loss.   |                           |  |
| REMEDIES        | Check CAN bus wiring.<br>Make sure CAN termination jumpers are set correctly to the prints. |                           |  |

| 199 – BRAKE_MOSFET |   | BRAKE BOARD MOSFET |  |
|--------------------|---|--------------------|--|
| DESCRIPTION        | Brake board reporting MOSFET failure.                   |                    |  |
| REMEDIES           | Check wiring on brake board’s high voltage connections. |                    |  |

| 200 – BRAKE_BUS_OFFLINE |                                      | BRAKE BOARD CAN BUS OFFLINE |  |
|-------------------------|--------------------------------------|-----------------------------|--|
| DESCRIPTION             | Brake board reporting CAN bus reset. |                             |  |
| REMEDIES                | Check for short on the CAN bus.      |                             |  |

| 201 – BRAKE_DIP |  | BRAKE BOARD DIP SWITCH SETTING |  |
|-----------------|--|--------------------------------|--|
| DESCRIPTION     | Brake board reporting DIP switch settings in conflict with another brake board.  |                                |  |
| REMEDIES        | Check brake boards to make sure DIP switch settings are not identical.<br>Adjust dip switches on brake boards to match prints accordingly. |                                |  |

| 203 – BRAKE_AC_LOSS |   | BRAKE BOARD INCOMING AC VOLTAGE |  |
|---------------------|---|---------------------------------|--|
| DESCRIPTION         | Brake board does not detect an AC voltage source.<br>Note: This fault is only valid on 20 AMP brake boards.   |                                 |  |
| REMEDIES            | Check brake board for consistent AC voltage coming into the brake board. If none, trace back to power source. |                                 |  |

| 204 – EBRAKE_OFFLINE |   | EMERGENCY BRAKE BOARD OFFLINE |  |
|----------------------|---|-------------------------------|--|
| DESCRIPTION          | Emergency Brake board communication was lost.   |                               |  |
| REMEDIES             | Check CAN bus wiring.<br>Make sure CAN termination jumpers are set correctly to the prints. |                               |  |

| 205 – EBRAKE_UNK |   | EMERGENCY BRAKE BOARD UNKNOWN |  |
|------------------|---|-------------------------------|--|
| DESCRIPTION      | Emergency Brake board reporting an unknown state.   |                               |  |
| REMEDIES         | Recycle power to the emergency brake board.<br>If still reporting unknown state, replace emergency brake board. |                               |  |

| 208 – EBRAKE_COMM |   | EMERGENCY BRAKE BOARD COMMUNICATION |  |
|-------------------|---|-------------------------------------|--|
| DESCRIPTION       | Emergency Brake board reporting communication loss.   |                                     |  |
| REMEDIES          | Check CAN bus wiring.<br>Make sure CAN termination jumpers are set correctly to the prints. |                                     |  |

| 210 – EBRAKE_MOSFET |   | EMERGENCY BRAKE BOARD MOSFET |  |
|---------------------|---|------------------------------|--|
| DESCRIPTION         | Emergency Brake board reporting MOSFET failure.                   |                              |  |
| REMEDIES            | Check wiring on emergency brake board’s high voltage connections. |                              |  |

| 211 – EBRAKE_BUS_OFFLINE |  | EMERGENCY BRAKE BOARD CAN BUS OFFLINE |  |
|--------------------------|--|---------------------------------------|--|
| DESCRIPTION              | Emergency Brake board reporting CAN bus reset. |                                       |  |
| REMEDIES                 | Check for short on the CAN bus.                |                                       |  |

| 212 – EBRAKE_DIP |  | EMERGENCY BRAKE BOARD DIP SWITCH SETTING |  |
|------------------|--|--|--|
| DESCRIPTION      | Emergency Brake board reporting DIP switch settings in conflict with another brake board.  |  |  |
| REMEDIES         | Check brake boards to make sure DIP switch settings are not identical.<br>Adjust dip switches on brake boards to match prints accordingly. |  |  |

| 214 – EBRAKE_AC_LOSS |   | EMERGENCY BRAKE BOARD INCOMING AC VOLTAGE |  |
|----------------------|---|---|--|
| DESCRIPTION          | Emergency Brake board does not detect an AC voltage source.<br>Note: This fault is only valid on 20 AMP brake boards.   |   |  |
| REMEDIES             | Check Emergency brake board for consistent AC voltage coming into the brake board. If none, trace back to power source. |   |  |

| 216 – CPLD_UNINT_MOV |  | CPLD UNINTENDED MOVEMENT |
|----------------------|--|--------------------------|
| DESCRIPTION          | CPLD reporting unintended movement.<br>Car drifted with GSW and hall locks open out of door zone.        |                          |
| REMEDIES             | Check wiring and safety contacts.<br>Locate and press the EBRK RST Button at the bottom of the MR BOARD. |                          |

| 217 – CPLD_GOV |   | CPLD GOVERNOR |
|----------------|---|---------------|
| DESCRIPTION    | The CPLD detected a loss of power on the governor input. The controller monitors the electrical contact on the governor.  |               |
| REMEDIES       | Check the fault log to see what speed the car was at when the fault was recorded. Over speeding can occur if the drive is not properly configured. Try running the car on inspection and verify that the FPM speed feedback tracks the CMD speed. If it does not, check the drive parameters on the drives:<br>Magnetek HPV900: adjust the RPM value of DRIVE A1   CONTRACT MTR SPD.<br>KEB: adjust the LN01   SHEAVE DIAMETER.<br>Magnetek DSD: adjust the RPM value of parameter 11   MOTOR RPM.<br>If this fault occurred while the car was stopped or at low speed, it could be a problem with the governor switch or wiring. |               |

| 218 – CPLD_REDUND |  | CPLD REDUNDANCY |
|-------------------|--|-----------------|
| DESCRIPTION       | CPLD reporting redundancy fault. Refer to Fault 11 through Fault 49.                       |                 |
| REMEDIES          | Verify the MRU board has its RDC jumper on.<br>If the RDC jumper is on, replace MRU Board. |                 |

| 219 – CPLD_COM_LOSS |  | CPLD COMMUNICATION LOSS |
|---------------------|--|-------------------------|
| DESCRIPTION         | CPLD reporting communication loss of CN2 network.  |                         |
| REMEDIES            | Check for miswiring on the CN2 network.<br>Measure voltage on CN2+ and CN2- on MRU and CT SRU Board and make sure you have around 1.5VDC-3.5VDC.<br>Check CT/COP toggle switch on the CT/COP SRU Board, make sure they are in the correct state for the board that they are for.<br>Make sure DIP1B is set to ON for Cop and OFF for CT. |                         |

| 220 – CPLD_NON_BYP |   | CPLD NONBYPASS |
|--------------------|---|----------------|
| DESCRIPTION        | CPLD reporting loss of a no bypass input. |                |
| REMEDIES           | Check MRU and CT SRU Board safety inputs. |                |



| 221 – CPLD_IN_CAR |   | CPLD IN CAR STOP SWITCH |
|-------------------|---|-------------------------|
| DESCRIPTION       | <p>The In-Car Stop switch is in the Stop position.</p> <p>The In-Car stop switch input on the SRU board are not powered or switch is wired incorrectly (reversed).</p> <p>The In-Car Stop switch is not present on car but inputs have not been jumped out.</p>   |                         |
| REMEDIES          | <p>Turn the In-Car Stop switch to the RUN position.</p> <p>Input (COP-SF2) on the COP SRU board must be powered for the car to run. Verify that the In-car Stop switch is wired to the input.</p> <p>Verify the input have power when the switch is in the RUN position and that power is removed in the STOP position.</p> <p>If car does not have an In-car Stop switch, then the Cartop SRU input (COP-SF2) must be jumped to the C24 bus.</p> |                         |

