TITAN 4000

Park Industries (User) Alarms

(700000 ~ 700999)

August 1, 2023

700032 WARNING – VACUUM PUMP MOTOR AUXILIARY CONTACT FAILED TO REPLY

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX558.0

Explanation: Confirmation of the motor starter contactor operation is monitored.
See related alarm 7000156.
Cause: The vacuum pump PLC output (Q51.4) is on while the auxiliary contact PLC input (I40.6) is off for longer than 0.5 seconds.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered and spindle feedhold is applied.
Remedy: Check integrity of the motor starter and the auxiliary contact signal coming back to the PLC.
When PLC output (Q51.4) is on, PLC input (I40.6) should be on.

700033 WARNING – VACUUM PUMP SUPPLY WATER FLOW TOO LOW

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX558.1

Explanation: Confirmation of water flow to the vacuum pump is monitored.
See related alarm 7000160.
Cause: The vacuum pump water valve PLC output (Q51.1) is on while the water flow switch PLC input (I41.7) is off for longer than 1.5 seconds.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered. 1.5 seconds later spindle feedhold is applied and the vacuum pump is turned off.
Remedy: Check the water flow switch, and its signal coming back to the PLC. When PLC output (Q51.1) is on, PLC input (I41.7) should be on (within 1.5 seconds).

700034 WARNING – VACUUM AT MARGINAL LEVEL – MACHINE RUN ALLOWED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX558.2

Explanation: As the vacuum level diminishes, this is the first warning level – i.e., “marginal” level.
There are 3 levels of vacuum: OK=green, Marginal=yellow, Critical=red.

Cause: The scaled vacuum level (DB306.DBD8) is below the “lowest OK” (DB306.DBD0) level but above the “lowest marginal” (DB306.DBD4) level.

Reaction: The alarm is self-clearing.
Activation of this alarm does not affect machine operation.

Remedy: Address cause(s) for low vacuum level.
Check analog vacuum sensor signal (0-10vdc, PLC IW258) and vacuum level settings (DB306.DBD0 and DB306.DBD4).

700035 WARNING – VACUUM AT CRITICAL LOW LEVEL – MACHINE STOP OVERRIDE ACTIVE

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX558.3

Explanation: Display warning that the vacuum level is critically insufficient, but shutdown of the machine is being bypassed.
There are 3 levels of vacuum: OK=green, Marginal=yellow, Critical=red.

Cause: The scaled vacuum level (DB306.DBD8) is below the “lowest marginal” (DB306.DBD4) level and the operator selection to bypass “low vacuum shutdown” has been selected.

Reaction: The alarm is self-clearing.
Activation of this alarm does not affect machine operation (i.e., “low vacuum shutdown” is bypassed).

Remedy: Address cause(s) for low vacuum level.
Check analog vacuum sensor signal (0-10vdc, PLC IW258) and vacuum level settings (DB306.DBD0 and DB306.DBD4).

700036 NC CYCLE STOPPED - VACUUM AT CRITICAL LOW LEVEL

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX558.4

Explanation: Display warning that the vacuum level is critically insufficient, and the cycle is stopped.
There are 3 levels of vacuum: OK=green, Marginal=yellow, Critical=red.
Cause: The scaled vacuum level (DB306.DBD8) is below the “lowest marginal” (DB306.DBD4) level for more than 1.5 seconds.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered. 1.5 seconds later spindle feedhold is applied.
Remedy: Address cause(s) for low vacuum level.
Check analog vacuum sensor signal (0-10vdc, PLC IW258) and vacuum level settings (DB306.DBD0 and DB306.DBD4).

700040 WARNING – LUBRICATION LEVEL IS LOW

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX559.0

Explanation: The auto-lube system is low on grease.
Cause: Three or more low level signals (PLC input (I41.6)) were detected during the auto-lube cycle.
Reaction: The alarm is latched until cleared.
Activation of this alarm does not affect machine operation.
Remedy: Service the auto-lube system.

700041 WARNING – LUBRICATION FLOW IS LOW

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX559.1

Explanation: The auto-lube system is not detecting grease flow.
Cause: Three or fewer full flow signals (PLC input (I41.4)) were detected during the auto-lube cycle.
The lube cycle runs for up to 90 seconds. During this time, once 4 flow signals are detected, the lube cycle is complete and the 90 second timer is stopped prematurely. If 90 seconds elapses without 4 flow signals detected, this alarm is raised.
Reaction: The alarm is latched until cleared.
Activation of this alarm does not affect machine operation.
Remedy: Service the auto-lube system. Manually run the lube pump and make sure PLC input I41.4 occasionally comes on.

700048 NC CYCLE STARTS DISABLED – SPINDLE PURGE AIR PRESSURE TOO LOW

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX560.0

Explanation: Monitoring of the spindle bearing air purge pressure.
Cause: While the system is on and the incoming air pressure is adequate, the spindle air purge pressure switch PLC input (I41.2) is monitored. If the PLC input is off for 5 consecutive seconds, the alarm is active.
Reaction: This alarm is self-clearing.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Service the spindle air purge pressure switch and check for proper operation (PLC input I41.2 should be on during normal purging).

700049 NC CYCLE STARTS DISABLED – INCOMING AIR PRESSURE TOO LOW

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX560.1

Explanation: Monitoring of the system incoming air pressure.
Cause: While the system is on, system incoming air pressure switch PLC input (I41.3) is monitored. If the PLC input is off for 2 consecutive seconds, the alarm is active.
Reaction: This alarm is self-clearing.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Service and check the incoming air pressure switch and pressure level during machine operation. Make sure the plant's air supply can adequately maintain pressure *during* air consumption. PLC input (I41.3) should be on when air pressure is present.

700051 NC READ-IN, STARTS DISABLED – GANTRY SKEWED (JOG-REF TO CORRECT)

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX560.3

Explanation: The NC gantry motor (axes Y1 & Y2) synchronization is monitored.
Cause: This alarm occurs when the system is on and the SINUMERIK ONE signals the gantry group (axes Y1 & Y2) is not synchronized (DB32.DBX101.5 is off).
Reaction: This alarm is self-clearing.
While this alarm is active, NC Cycle Starts are disabled and the NC Channel Read-in is disabled (i.e., the program execution stops after the current block).
Remedy: The gantry is re-synchronized during the system on sequence. If the SINUMERIK ONE cannot synchronize the axes, check for mechanical binding of the bridge/rails. Check the Y1 and Y2 axis push levels on the front-end.

700053 NC CYCLE STARTS DISABLED – TEST STOP REQUIRED (CYCLE SYSTEM ON)

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX560.5

Explanation: As part of the machine's safety requirements, each axis motor must periodically perform (and pass) a “test stop”. On the Titan 4000 the period is 24 hours. A “test stop” check/execution is a regular function of the system on sequence.
Cause: Any axis (X, Y1, Y2, Z or Spindle) motor has not run a “test stop” for 24 hours.
Reaction: This alarm is self-clearing.
While this alarm is active, NC Cycle Starts are disabled.
Machine operation is not interrupted if this alarm occurs during program execution.
Remedy: Re-run a system-on sequence.
Note: you can turn the system off by pressing and holding the system on button.

700056 NC CYCLE STARTS DISABLED – NCU HEAT SINK TEMPERATURE TOO HIGH

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX561.0

Explanation: Status of the SINUMERIK ONE is monitored.
Cause: The heat sink temperature limit of the NCU has been exceeded (SINUMERIK ONE system bit DB10.DBX109.5 is on). Continuous NCU operation can no longer be guaranteed.
Reaction: This alarm is self-clearing.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Investigate cooling/heating aspect of the main enclosure.

700057 NC CYCLE STARTS DISABLED – NC AMBIENT AIR TEMPERATURE TOO HIGH

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX561.1

Explanation: Status of the SINUMERIK ONE is monitored.
Cause: The ambient air temperature limit of the NCU has been exceeded (SINUMERIK ONE system bit DB10.DBX109.6 is on). It is also possible the cooling fan of the module has responded.
Reaction: This alarm is self-clearing.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Replace the fan and/or ensure that adequate cooling is provided.