| 222 – CPLD_INSP |   | CPLD INSPECTION |
|-----------------|---|-----------------|
| DESCRIPTION     | CPLD reporting invalid inspection mode.           |                 |
| REMEDIES        | An invalid set of inspection switches are active. |                 |

| 223 – CPLD_SFH |   | CPLD SFH RELAY |
|----------------|---|----------------|
| DESCRIPTION    | CPLD reporting loss of SFH input.                   |                |
| REMEDIES       | Check input SFH on MRU board, input needs to be on. |                |

| 225 – CPLD_ACCESS |   | CPLD ACCESS INSPECTION |
|-------------------|---|------------------------|
| DESCRIPTION       | CPLD reporting invalid access switch and lock combination.  |                        |
| REMEDIES          | <p>Check to make sure that the top locks are the only one open when on top access.</p> <p>Check to make sure that the bottom locks are the only one open when on bottom access.</p> |                        |

| 226 – CPLD_LOCKS |   | CPLD HALL LOCKS |
|------------------|---|-----------------|
| DESCRIPTION      | CPLD reporting hall locks are open.   |                 |
| REMEDIES         | <p>Check wiring of hall locks.</p> <p>Check contacts of hall locks make sure they are making up when hall doors are closed.</p> <p>Make sure all hall lock inputs are on when closed.</p> |                 |

| 227 – CPLD_DOORS |   | CPLD DOORS |
|------------------|---|------------|
| DESCRIPTION      | CPLD reporting gate switches are open.  |            |
| REMEDIES         | Verify the Door Close Limit (DCL) input goes off, and GSW and/or DPM, when doors fully close. |            |

| 228 – CPLD_BYPASS_SW | CPLD BYPASS SWITCH  |
|----------------------|---|
| DESCRIPTION          | CPLD reporting a bypass switch is active.                           |
| REMEDIES             | Turn off bypass switch if not using CT inspection or IC inspection. |

| 229 – CPLD_PREFLIGHT | CPLD PRE FLIGHT CHECK   |
|----------------------|---|
| DESCRIPTION          | CPLD reporting preflight check failure.   |
| REMEDIES             | Verify wiring of all safety connections/relays/inputs/outputs on the preflight requirement. |

| 234 – DZ_STUCK_HI | DOOR ZONE STUCK   |
|-------------------|---|
| DESCRIPTION       | Door zone input stuck high and over six inches from the closest learned floor position.   |
| REMEDIES          | Check and verify DZ input (CT-503/504) goes on and off while crossing the door zone.<br>Check for obstruction of the DZ sensor. |

| 235 – POSITION_LIMIT | POSITION LIMIT   |
|----------------------|--|
| DESCRIPTION          | Car moving outside the mode defined position limit.                                    |
| REMEDIES             | To bypass the limit, go to <b>MAIN MENU   SETUP   MISC   BYPASS TERM LIMITS   YES.</b> |

| 236 – INVALID_MANUAL_RUN | INVALID MANUAL RUN   |
|--------------------------|--|
| DESCRIPTION              | Attempting a manual run outside specified current position limits.                     |
| REMEDIES                 | To bypass the limit, go to <b>MAIN MENU   SETUP   MISC   BYPASS TERM LIMITS   YES.</b> |

| 237 – INVALID_ACCEL_CURVE | INVALID ACCELERATION CURVE                             |
|---------------------------|--|
| DESCRIPTION               | Requested acceleration curve is invalid.               |
| REMEDIES                  | Increase current s-curve acceleration rate parameters. |

| 238 – INVALID_DECEL_CURVE | INVALID DECELERATION CURVE                             |
|---------------------------|--|
| DESCRIPTION               | Requested deceleration curve is invalid.               |
| REMEDIES                  | Increase current s-curve deceleration rate parameters. |

| 239 – INVALID_ADDED_CURVE | INVALID MID ACCELERATION CURVE                         |
|---------------------------|--|
| DESCRIPTION               | Requested mid run acceleration curve is invalid.       |
| REMEDIES                  | Increase current s-curve acceleration rate parameters. |

| 240 – INVALID_RSL_CURVE | INVALID RUN DECELERATION CURVE                         |
|-------------------------|--|
| DESCRIPTION             | Requested mid run deceleration curve is invalid.       |
| REMEDIES                | Increase current s-curve deceleration rate parameters. |

|                        |  |                                |  |
|------------------------|--|--------------------------------|--|
| 241 – INVALID_CURVE_P1 |  | INVALID NORMAL PROFILE S CURVE |  |
| DESCRIPTION            | Normal profile s-curve settings are invalid.                         |                                |  |
| REMEDIES               | Increase the profile's acceleration or deceleration rate parameters. |                                |  |

|                        |  |                                    |  |
|------------------------|--|------------------------------------|--|
| 242 – INVALID_CURVE_P2 |  | INVALID INSPECTION PROFILE S CURVE |  |
| DESCRIPTION            | Inspection profile s-curve settings are invalid.                     |                                    |  |
| REMEDIES               | Increase the profile's acceleration or deceleration rate parameters. |                                    |  |

|                        |  |   |  |
|------------------------|--|---|--|
| 243 – INVALID_CURVE_P3 |  | INVALID EMERGENCY POWER PROFILE S CURVE |  |
| DESCRIPTION            | E-Power profile s-curve settings are invalid.                        |   |  |
| REMEDIES               | Increase the profile's acceleration or deceleration rate parameters. |   |  |

|                        |  |                               |  |
|------------------------|--|-------------------------------|--|
| 244 – INVALID_CURVE_P4 |  | INVALID SHORT PROFILE S CURVE |  |
| DESCRIPTION            | Short profile s-curve settings are invalid.                          |                               |  |
| REMEDIES               | Increase the profile's acceleration or deceleration rate parameters. |                               |  |

|                 |   |                           |  |
|-----------------|---|---------------------------|--|
| 245 – SFM_STUCK |   | SFM RELAY IS STUCK ON/OFF |  |
| DESCRIPTION     | SFM relay is stuck on/off.  |                           |  |
| REMEDIES        | Verify the SFM relay is tightly seated on its connector on the MRU Board. |                           |  |

|                  |   |                   |  |
|------------------|---|-------------------|--|
| 246 – OVERLOADED |   | CAR IS OVERLOADED |  |
| DESCRIPTION      | Overload input is high, indicating the car is overloaded. |                   |  |
| REMEDIES         | Remove weight from the elevator until input is low.       |                   |  |

|                                       |   |                           |  |
|---------------------------------------|---|---------------------------|--|
| 247 THROUGH 249 – PREFLIGHT_MR/CT/COP |   | MR/CT/COP PREFLIGHT CHECK |  |
| DESCRIPTION                           | MR or CT or COP is indicating failure of preflight check.                                   |                           |  |
| REMEDIES                              | Verify wiring of all safety connections/relays/inputs/outputs on the preflight requirement. |                           |  |

|                   |   |                    |  |
|-------------------|---|--------------------|--|
| 254 – REGEN_FAULT |   | REGEN UNIT FAULTED |  |
| DESCRIPTION       | Regen unit reporting a fault state.   |                    |  |
| REMEDIES          | Refer to the Regen for fault indication.<br>Refer to the Regen manual for troubleshooting.<br>Verify wiring of the regen fault input. |                    |  |

| 255 – OVERSPEED_CONST CONSTRUCTION OVERSPEED |   |
|--|---|
| DESCRIPTION                                  | Car speed has exceeded 125% of the max inspection speed (150 FPM)   |
| REMEDIES                                     | Be sure Inspection Speed parameter is set correctly to a value of 150 FPM or lower. Check contract motor speed on drive. Reduce the RPM inside the drive to slow car speed down. Reduce the s-curve values. |

| 256 – EBPS_STUCK_LO EMERGENCY BRAKE PICK SWITCH STUCK LOW |   |
|---|---|
| DESCRIPTION   | Emergency brake pick switch is stuck low during a run.  |
| REMEDIES  | Check emergency brake pick switch.<br>Reset machine room board to clear.<br>Check emergency brake pick switch wiring.<br>Make sure EBPS setting is set to NC by going to <b>MAIN MENU   SETUP   BRAKE SETUP   SECONDARY SETUP   BPS NC.</b> |

| 257 – EBPS_STUCK_HI EMERGENCY BRAKE PICK SWITCH STUCK HIGH |   |
|--|---|
| DESCRIPTION  | Emergency brake pick switch is stuck high while the car is stopped.   |
| REMEDIES   | Check emergency brake pick switch.<br>Reset machine room board to clear.<br>Check emergency brake pick switch wiring.<br>Make sure EBPS setting is set to NC by going to <b>MAIN MENU   SETUP   BRAKE SETUP   SECONDARY SETUP   BPS NC.</b> |

| 258 – INVALID_DIP_SW_B2 INVALID DIP SWITCH B2 SETTING |   |
|---|---|
| DESCRIPTION   | Rear door DIP switches and parameter do not match.  |
| REMEDIES  | If dip switch B2 is turned ON for the machine room, car top, and COP SRU Boards, enable parameter 01-0033 to ON. If dip switch B2 is turned OFF for all three boards, disable parameter 01-0033 to OFF. |

| 259 – INVALID_DIP_SW_B3 INVALID DIP SWITCH B3 SETTING |  |
|---|--|
| DESCRIPTION   | Enable landing inspection DIP switch and parameter do not match.   |
| REMEDIES  | If dip switch B3 is turned ON for the machine room, enable parameter 01-0038 to ON. If dip switch B3 is turned OFF for the machine room, disable parameter 01-0038 to OFF. |

| 260 – INVALID_DIP_SW_B4 |   | INVALID DIP SWITCH B4 SETTING |
|-------------------------|---|-------------------------------|
| DESCRIPTION             | Enable PIT inspection DIP switch and parameter do not match.  |                               |
| REMEDIES                | If dip switch B4 is turned ON for the machine room, enable parameter 01-0037 to ON. If dip switch B4 is turned OFF on the machine room, disable parameter 01-0037 to OFF. |                               |

| 261 – INVALID_DIP_SW_B8 |  | INVALID DIP SWITCH B8 SETTING |
|-------------------------|--|-------------------------------|
| DESCRIPTION             | Dip B8 on the machine room board is ON while not performing the unintended movement acceptance test. |                               |
| REMEDIES                | Turn OFF dip switch B8 if not doing the unintended acceptance movement test.                         |                               |

| 262 – INVALID_DIP_SW_A6 |  | INVALID DIP SWITCH A6 SETTING |
|-------------------------|--|-------------------------------|
| DESCRIPTION             | Construction mode is required when the motor learn dip switch A6 is ON.                              |                               |
| REMEDIES                | Move to construction mode if doing a motor learn. If not doing a motor learn turn dip switch A6 off. |                               |

| 263 – INSP_IC_KEY_REQD |  | INSPECTION IC KEY REQUIRED |
|------------------------|--|----------------------------|
| DESCRIPTION            | Both IC and CT inspection switches are required for CT inspection operation.   |                            |
| REMEDIES               | Enable IC inspection if enabling CT inspection.<br>If IC inspection is not required to enable CT inspection, turn OFF parameter 01-0075. |                            |

| 264 – B_CONT_HI_SW |  | B CONTACTOR HIGH SERIAL |
|--------------------|--|-------------------------|
| DESCRIPTION        | Drive's serial speed reg signal is stuck high.               |                         |
| REMEDIES           | Check drive's speed reg settings for correct serial mapping. |                         |

| 265 – B_CONT_HI_HW |  | B CONTACTOR HIGH |
|--------------------|--|------------------|
| DESCRIPTION        | B contactor feedback is stuck high.  |                  |
| REMEDIES           | Check the wiring to and from the B contactor.<br>Make sure MBC input on the MRU Board is in the correct state.<br>When idle, MBC input is off. When B contactor is pulled in, MBC input is on. |                  |

| 266 – B_CONT_LO_SW |  | B CONTACTOR LOW SERIAL |
|--------------------|--|------------------------|
| DESCRIPTION        | Drive's serial speed reg signal is stuck low.                |                        |
| REMEDIES           | Check drive's speed reg settings for correct serial mapping. |                        |

| 267 – B_CONT_LO_HW          |  | B CONTACTOR LOW                    |
|-----------------------------|--|------------------------------------|
| DESCRIPTION                 | B contactor feedback is stuck low.   |                                    |
| REMEDIES                    | Check the wiring to and from the B contactor.<br>Make sure MBC input on the MRU Board is in the correct state.<br>When idle, MBC input is off. When B contactor is pulled in, MBC input is on. |                                    |
| 284 THROUGH 298 – EXP_DIP_X |  | EXPANSION BOARD DIP SWITCH SETTING |
| DESCRIPTION                 | Two or more expansion boards have the same DIP switch settings.  |                                    |
| REMEDIES                    | Make sure none of the dip switch settings on the expansion boards are identical.<br>Match the expansion boards dip switch settings with the prints accordingly.                                |                                    |
| 299 – INVALID_HALLMASK      |  | INVALID HALL MASKS                 |
| DESCRIPTION                 | There is overlap between hall call, medical, and swing masks.  |                                    |
| REMEDIES                    | Make sure none of the swing risers hall mask is set identically.   |                                    |
| 300 – OOS_LIMIT             |  | OUT OF SERVICE LIMIT               |
| DESCRIPTION                 | Car has exceeded a fault limit and gone out of service.  |                                    |
| REMEDIES                    | Reset fault by putting car on inspection mode.   |                                    |
| 301 – DUPLICATE_GROUP_ID    |  | DUPLICATE GROUP ID                 |
| DESCRIPTION                 | Two or more cars in the group have the same car ID.  |                                    |
| REMEDIES                    | Verify that the car ID are not identical.<br>If identical, change accordingly to car labels by going to MAIN MENU   GROUP SETUP   CAR ID.  |                                    |
| 302 – RESCUE_START          |  | RESCUE OPERATION START SEQUENCE    |
| DESCRIPTION                 | After moving to rescue operation, the car waits a minimum of 2 seconds before beginning rescue.  |                                    |
| REMEDIES                    | N/A  |                                    |
| 303 – RESCUE_IN_DZ          |  | RESCUE OPERATION IN DOOR ZONE      |
| DESCRIPTION                 | The car has arrived at the nearest opening, opened its doors, and gone out of service.   |                                    |
| REMEDIES                    | N/A  |                                    |
| 304 – INVALID               |  | RESCUE OPERATION INVALID           |
| DESCRIPTION                 | Automatic: No valid recall was found.<br>Manual: Invalid run state.  |                                    |
| REMEDIES                    | Turn off automatic rescue and perform a manual rescue.   |                                    |