700058 MAINTENANCE WARNING – NC BATTERY VOLTAGE TOO LOW

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX561.2

Explanation: Status of the SINUMERIK ONE is monitored.
Cause: The NC battery voltage monitoring function has responded (SINUMERIK ONE system bit DB10.DBX109.7 is on). This may be due to the following:

- The battery voltage is within the pre-warning limit range (approx. 2.7 to 2.9 V).
- The battery voltage is below the pre-warning limit range (≤ 2.6 V).
- When the controller powered up, it was identified that the battery voltage was below the pre-warning limit range (≤ 2.6 V).

Reaction: This alarm is self-clearing.
Activation of this alarm does not affect machine operation.
Remedy: Replace the battery.
Note: the NC battery should only be replaced while the NC is switched on to avoid data loss as there is no memory backup.

700060 NC CYCLE STARTS DISABLED – X AXIS IS NOT REFERENCED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX561.4

Explanation: The machine cannot operate with an axis that is not referenced.
Cause: This alarm occurs when the system is on, the axis status bit “ok” (SINUMERIK ONE axis bit DB31.DBX93.5) is on and the axis status bit “referenced” (SINUMERIK ONE axis bit DB31.DBX60.4) is off (position measuring system 1 of the machine axis is not referenced/synchronized).
Reaction: This alarm is self-clearing.
When this alarm is first triggered, an NCK Reset is also triggered.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Reference the axis.

700061 NC CYCLE STARTS DISABLED – Y1 AXIS IS NOT REFERENCED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX561.5

Explanation: The machine cannot operate with an axis that is not referenced.
Cause: This alarm occurs when the system is on, the axis status bit “ok” (SINUMERIK ONE axis bit DB32.DBX93.5) is on and the axis status bit “referenced” (SINUMERIK ONE axis bit DB32.DBX60.4) is off (position measuring system 1 of the machine axis is not referenced/synchronized).
Reaction: This alarm is self-clearing.
When this alarm is first triggered, an NCK Reset is also triggered.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Reference the axis.

700062 NC CYCLE STARTS DISABLED – Y2 AXIS IS NOT REFERENCED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX561.6

Explanation: The machine cannot operate with an axis that is not referenced.
Cause: This alarm occurs when the system is on, the axis status bit “ok” (SINUMERIK ONE axis bit DB33.DBX93.5) is on and the axis status bit “referenced” (SINUMERIK ONE axis bit DB33.DBX60.4) is off (position measuring system 1 of the machine axis is not referenced/synchronized).
Reaction: This alarm is self-clearing.
When this alarm is first triggered, an NCK Reset is also triggered.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Reference the axis.

700063 NC CYCLE STARTS DISABLED – Z AXIS IS NOT REFERENCED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX561.7

Explanation: The machine cannot operate with an axis that is not referenced.
Cause: This alarm occurs when the system is on, the axis status bit “ok” (SINUMERIK ONE axis bit DB34.DBX93.5) is on and the axis status bit “referenced” (SINUMERIK ONE axis bit DB34.DBX60.4) is off (position measuring system 1 of the machine axis is not referenced/synchronized).
Reaction: This alarm is self-clearing.
When this alarm is first triggered, an NCK Reset is also triggered.
While this alarm is active, NC Cycle Starts are disabled.
Remedy: Reference the axis.

700132 INTERNAL E-STOP ACTIVE – OB82 I/O POINT FAULT (CONTACT PARK)

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX566.0

Explanation: PLC internal monitor.
Cause: OB82 has been activated by a diagnostics event of a PLC module. See SIEMENS documentation for in-depth explanations of events that could cause OB82 to activate.
Reaction: The machine is E-stopped (because the integrity of the control architecture is unknown).
Remedy: Check PLC hardware for integrity, errors, and faults.

700133 INTERNAL E-STOP ACTIVE – OB86 RACK FAULT (CONTACT PARK)

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX566.1

Explanation: PLC internal monitor.
Cause: OB86 has been activated by a hardware diagnostics event of the PLC. See SIEMENS documentation for in-depth explanations of events that could cause OB86 to activate.
Reaction: The machine is E-stopped (because the integrity of the control architecture is unknown).
Remedy: Check PLC hardware for integrity, errors, and faults.

700134 INTERNAL E-STOP ACTIVE – OB87 COMMUNICATION ERROR (CONTACT PARK)

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX566.2

Explanation: PLC internal monitor.
Cause: OB87 has been activated by a communication error of the PLC. See SIEMENS documentation for in-depth explanations of events that could cause OB87 to activate.
Reaction: The machine is E-stopped (because the integrity of the control architecture is unknown).
Remedy: Check PLC communication hardware for integrity, errors, and faults.

700135 INTERNAL E-STOP ACTIVE – OB121 PROGRAMMING ERROR (CONTACT PARK)

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX566.3

Explanation: PLC internal monitor.
Cause: The operating system of the CPU calls OB121 whenever an event occurs that is caused by an error related to the processing of the program. For example, if the PLC program calls a block that has not been loaded on the CPU.
Reaction: The machine is E-stopped (because the integrity of the control architecture is unknown).
Remedy: Notify Park Industries engineering to address the programming error.

700136 INTERNAL E-STOP ACTIVE – OB122 MODULE ACCESS ERROR (CONTACT PARK)

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX566.4

Explanation: PLC internal monitor.
Cause: The operating system of the CPU calls OB122 whenever an error occurs while accessing data on a module. For example, if the CPU detects a read error when accessing data on an I/O module.
Reaction: The machine is E-stopped (because the integrity of the control architecture is unknown).
Remedy: Check PLC hardware for integrity, errors, and faults.

700137 INTERNAL E-STOP ACTIVE – SYSTEM OFF REQUEST

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX566.5

Explanation: System Off Request when the system is ON.
Cause: The System on PB on the HMI console is pressed and held for 3 seconds or the System On button on front end is pressed.
Reaction: The machine is E-stopped to turn off system and disable drives.
Remedy: Press Alarm Reset or System On to clear alarm.

700140 MACHINE E-STOP SIGNAL ACTIVE – HMI CONSOLE E-STOP PUSHBUTTON

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX567.0

Explanation: Displays the status of the E-stop device.
Cause: This alarm is raised when the PLC logical input (I20.0) of the HMI console E-Stop indicates the device is in the E-stopped condition.
Reaction: This alarm is self-clearing.
The alarm is for displaying the status of the E-stop device only.
Remedy: Reset the E-stop device. Check the pair of PLC inputs (I20.0 and I20.4) against the schematic for proper 2-channel signaling (both channels should be electrically equivalent).

700141 MACHINE E-STOP SIGNAL ACTIVE – PENDANT E-STOP PUSHBUTTON

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX567.1

Explanation: Displays the status of the E-stop device.
Cause: This alarm is raised when the PLC logical input (I20.1) of the HHU (pendant) E-Stop indicates the device is in the E-stopped condition.
Reaction: This alarm is self-clearing.
The alarm is for displaying the status of the E-stop device only.
Remedy: Reset the E-stop device. Check the pair of PLC inputs (I20.1 and I20.5) against the schematic for proper 2-channel signaling (both channels should be electrically equivalent).

700143 MACHINE E-STOP SIGNAL ACTIVE – SAFETY PULLCORD/DOOR SWITCH TRIPPED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX567.3

Explanation: Displays the status of the E-stop device.
Cause: This alarm is raised when the PLC logical input (I30.1) of the pullcord/door switch(option) indicates the device is in the E-stopped condition while the spindle disable/enable switch is in the “enable” position.
Reaction: This alarm is self-clearing.
The alarm is for displaying the status of the E-stop device only.
Remedy: Reset the E-stop device. Check the pair of PLC inputs (I30.1 and I30.5) against the schematic for proper 2-channel signaling (both channels should be electrically equivalent).