| 305 – MR_SAFETY |  | MACHINE ROOM SAFETY |
|-----------------|--|---------------------|
| DESCRIPTION     | Machine room safety input (SFM) was lost.  |                     |
| REMEDIES        | Check wiring to the input (SFM).<br>Verify safety contact is closing and opening in the correct state. |                     |

| 306 THROUGH 333 – CEDESX_XXX |  | CEDES1 LANDING SYSTEM ERRORS |
|------------------------------|--|------------------------------|
| DESCRIPTION                  | CEDES channel 1 or channel 2 reporting error:<br>306 – CEDES1_OFFLINE<br>307 – CEDES1_READ_FAIL<br>308 – CEDES1_ALIGN_CLOSE<br>309 – CEDES1_ALIGN_FAR<br>310 – CEDES1_ALIGN_LEFT<br>311 – CEDES1_ALIGN_RIGHT<br>312 – CEDES1_INTERNAL<br>313 – CEDES1_COMM<br>314 – CEDES1_CROSS1_POSS<br>315 – CEDES1_CROSS1_VEL<br>316 – CEDES1_CROSS1_BOTH<br>317 – CEDES1_CROSS2_POS<br>318 – CEDES1_CROSS2_VEL<br>319 – CEDES1_CROSS2_BOTH<br>320 – CEDES2_OFFLINE<br>321 – CEDES2_READ_FAIL<br>322 – CEDES2_ALIGN_CLOSE<br>323 – CEDES2_ALIGN_FAR<br>324 – CEDES2_ALIGN_LEFT<br>325 – CEDES2_ALIGN_RIGHT<br>326 – CEDES2_INTERNAL<br>327 – CEDES2_COMM<br>328 – CEDES2_CROSS1_POS<br>329 – CEDES2_CROSS1_VEL<br>330 – CEDES2_CROSS1_BOTH<br>331 – CEDES2_CROSS2_POS<br>332 – CEDES2_CROSS2_VEL<br>333 – CEDES2_CROSS2_BOTH |                              |
| REMEDIES                     | Check camera wiring from camera to CT SRU Board CAN port.<br>Check and clean the tape.<br>Run the elevator through the hoistway and align the tape with the camera accordingly.  |                              |



| <b>334 – EPOWER</b> |   | <b>EMERGENCY POWER OUT OF SERVICE</b> |
|---------------------|---|---------------------------------------|
| DESCRIPTION         | Emergency Power operation is active.                                |                                       |
| REMEDIES            | Building power needs to be returned to be back to normal operation. |                                       |

| <b>335 – INVALID_PARKING</b> |   | <b>INVALID PARKING</b> |
|------------------------------|---|------------------------|
| DESCRIPTION                  | Parking floor is set to landing with no openings. |                        |
| REMEDIES                     | Set parking floor to a valid opening.             |                        |

| <b>336 – INVALID_FIRE_MAIN</b> |   | <b>INVALID FIRE MAIN</b> |
|--------------------------------|---|--------------------------|
| DESCRIPTION                    | Main fire recall floor and opening setting are invalid. |                          |
| REMEDIES                       | Set main recall floor to valid opening.                 |                          |

| <b>337 – INVALID_FIRE_ALT</b> |  | <b>INVALID FIRE ALTERNATE</b> |
|-------------------------------|--|-------------------------------|
| DESCRIPTION                   | Alternate fire recall floor and opening setting are invalid. |                               |
| REMEDIES                      | Set alt recall floor to a valid opening.                     |                               |

| <b>338 THROUGH 340 – CPLD_OFFLINE_MR/CT/COP</b> |   | <b>CPLD OFFLINE MR/CT/COP</b> |
|---|---|-------------------------------|
| DESCRIPTION                                     | Communication with machine room / car stop / cop CPLD was lost. |                               |
| REMEDIES  | Contact Smartrise Engineering.                                  |                               |

| <b>342 – DRIVE_OFFLINE</b> |   | <b>DRIVE OFFLINE</b> |
|----------------------------|---|----------------------|
| DESCRIPTION                | Communication with drive was lost.  |                      |
| REMEDIES                   | <p>Check the wiring of the communication lines between the machine room and the drive.</p> <p>If verified wiring is correct according to the prints, replace CAT 5.</p> <p>Replace MRU board.</p> <p>Replace Drive control board.</p> |                      |

| <b>343 THROUGH 357 – DSD_XXX</b> |  | <b>DSD FAULTS</b> |
|----------------------------------|--|-------------------|
| DESCRIPTION                      | The DSD drive is indicating a fault. Look at the fault log on the DSD Drive for more detailed fault explanation. |                   |
| REMEDIES                         | Refer to the DSD Drive Manual for troubleshooting.   |                   |

| 358 – DSD_COMM |  | DSD COMMUNICATION |
|----------------|--|-------------------|
| DESCRIPTION    | Drive reporting a communication loss fault.  |                   |
| REMEDIES       | Check the wiring of the communication lines between the machine room and the drive.<br>If verified wiring is correct according to the prints, replace CAT 5.<br>Replace MRU board.<br>Replace Drive control board. |                   |

| 359 THROUGH 430 – MAG_FLT_X |  | MAGNETEK FAULTS |
|-----------------------------|--|-----------------|
| DESCRIPTION                 | The Magnetek drive is indicating a fault. Look at the fault log on the Magnetek Drive for more detailed fault explanation. |                 |
| REMEDIES                    | Refer to the Magnetek Drive Manual for troubleshooting.  |                 |

| 431 THROUGH 653 – KEB_FLT_X |  | KEB FAULTS |
|-----------------------------|--|------------|
| DESCRIPTION                 | The KEB drive is indicating a fault. Look at the fault log on the KEB Drive for more detailed fault explanation. |            |
| REMEDIES                    | Refer to the KEB Drive Manual for troubleshooting.   |            |

| 654 – INVALID_LAND_OFF |   | INVALID LAND OFF |
|------------------------|---|------------------|
| DESCRIPTION            | Group landing offset setting is outside valid range.  |                  |
| REMEDIES               | The sum of the landing offset and the car's number of floors should be less than the max support landings (typically 64). Currently this offset is bounded to less than 32. |                  |

| 655 – PAYMENT_PASSCODE |   | PAYMENT PASSCODE |
|------------------------|---|------------------|
| DESCRIPTION            | The passcode required for normal operation is not entered.  |                  |
| REMEDIES               | Contact Smartrise Engineering customer service for payment passcode.<br>After receiving payment passcode go to MAIN MENU   SETUP   MISC   PAYMENT PASSCODE. |                  |

| 656 – BATTERY_FAULT |   | BATTERY FAULT |
|---------------------|---|---------------|
| DESCRIPTION         | Battery Lowering device is reporting a fault state.   |               |
| REMEDIES            | Check backup battery for fault indication.<br>Measure voltage on batteries of the battery lowering. |               |

| 657 THROUGH 660 – INVALID_ETSL_X |   | INVALID ETSL |
|----------------------------------|---|--------------|
| DESCRIPTION                      | 657 – INVALID_ETSL_1 Normal profile ETSL<br>658 – INVALID_ETSL_2 Inspection profile ETSL<br>659 – INVALID_ETSL_3 Emergency profile ETSL<br>660 – INVALID_ETSL_4 Short profile ETSL<br>ETSL points are not of increasing in position/speed value or a trip speed exceeds contract speed. |              |
| REMEDIES                         | Cycle power to the system or edit an S-Curve parameter to trigger a ETSL point recalculation.   |              |