700144 WARNING – SYSTEM IS NOT ON

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX567.4

Explanation: If no hardware E-stop devices are tripped and the system is not on, this alarm displays the status of the system on circuit.
Cause: If the system on circuit is not on, the PLC logical safety relay is disabled (which is equivalent to pressing a hardware E-stop device).
Reaction: This alarm is self-clearing.
The alarm is for displaying the status of the E-stop cause only.
Remedy: This alarm will clear when the system circuit comes on or an actual hardware E-stop device is tripped.

700145 MACHINE E-STOP SIGNAL ACTIVE – SPINDLE BELT BROKE/NOT DETECTED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX567.5

Explanation: Monitoring of the spindle drive belt sensor.
Cause: The spindle drive belt sensor PLC input (I40.7), indicates a broken or missing belt.
Reaction: This alarm is self-clearing.
While this alarm is active, an E-stop condition exists – the machine cannot be started.
Remedy: Check the spindle belt and belt sensor. Check PLC input I40.7 for proper operation. If I40.7 is off, the belt is considered ok.

700148 ATTENTION – SAFETY WORKZONE VIOLATION – ACKNOWLEDGE REQUIRED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX568.0

Explanation: Machine safety situation involving the front photobeam needs attention.
Cause: This alarm is raised when the system is on, the spindle enable/disable switch is set to “enable”, and the front photobeam is interrupted.
Reaction: This alarm is self-clearing (once conditions are returned to normal).
When this alarm is activated, an NC Cycle Stop is triggered, NC Cycle Starts are disabled and axes X, Y1, Y2 and Z are immobilized via SS2e safety stop commands.
If this alarm occurs while in “Jog” mode, the NC is Reset.
Remedy: Clear the front photobeam. Acknowledge and clear by briefly pressing the system on button.
Check the pair of PLC inputs (I30.0 and I30.4) against the schematic for proper 2-channel signaling (both channels should be electrically non-equivalent).

700149 ATTENTION – MACHINE SAFETY SPEED LIMIT BEING ENFORCED (SPINDLE DISABLED)

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX568.1

Explanation: Displays when the machine motion velocity is being limited.
Cause: This alarm is raised when the system is on, and the spindle disable switch is set to “disable”.
Reaction: This alarm is self-clearing.
When this alarm is activated, an NC Cycle Stop is triggered (NC Cycle Starts are disabled because the spindle is disabled). Axes X, Y1, Y2 and Z are held in Safe Limited Speed (SLS) mode.
Remedy: Enable the spindle. Check the pair of PLC inputs (I20.2 and I20.6) against the schematic for proper 2-channel signaling (both channels should be electrically equivalent).

700150 ATTENTION – SPIKE IN AXIS LOADS DETECTED – POSSIBLE SPINDLE CRASH

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX568.2

Explanation: This alarm is momentarily displayed (5 seconds) whenever an excessive spike in axes push is detected.
Cause: The XY vector push is monitored. If the rate of force change in lbs. exceeds DB91.DBD24 the alarm is triggered, and the spindle crash counter DB301.DBD10 is incremented. While the system is on, the peak push is recorded in DB307.DBD28 (this gets reset when the system is off).
Reaction: This alarm is self-clearing.
Activation of this alarm does not affect machine operation. Use HMI Operate to view the PLC addresses listed above (they are not viewable on the front-end).

700151 ATTENTION – SPINDLE WARM-UP ROUTINE DID NOT COMPLETE NORMALLY

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX568.3

Explanation: During the machine's spindle warm-up routine, the front photobeam was interrupted.
Cause: During the machine's spindle warm-up routine, the front photobeam PLC input I40.0, was interrupted.
Reaction: The alarm is latched until cleared.
When this alarm is triggered, an NCK Reset is triggered to stop the spindle warm-up program.
Remedy: Re-start the spindle warm-up routine being careful to not interrupt the front photobeam while the program is running. Check the pair of PLC inputs (I30.0 and I30.4) against the schematic for proper 2-channel signaling (both channels should be electrically non-equivalent).

700156 ATTENTION – VACUUM PUMP MOTOR AUX CONTACT SIGNAL ERROR WHILE DE-ENERGIZED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX569.0

Explanation: Monitor signal integrity of the machine's PLC output and input combinations and avoid/detect use of jumper wires.
See related alarm 700032.

Cause: The PLC output for the vacuum pump motor starter (Q51.4) is off but the motor starter auxiliary contact signal PLC input (I40.6) is on. The input signal must respond within 0.75 seconds of the PLC output.

Reaction: This alarm is self-clearing.
Activation of this alarm does not affect machine operation.

Remedy: Check integrity of the motor starter and the auxiliary contact signal coming back to the PLC. When PLC output (Q51.4) is off, PLC input (I40.6) should be off.

700157 ATTENTION – SPINDLE FAN MOTOR AUX CONTACT SIGNAL ERROR WHILE DE-ENERGIZED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX569.1

Explanation: Monitor signal integrity of the machine's PLC output and input combinations and avoid/detect use of jumper wires.
See related alarm 700234.

Cause: The PLC output for the spindle cooling fan (Q51.2) is off but the motor starter auxiliary contact signal PLC input (I40.4) is on. The input signal must respond within 0.75 seconds of the PLC output.

Reaction: This alarm is self-clearing.
Activation of this alarm does not affect machine operation.

Remedy: Check integrity of the motor starter and the auxiliary contact signal coming back to the PLC. When PLC output (Q51.2) is off, PLC input (I40.4) should be off.

700158 ATTENTION – SPINDLE CENTER WATER FLOW SWITCH ERROR WHILE VALVE DE-ENERGIZED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX569.2

Explanation: Monitor signal integrity of the machine's PLC output and input combinations and avoid/detect use of jumper wires.
See related alarm 700232.

Cause: The PLC output for the spindle center water valve (Q50.5) is off but the center water flow switch signal PLC input (I41.1) is on. The input signal must respond within 10 seconds of the PLC output.
Note: this alarm does not occur if the “center water alarm suppress” option is selected on the front-end.

Reaction: This alarm is self-clearing.
Activation of this alarm does not affect machine operation.

Remedy: Check integrity of the spindle water flow switch signal coming back to the PLC. When PLC output (Q50.5) is off, PLC input (I41.1) should be off.

700159 ATTENTION – SPINDLE RING WATER FLOW SWITCH ERROR WHILE VALVE DE-ENERGIZED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX569.3

Explanation: Monitor signal integrity of the machine's PLC output and input combinations and avoid/detect use of jumper wires.
See related alarm 700233.

Cause: The PLC output for the spindle ring water valve (Q50.3) is off but the ring water flow switch signal PLC input (I41.0) is on. The input signal must respond within 10 seconds of the PLC output.
Note: this alarm does not occur if the “ring water alarm suppress” option is selected on the front-end.

Reaction: This alarm is self-clearing.
Activation of this alarm does not affect machine operation.

Remedy: Check integrity of the spindle water flow switch signal coming back to the PLC. When PLC output (Q50.3) is off, PLC input (I41.0) should be off.

700160 ATTENTION – VACUUM PUMP SUPPLY WATER FLOW SWITCH ERROR WHILE VALVE DE-ENERGIZED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX569.4

Explanation: Monitor signal integrity of the machine's PLC output and input combinations and avoid/detect use of jumper wires.
See related alarm 700033.

Cause: The PLC output for the vacuum pump water valve (Q51.1) is off but the pump water flow switch signal PLC input (I41.7) is on. The input signal must respond within 5 seconds of the PLC output.
Note: this alarm does not occur if the “vacuum pump water flow alarm suppress” option is selected on the front-end.

Reaction: This alarm is self-clearing.
Activation of this alarm does not affect machine operation.

Remedy: Check integrity of the spindle water flow switch signal coming back to the PLC. When PLC output (Q51.1) is off, PLC input (I41.7) should be off.

700232 NC CYCLE STOPPED – SPINDLE CENTER WATER FEED LOW/NO FLOW

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX574.0

Explanation: Monitor signal integrity of the machine's PLC output and input combinations and avoid/detect use of jumper wires.
See related alarm 700158.