| 663 THROUGH 676 – CEDES3_XXX |   | CEDES3 LANDING SYSTEM ERRORS |
|------------------------------|---|------------------------------|
| DESCRIPTION                  | ETSL CEDES channel 2 reporting error:<br>663 – CEDES3_OFFLINE<br>664 – CEDES3_READ_FAIL<br>665 – CEDES3_ALIGN_CLOSE<br>666 – CEDES3_ALIGN_FAR<br>667 – CEDES3_ALIGN_LEFT<br>668 – CEDES3_ALIGN_RIGHT<br>669 – CEDES3_INTERNAL<br>670 – CEDES3_COMM<br>671 – CEDES3_CROSS1_POSS<br>672 – CEDES3_CROSS1_VEL<br>673 – CEDES3_CROSS1_BOTH<br>674 – CEDES3_CROSS2_POS<br>675 – CEDES3_CROSS2_VEL<br>676 – CEDES3_CROSS2_BOTH |                              |
| REMEDIES                     | Check camera wiring from camera to COP SRU Board CAN port.<br>Check and clean the tape.<br>Run the elevator through the hoistway and align the tape with the camera accordingly.  |                              |

| 677 THROUGH 680 – RSBUFFER_PX |  | RSBUFFER |
|-------------------------------|--|----------|
| DESCRIPTION                   | 677 – RSBUFFER_P1 S-curve normal profile decel exceeds limit for reduce speed buffer.<br>678 – RSBUFFER_P2 S-curve inspection profile decel exceeds limit for reduce speed buffer.<br>679 – RSBUFFER_P3 S-curve emergency power profile decel exceeds limit for reduce speed buffer.<br>680 – RSBUFFER_P4 S-curve short profile decel exceeds limit for reduce speed buffer. |          |
| REMEDIES                      | Controller automatically calculates slowdowns based on the user input in SETUP I SAFETY I ETSL for reduced stroke buffers.<br>Current s-curve settings are outside of the range to meet the slowdown requirement. Lower the s-curve decel parameters until the fault clears.   |          |

| 681 THROUGH 688 – OVERSPEED_UETS_X |   | OVERSPEED UETS 1-8 |
|------------------------------------|---|--------------------|
| DESCRIPTION                        | Car has 8 UETS trip points and the car exceeded the top terminal speed limit on one of those trip points. |                    |
| REMEDIES                           | Lower your deceleration curve parameters or increase the ETSL debounce limit.                             |                    |

| 689 THROUGH 696 – OVERSPEED_DETS_X |  | OVERSPEED DETS 1-8 |
|------------------------------------|--|--------------------|
| DESCRIPTION                        | Car has 8 DETS trip points and the car exceeded the bottom terminal speed limit on one of those trip points. |                    |
| REMEDIES                           | Lower your deceleration curve parameters or increase the ETSL debounce limit.                                |                    |

| 697 THROUGH 704 – OVERSPEED_UETSL_X |  | OVERSPEED UETSL 1-8 |
|-------------------------------------|--|---------------------|
| DESCRIPTION                         | Car has 8 UETSL trip points and the car exceeded the top terminal speed limit on one of those trip points. |                     |
| REMEDIES                            | Lower your deceleration curve parameters or increase the ETSL debounce limit.                              |                     |

| 705 THROUGH 712 – OVERSPEED_DETSL_X |   | OVERSPEED DETSL 1-8 |
|-------------------------------------|---|---------------------|
| DESCRIPTION                         | Car has 8 DETSL trip points and the car exceeded the bottom terminal speed limit on one of those trip points. |                     |
| REMEDIES                            | Lower your deceleration curve parameters or increase the ETSL debounce limit.                                 |                     |

| 713 – FAULT_INPUT |  | FAULT INPUT |
|-------------------|--|-------------|
| DESCRIPTION       | Discrete fault input has been high for 200ms.  |             |
| REMEDIES          | Check IO configuration for the fault input location.<br>Check wiring of the fault input. |             |

| 714 – DRIVE_FLT_UNKNOWN |   | DRIVE FAULT UNKNOWN |
|-------------------------|---|---------------------|
| DESCRIPTION             | Drive reporting a fault that is out of the C4 system's defined range.   |                     |
| REMEDIES                | Check the drive fault log for indication of the fault.<br>Note: only for KEB drive, this signals that the drive ready output is either low or the output is misconfigured on the drive. |                     |

| 715 – FRAM_DATA_CORRUPTION |  | FRAM DATA CORRUPTION |
|----------------------------|--|----------------------|
| DESCRIPTION                | FRAM data redundancy check has failed, and data was not recovered. |                      |
| REMEDIES                   | Contact Smartrise Engineering.                                     |                      |

## Alarm Description Index:

| 1 THROUGH 8 – NTS_UP_P1_X |   | NTS UP P1-1 THROUGH 8 (NORMAL MOTION) |
|---------------------------|---|---------------------------------------|
| DESCRIPTION               | <p>Note: The lowest point is closest to the terminal.</p> <p>NTS point 1 has been tripped in the up direction for normal motion profile.</p> <p>NTS point 2 has been tripped in the up direction for normal motion profile.</p> <p>NTS point 3 has been tripped in the up direction for normal motion profile.</p> <p>NTS point 4 has been tripped in the up direction for normal motion profile.</p> <p>NTS point 5 has been tripped in the up direction for normal motion profile.</p> <p>NTS point 6 has been tripped in the up direction for normal motion profile.</p> <p>NTS point 7 has been tripped in the up direction for normal motion profile.</p> <p>NTS point 8 has been tripped in the up direction for normal motion profile.</p> |                                       |
| REMEDIES                  | Adjust S-Curve.   |                                       |

| 17 THROUGH 24 – NTS_UP_P3_X |   | NTS UP P3-1 THROUGH 8 (E-POWER MOTION) |
|-----------------------------|---|--|
| DESCRIPTION                 | <p>Note: The lowest point is closest to the terminal.</p> <p>NTS point 1 has been tripped in the up direction for e-power motion profile.</p> <p>NTS point 2 has been tripped in the up direction for e-power motion profile.</p> <p>NTS point 3 has been tripped in the up direction for e-power motion profile.</p> <p>NTS point 4 has been tripped in the up direction for e-power motion profile.</p> <p>NTS point 5 has been tripped in the up direction for e-power motion profile.</p> <p>NTS point 6 has been tripped in the up direction for e-power motion profile.</p> <p>NTS point 7 has been tripped in the up direction for e-power motion profile.</p> <p>NTS point 8 has been tripped in the up direction for e-power motion profile.</p> |  |
| REMEDIES                    | Adjust S-Curve.   |  |

| 25 THROUGH 32 – NTS_UP_P4_X |   | NTS UP P4-1 THROUGH 8 (SHORT MOTION) |
|-----------------------------|---|--------------------------------------|
| DESCRIPTION                 | <p>Note: The lowest point is closest to the terminal.</p> <p>NTS point 1 has been tripped in the up direction for short motion profile.</p> <p>NTS point 2 has been tripped in the up direction for short motion profile.</p> <p>NTS point 3 has been tripped in the up direction for short motion profile.</p> <p>NTS point 4 has been tripped in the up direction for short motion profile.</p> <p>NTS point 5 has been tripped in the up direction for short motion profile.</p> <p>NTS point 6 has been tripped in the up direction for short motion profile.</p> <p>NTS point 7 has been tripped in the up direction for short motion profile.</p> <p>NTS point 8 has been tripped in the up direction for short motion profile.</p> |                                      |
| REMEDIES                    | Adjust S-Curve.   |                                      |

| 33 THROUGH 40 – NTS_DN_P1_X |   | NTS DOWN P1-1 THROUGH 8 (NORMAL MOTION) |
|-----------------------------|---|---|
| DESCRIPTION                 | <p>Note: The lowest point is closest to the terminal.</p> <p>NTS point 1 has been tripped in the down direction for normal motion profile.</p> <p>NTS point 2 has been tripped in the down direction for normal motion profile.</p> <p>NTS point 3 has been tripped in the down direction for normal motion profile.</p> <p>NTS point 4 has been tripped in the down direction for normal motion profile.</p> <p>NTS point 5 has been tripped in the down direction for normal motion profile.</p> <p>NTS point 6 has been tripped in the down direction for normal motion profile.</p> <p>NTS point 7 has been tripped in the down direction for normal motion profile.</p> <p>NTS point 8 has been tripped in the down direction for normal motion profile.</p> |   |
| REMEDIES                    | Adjust S-Curve.   |   |

| 49 THROUGH 56 – NTS_DOWN_P3_X |   | NTS DOWN P3-1 THROUGH 8 (E-POWER) |
|-------------------------------|---|-----------------------------------|
| DESCRIPTION                   | <p>Note: The lowest point is closest to the terminal.</p> <p>NTS point 1 has been tripped in the down direction for e-power motion profile.</p> <p>NTS point 2 has been tripped in the down direction for e-power motion profile.</p> <p>NTS point 3 has been tripped in the down direction for e-power motion profile.</p> <p>NTS point 4 has been tripped in the down direction for e-power motion profile.</p> <p>NTS point 5 has been tripped in the down direction for e-power motion profile.</p> <p>NTS point 6 has been tripped in the down direction for e-power motion profile.</p> <p>NTS point 7 has been tripped in the down direction for e-power motion profile.</p> <p>NTS point 8 has been tripped in the down direction for e-power motion profile.</p> |                                   |
| REMEDIES                      | Adjust S-Curve.   |                                   |

| 57 THROUGH 64 – NTS_DOWN_P4_X |   | NTS DOWN P4-1 THROUGH 8 (SHORT MOTION) |
|-------------------------------|---|--|
| DESCRIPTION                   | <p>Note: The lowest point is closest to the terminal.</p> <p>NTS point 1 has been tripped in the down direction for short motion profile.</p> <p>NTS point 2 has been tripped in the down direction for short motion profile.</p> <p>NTS point 3 has been tripped in the down direction for short motion profile.</p> <p>NTS point 4 has been tripped in the down direction for short motion profile.</p> <p>NTS point 5 has been tripped in the down direction for short motion profile.</p> <p>NTS point 6 has been tripped in the down direction for short motion profile.</p> <p>NTS point 7 has been tripped in the down direction for short motion profile.</p> <p>NTS point 8 has been tripped in the down direction for short motion profile.</p> |  |
| REMEDIES                      | Adjust S-Curve.   |  |

| 65 THROUGH 68 – NTS_INVALID_PX |  | NTS INVALID P1 THROUGH 4 |
|--------------------------------|--|--------------------------|
| DESCRIPTION                    | NTS_INVALID_P1: Normal Profile NTS points are not of increasing in position/speed value or a trip speed exceeds contract speed.<br>NTS_INVALID_P2: Inspection Profile NTS points are not of increasing in position/speed value or a trip speed exceeds contract speed.<br>NTS_INVALID_P3: E-Power Profile NTS points are not of increasing in position/speed value or a trip speed exceeds contract speed.<br>NTS_INVALID_P1: Short Profile NTS points are not of increasing in position/speed value or a trip speed exceeds contract speed. |                          |
| REMEDIES                       | Cycle power to the system or edit an S-Curve parameter to trigger a NTS point recalculation.   |                          |

| 69 – ESTOP_CLASS_OP |  | EMERGENCY STOP CLASS OP |
|---------------------|--|-------------------------|
| DESCRIPTION         | This debugging alarm will signal when an ESTOP is. |                         |
| REMEDIES            | To turn off alarm, adjust parameter 01-150 to OFF. |                         |

| 70 – ESTOP_STOP_TIMEOUT |  | EMERGENCY STOP STOP TIMEOUT |
|-------------------------|--|-----------------------------|
| DESCRIPTION             | This debugging alarm will signal when an ESTOP is. |                             |
| REMEDIES                | To turn off alarm, adjust parameter 01-150 to OFF. |                             |

| 71 – ESTOP_MOVE_TIMEOUT |  | EMERGENCY STOP MOVE TIMEOUT |
|-------------------------|--|-----------------------------|
| DESCRIPTION             | This debugging alarm will signal when an ESTOP is. |                             |
| REMEDIES                | To turn off alarm, adjust parameter 01-150 to OFF. |                             |

| 72 – ESTOP_INVALID_INSP |  | EMERGENCY STOP INVALID INSPECTION |
|-------------------------|--|-----------------------------------|
| DESCRIPTION             | This debugging alarm will signal when an ESTOP is. |                                   |
| REMEDIES                | To turn off alarm, adjust parameter 01-150 to OFF. |                                   |

| 73 – ESTOP_RECALL_DEST |  | EMERGENCY STOP RECALL DESTINATION |
|------------------------|--|-----------------------------------|
| DESCRIPTION            | This debugging alarm will signal when an ESTOP is. |                                   |
| REMEDIES               | To turn off alarm, adjust parameter 01-150 to OFF. |                                   |

| 74 – STOP_AT_NEXT_FLOOR |  | EMERGENCY STOP STOP AT NEXT FLOOR |
|-------------------------|--|-----------------------------------|
| DESCRIPTION             | This debugging alarm will signal when an ESTOP is. |                                   |
| REMEDIES                | To turn off alarm, adjust parameter 01-130 to OFF. |                                   |

| 75 – ESTOP_EQ |  | EMERGENCY STOP EARTHQUAKE |
|---------------|--|---------------------------|
| DESCRIPTION   | This debugging alarm will signal when an ESTOP is. |                           |
| REMEDIES      | To turn off alarm, adjust parameter 01-150 to OFF. |                           |