Cause: The PLC output for the spindle center water valve (Q50.5) is on but the center water flow switch signal PLC input (I41.1) is off. The input signal must respond within 5 seconds of the PLC output.
Note: this alarm does not occur if the “center water alarm suppress” option is selected on the front-end.

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered and spindle feedhold is applied.

Remedy: Check integrity of the spindle water flow switch signal coming back to the PLC. When PLC output (Q50.5) is on, PLC input (I41.1) should be on.

700233 NC CYCLE STOPPED – SPINDLE RING WATER FEED LOW/NO FLOW

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX574.1

Explanation: Monitor signal integrity of the machine's PLC output and input combinations and avoid/detect use of jumper wires.
See related alarm 700159.

Cause: The PLC output for the spindle ring water valve (Q50.3) is on but the ring water flow switch signal PLC input (I41.0) is off. The input signal must respond within 5 seconds of the PLC output.
Note: this alarm does not occur if the “ring water alarm suppress” option is selected on the front-end.

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered and spindle feedhold is applied.

Remedy: Check integrity of the spindle water flow switch signal coming back to the PLC. When PLC output (Q50.3) is on, PLC input (I41.0) should be on.

700234 NC CYCLE STOPPED – SPINDLE FAN MOTOR AUXILIARY CONTACT FAILED TO REPLY

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX574.2

Explanation: Monitor signal integrity of the machine's PLC output and input combinations and avoid/detect use of jumper wires.
See related alarm 700157.

Cause: The PLC output for the spindle cooling fan (Q51.2) is on but the motor starter auxiliary contact signal PLC input (I40.4) is off. The input signal must respond within 0.5 seconds of the PLC output.

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered and spindle feedhold is applied.

Remedy: Check integrity of the motor starter and the auxiliary contact signal coming back to the PLC. When PLC output (Q51.2) is on, PLC input (I40.4) should be on.

700235 NC CYCLE STOPPED – NO TOOL DETECTED IN DRAWBAR DURING SPINDLE RUN

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX574.3

Explanation: Drawbar position monitoring while the spindle is running.
Cause: While the spindle is not at static (i.e., rotating above minimum speed – MD36060 $MA_STANDSTILL_VELO_TOL), the drawbar position sensor is monitored. If the PLC logic determines the drawbar is not clamped with a tool for 1 consecutive second while running, the alarm is triggered.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered and spindle feedhold is applied.
Remedy: Check tool knob, drawbar, recalibrate drawbar position. Monitor drawbar position while spindle is running for analog signal (0-10vdc, PLC IW256) stability.

700236 NC CYCLE STOPPED – SPINDLE RPM DROPPED BELOW REQUESTED OPERATING SPEED

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX574.4

Explanation: Excessive slowing of the spindle rpm is monitored while running.
Cause: The following 3 conditions must be met to trigger this alarm:

- The spindle is not at static rpm DB35.DBX61.4 (i.e., it is rotating above minimum speed – MD36060 $MA_STANDSTILL_VELO_TOL),
- The spindle run-up has completed (Spindle axis bit DB35.DBX94.2),
- The spindle rpm is not within the setpoint range (Spindel axis bit DB35.DBX83.5), where: | actual speed – setpoint speed | < MD35150 $MA_SPIND_DES_VELO_TOL. This is currently set to 10%.

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered and spindle feedhold is applied.
Remedy: Reduce loading on the spindle motor.

700240 WARNING – CHECK MACHINE WATER SUPPLY, PRESSURE IS LOW

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX575.0

Explanation: Displays when the vacuum water supply pressure is low.
Cause: The following conditions must be met to trigger this alarm:

- The Vacuum Water Regulator Outlet pressure is outside the normal operating PSI.
- The Vacuum Water Filter Outlet pressure is outside the normal operating PSI.
- The Machine Inlet Water pressure is outside the normal operating PSI.

Reaction: The alarm is latched until cleared.
Remedy: Check if the water being supplied to the machine is on.
Check analog Vacuum Water Regulator Outlet sensor signal (0-10vdc, PLC IW262), the analog Vacuum Water Filter Outlet sensor signal (0-10vdc, PLC IW260), and Machine Inlet Water sensor signal (0-10vdc, PLC IW268).