| 76 – ESTOP_FLOOD         |   | EMERGENCY STOP FLOOD        |
|--------------------------|---|-----------------------------|
| DESCRIPTION              | This debugging alarm will signal when an ESTOP is.                        |                             |
| REMEDIES                 | To turn off alarm, adjust parameter 01-150 to OFF.                        |                             |
| 77 – STOP_NO_DZ          |   | STOP NO DOOR ZONE           |
| DESCRIPTION              | Car is stopped outside of a door zone.                                    |                             |
| REMEDIES                 | If car overshot floor, adjust S-Curve.                                    |                             |
| 78 – RELEVELING          |   | RELEVELING                  |
| DESCRIPTION              | The car was in a releveling condition.                                    |                             |
| REMEDIES                 | The floor level may be set improperly.<br>Hydro: Valves possibly leaking. |                             |
| 79 – DEFAULT_PARAM_1BIT  |   | DEFAULTING PARAMETER BIT 1  |
| DESCRIPTION              | Parameters in Bit 1 are being defaulted.                                  |                             |
| REMEDIES                 | Wait until parameters of Bit 1 are defaulted.                             |                             |
| 80 – DEFAULT_PARAM_8BIT  |   | DEFAULTING PARMAETER BIT 8  |
| DESCRIPTION              | Parameters in Bit 8 are being defaulted.                                  |                             |
| REMEDIES                 | Wait until parameters of Bit 8 are defaulted.                             |                             |
| 81 – DEFAULT_PARAM_16BIT |   | DEFAULTING PARAMETER BIT 16 |
| DESCRIPTION              | Parameters in Bit 16 are being defaulted.                                 |                             |
| REMEDIES                 | Wait until parameters of Bit 16 are defaulted.                            |                             |
| 82 – DEFAULT_PARAM_24BIT |   | DEFAULTING PARAMETER BIT 24 |
| DESCRIPTION              | Parameters in Bit 24 are being defaulted.                                 |                             |
| REMEDIES                 | Wait until parameters of Bit 24 are defaulted.                            |                             |
| 83 – DEFAULT_PARAM_32BIT |   | DEFAULTING PARAMETER BIT 32 |
| DESCRIPTION              | Parameters in Bit 32 are being defaulted.                                 |                             |
| REMEDIES                 | Wait until parameters of Bit 32 are defaulted.                            |                             |

| 84 – RECALL_INVALID_DOOR |   | RECALL INVALID DOOR |
|--------------------------|---|---------------------|
| DESCRIPTION              | Requested recall destination has an invalid door configuration. |                     |
| REMEDIES                 | Set recall destination to valid door.                           |                     |

| 85 – RECALL_INVALID_FLOOR |  | RECALL INVALID FLOOR |
|---------------------------|--|----------------------|
| DESCRIPTION               | Requested recall destination has an invalid floor. |                      |
| REMEDIES                  | Set recall destination to a valid floor.           |                      |

| 86 – RECALL_INVALID_OPENING |  | RECALL INVALID OPENING |
|-----------------------------|--|------------------------|
| DESCRIPTION                 | Requested recall destination has an invalid opening. |                        |
| REMEDIES                    | Set recall destination to a valid opening.           |                        |

| 87 THROUGH 92–<br>WDT_DISABLED_MR/CT/COP |   | MR/CT/COP PROCESSORS WATCHDOG DISABLED |
|--|---|--|
| DESCRIPTION                              | MRA MRB CTA CTB COPA or COPB processor has started up with a watchdog disabled. |  |
| REMEDIES                                 | Remove the WD jumper and restart the board to reenale WD.                       |  |

| 93 THROUGH 96 – MR_CAN_RESET_X |   | MRU CAN1-4 RESET |
|--------------------------------|---|------------------|
| DESCRIPTION                    | MRU CAN 1 through 4 transceiver has self-reset due to excessive bus errors.   |                  |
| REMEDIES                       | Verify bus wiring. If problem persists, remove boards from the network to isolate the board with the problem transceiver. |                  |

| 97 THROUGH 100 – CT_CAN_RESET_X |   | CT SRU BOARD CAN1-4 RESET |
|---------------------------------|---|---------------------------|
| DESCRIPTION                     | CT SRU Board CAN 1 through 4 transceiver has self-reset due to excessive bus errors.                                      |                           |
| REMEDIES                        | Verify bus wiring. If problem persists, remove boards from the network to isolate the board with the problem transceiver. |                           |

| 101 THROUGH 104 – COP_CAN_REST_X |   | COP SRU BOARD CAN1-4 RESET |
|----------------------------------|---|----------------------------|
| DESCRIPTION                      | COP SRU Board CAN 1 through 4 transceiver has self-reset due to excessive bus errors.                                     |                            |
| REMEDIES                         | Verify bus wiring. If problem persists, remove boards from the network to isolate the board with the problem transceiver. |                            |

| 105 – DRIVE_RESET |  | DRIVE RESET |
|-------------------|--|-------------|
| DESCRIPTION       | Car is triggering a drive fault reset. |             |
| REMEDIES          | This is a notification.                |             |

| 106 – DRIVE_RESET_LIMIT |   | DRIVE RESET LIMIT |
|-------------------------|---|-------------------|
| DESCRIPTION             | Drive reset limit has been reached. The controller will no longer reset drive faults. |                   |
| REMEDIES                | Check the drive for faults.   |                   |

| 107 – FULLY_LOADED |   | FULLY LOADED |
|--------------------|---|--------------|
| DESCRIPTION        | Car is fully loaded and will no longer accept hall calls. |              |
| REMEDIES           | Weight will have to be removed from the car.              |              |

| 108 THROUGH 112 – REMOTE_PU_XBIT |  | REMOTE PU 1,8,16,24,32 BIT |
|----------------------------------|--|----------------------------|
| DESCRIPTION                      | The car has received a remote request to change one of the bit parameters. |                            |
| REMEDIES                         | This is a notification.  |                            |

| 113 – REMOTE_PU_MAG |   | REMOTE PU MAGNETEK |
|---------------------|---|--------------------|
| DESCRIPTION         | The car has received a remote request to change a Magnetek parameter. |                    |
| REMEDIES            | This is a notification.   |                    |

| 114 – REMOTE_PU_KEB |  | REMOTE PU KEB |
|---------------------|--|---------------|
| DESCRIPTION         | The car has received a remote request to change a KEB parameter. |               |
| REMEDIES            | This is a notification.  |               |

| 115 – INVALID_MAN_RUN_CAR |  | INVALID MANUAL RUN CAR |
|---------------------------|--|------------------------|
| DESCRIPTION               | Manual run request rejected due to invalid car door state. |                        |
| REMEDIES                  | Verify all the door signals are in the correct state.      |                        |

| 116 – INVALID_MAN_RUN_HALL |   | INVALID MANUAL RUN HALL |
|----------------------------|---|-------------------------|
| DESCRIPTION                | Manual run requested rejected due to invalid hall door state. |                         |
| REMEDIES                   | Verify all the hall door signals are in the correct state.    |                         |

| 117 – INVALID_MAN_RUN_ARM      INVALID MANUAL RUN ARM |   |
|---|---|
| DESCRIPTION   | Manual run requested rejected due to disarmed direction inputs. This may occur if car enters inspection with its direction inputs active. |
| REMEDIES  | Verify wiring to the disarmed direction inputs.   |

| 120 – INVALID_MAN_RUN_DOFB      INVALID MANUAL RUN DOBF |  |
|---|--|
| DESCRIPTION   | Manual run request rejected due to front door open button request.               |
| REMEDIES  | If user did not press the DOB front button, check wiring to the DOB front input. |

| 121 – INVALID_MAN_RUN_DOB      INVALID MANUAL RUN DOBR |  |
|--|--|
| DESCRIPTION  | Manual run request rejected due to rear door open button request.              |
| REMEDIES   | If user did not press the DOB rear button, check wiring to the DOB rear input. |

| 122 – INVALID_MAN_RUN_HA      INVALID MANUAL RUN HOISTWAY ACCESS |   |
|--|---|
| DESCRIPTION  | Manual run request rejected due to invalid hoistway access floor or opening |
| REMEDIES   | Verify setting of openings and floors.                                      |

| 123 – INVALID_MAN_RUN_CT_EN      INVALID MANUAL RUN CT ENABLE |  |
|---|--|
| DESCRIPTION   | Manual run request rejected due to missing CT enable signal. |
| REMEDIES  | Verifying wiring to the CT inspection input (CT-SF4).        |

| 146 – MODE_CHANGE      MODE CHANGED |  |
|-------------------------------------|--|
| DESCRIPTION                         | This debugging alarm will signal when mode of operation changes. |
| REMEDIES                            | To turn off alarm, adjust parameter 01-150 to OFF.               |

| 147 THROUGH 159 – RIS1_XXX |   | RISER 1 ERRORS |
|----------------------------|---|----------------|
| DESCRIPTION                | <p>147 – RIS1_OFFLINE - Riser1 marked as offline after 30 seconds without communication.</p> <p>148 – RIS1_UNK - Riser1 reporting an unknown error.</p> <p>149 – RIS1_POR_RST - Riser1 reporting a power-on reset error.</p> <p>150 – RIS1_WDT_RST - Riser1 reporting a watchdog reset error.</p> <p>151 – RIS1_BOD_RST - Riser1 reporting a brown-out reset error.</p> <p>152 – RIS1_GRP_COM - Riser1 reporting a group network communication loss error.</p> <p>153 – RIS1_HALL_COM - Riser1 reporting a hall network communication loss error.</p> <p>154 – RIS1_CAR_COM - Riser1 reporting an invalid error.</p> <p>155 – RIS1_MST_COM - Riser1 reporting an invalid error.</p> <p>156 – RIS1_SLV_COM - Riser1 reporting an invalid error.</p> <p>157 – RIS1_ADDRESS - Riser1 has detected another board with the same address.</p> <p>158 – RIS1_BUS_RST_1 - Riser1 reporting a CAN1 bus reset error.</p> <p>159 – RIS1_BUS_RST_2 - Riser1 reporting a CAN2 bus reset error.</p> |                |
| REMEDIES                   | Check and verify wiring of riser 1 circuitry.   |                |

| 162 THROUGH 174 – RIS2_XXX |   | RISER 2 ERRORS |
|----------------------------|---|----------------|
| DESCRIPTION                | <p>162 – RIS2_OFFLINE – Riser2 marked as offline after 30 seconds without communication.</p> <p>163 – RIS2_UNK – Riser2 reporting an unknown error.</p> <p>164 – RIS2_POR_RST – Riser2 reporting a power-on reset error.</p> <p>165 – RIS2_WDT_RST – Riser2 reporting a watchdog reset error.</p> <p>166 – RIS2_BOD_RST – Riser2 reporting a brown-out reset error.</p> <p>167 – RIS2_GRP_COM – Riser2 reporting a group network communication loss error.</p> <p>168 – RIS2_HALL_COM – Riser2 reporting a hall network communication loss error.</p> <p>169 – RIS2_CAR_COM – Riser2 reporting an invalid error.</p> <p>170 – RIS2_MST_COM – Riser2 reporting an invalid error.</p> <p>171 – RIS2_SLV_COM – Riser2 reporting an invalid error.</p> <p>172 – RIS2_ADDRESS – Riser2 has detected another board with the same address.</p> <p>173 – RIS2_BUS_RST_1 – Riser2 reporting a CAN1 bus reset error.</p> <p>174 – RIS2_BUS_RST_2 – Riser2 reporting a CAN2 bus reset error.</p> |                |
| REMEDIES                   | Check and verify wiring of riser 2 circuitry.   |                |

| 177 THROUGH 189 – RIS3_XXX |  | RISER 3 ERRORS |
|----------------------------|--|----------------|
| DESCRIPTION                | 177 – RIS3_OFFLINE – Riser3 marked as offline after 30 seconds without communication.<br>178 – RIS3_UNK – Riser3 reporting an unknown error.<br>179 – RIS3_POR_RST – Riser3 reporting a power-on reset error.<br>180 – RIS3_WDT_RST – Riser3 reporting a watchdog reset error.<br>181 – RIS3_BOD_RST – Riser3 reporting a brown-out reset error.<br>182 – RIS3_GRP_COM – Riser3 reporting a group network communication loss error.<br>183 – RIS3_HALL_COM – Riser3 reporting a hall network communication loss error.<br>184 – RIS3_CAR_COM – Riser3 reporting an invalid error.<br>185 – RIS3_MST_COM – Riser3 reporting an invalid error.<br>186 – RIS3_SLV_COM – Riser3 reporting an invalid error.<br>187 – RIS3_ADDRESS – Riser3 has detected another board with the same address.<br>188 – RIS3_BUS_RST_1 – Riser3 reporting a CAN1 bus reset error.<br>189 – RIS3_BUS_RST_2 – Riser3 reporting a CAN2 bus reset error. |                |
| REMEDIES                   | Check and verify wiring of riser 3 circuitry.  |                |

| 192 THROUGH 204 – RIS4_XXX |  | RISER 4 ERRORS |
|----------------------------|--|----------------|
| DESCRIPTION                | 192 – RIS4_OFFLINE - Riser1 marked as offline after 30 seconds without communication.<br>193 – RIS4_UNK – Riser4 reporting an unknown error.<br>194 – RIS4_POR_RST – Riser4 reporting a power-on reset error.<br>195 – RIS4_WDT_RST – Riser4 reporting a watchdog reset error.<br>196 – RIS4_BOD_RST – Riser4 reporting a brown-out reset error.<br>197 – RIS4_GRP_COM – Riser4 reporting a group network communication loss error.<br>198 – RIS4_HALL_COM – Riser4 reporting a hall network communication loss error.<br>199 – RIS4_CAR_COM – Riser4 reporting an invalid error.<br>200 – RIS4_MST_COM – Riser4 reporting an invalid error.<br>201 – RIS4_SLV_COM – Riser4 reporting an invalid error.<br>202 – RIS4_ADDRESS – Riser4 has detected another board with the same address.<br>203 – RIS4_BUS_RST_1 – Riser4 reporting a CAN1 bus reset error.<br>204 – RIS4_BUS_RST_2 – Riser4 reporting a CAN2 bus reset error. |                |
| REMEDIES                   | Check and verify wiring of riser 4 circuitry.  |                |

| 628 – DDM_OFFLINE |  | DDM OFFLINE |
|-------------------|--|-------------|
| DESCRIPTION       | DD Panel manager board has gone offline. |             |
| REMEDIES          | Check DD manager board wiring.           |             |

| 629 – DOOR_OPEN_TEST |  | DOOR OPEN TEST |
|----------------------|--|----------------|
| DESCRIPTION          | Test alarm signaling that both locks and gate switch are open while in motion. |                |
| REMEDIES             | Enable this by adjusting parameter 01-159 to on.                               |                |

| 630 – FRAM_REDUNDANCY |  | FRAM REDUNDANCY |
|-----------------------|--|-----------------|
| DESCRIPTION           | FRAM's data redundancy check has failed, but the data was recovered. |                 |
| REMEDIES              | This is a notification.  |                 |

| 631 DO_DURING_RUN |   | DOOR OPEN DURING RUN |
|-------------------|---|----------------------|
| DESCRIPTION       | Debugging alarm signaling that DO output asserted during a run. Will not flag if decelerating, in stop sequence, or releveling. |                      |
| REMEDIES          | Verifying wiring to door operator and check car door data for correct signal.   |                      |

| 632 – IN_DEST_DZ_DURING RUN |   | IN DEST DOOR ZONE DURING RUN |
|-----------------------------|---|------------------------------|
| DESCRIPTION                 | Debugging alarm signaling that the flag preventing DO is being lost during a run. Will not flag if decelerating, in stop sequence, or releveling. |                              |
| REMEDIES                    | Verifying wiring to door operator and check car door data for correct signal.   |                              |