700241 WARNING - BLOW OFF Y-STRAINER (2 TIMES /30 SEC EACH); REPLACE VACUUM WATER FILTER IF WARNING PERSISTS

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX575.1

Explanation: Displays when the vacuum water supply pressure is low.
Cause: The following conditions must be met to trigger this alarm:

- The Vacuum Water Regulator Outlet pressure is outside the normal operating PSI.
- The Vacuum Water Filter Outlet pressure is outside the normal operating PSI.
- The Machine Inlet Water pressure is within the normal operating PSI.

Reaction: The alarm is latched until cleared.
Remedy: Blow off the Y-Strainer two times for 30 seconds each. If error persists, replace the vacuum water filter.
Check analog Vacuum Water Regulator Outlet sensor signal (0-10vdc, PLC IW262), the analog Vacuum Water Filter Outlet sensor signal (0-10vdc, PLC IW260), and Machine Inlet Water sensor signal (0-10vdc, PLC IW268).

700242 WARNING - CHECK FOR BLOCKAGE IN VACUUM WATER AND DISCHARGE WATER LINES

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX575.2

Explanation: Displays when the vacuum water supply pressure is low.
Cause: The following conditions must be met to trigger this alarm:

- The Vacuum Water Regulator Outlet pressure is outside the normal operating PSI.
- The Vacuum Water Filter Outlet pressure is within the normal operating PSI.
- The Vacuum Water Flow Switch is not on.

Reaction: The alarm is latched until cleared.
Remedy: Check for blockage in the vacuum water lines and the vacuum discharge water lines.
Check analog Vacuum Water Regulator Outlet sensor signal (0-10vdc, PLC IW262), and the analog Vacuum Water Filter Outlet sensor signal (0-10vdc, PLC IW260). Check the water flow switch, and its signal coming back to the PLC. See related alarm 700033.

700243 WARNING – ADJUST VACUUM WATER PRESSURE REGULATOR

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX575.3

Explanation: Displays when the vacuum water supply pressure is low.
Cause: The following conditions must be met to trigger this alarm:

- The Vacuum Water Regulator Outlet pressure is outside the normal operating PSI.
- The Vacuum Water Filter Outlet pressure is within the normal operating PSI.
- The Vacuum Water Flow Switch is on.

Reaction: The alarm is latched until cleared.
Remedy: Adjust the vacuum water pressure regulator.
Check analog Vacuum Water Regulator Outlet sensor signal (0-10vdc, PLC IW262), and the analog Vacuum Water Filter Outlet sensor signal (0-10vdc, PLC IW260). Check the water flow switch, and its signal coming back to the PLC. See related alarm 700033.

700244 WARNING – VACUUM LINE BLOCKAGE BETWEEN PUMP AND PODS

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX575.4

Explanation: Displays when the vacuum water supply pressure is low.
Cause: The following conditions must be met to trigger this alarm:

- The Vacuum Water Regulator Outlet pressure is within the normal operating PSI.
- The Vacuum Water Flow Switch is not on.

Reaction: The alarm is latched until cleared.
Remedy: Check if there is a blockage between the vacuum pump and the vacuum pods.
Check analog Vacuum Water Regulator Outlet sensor signal (0-10vdc, PLC IW262). Check the water flow switch, and its signal coming back to the PLC. See related alarm 700033.

700245 WARNING – VACUUM PUMP FAILURE; FOLLOW TROUBLESHOOTING GUIDE

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX575.5

Explanation: Displays when the machine water supply pressure is low.
Cause: The following conditions must be met to trigger this alarm:

- The Vacuum Water Regulator Outlet pressure is within the normal operating PSI.
- The Vacuum Water Flow Switch is on.

Reaction: The alarm is latched until cleared.
Remedy: See troubleshooting guide for vacuum pump failure.
Check analog Vacuum Water Regulator Outlet sensor signal (0-10vdc, PLC IW262). Check the water flow switch, and its signal coming back to the PLC. See related alarm 700033.

700246 WARNING – CHECK THRU-SPINDLE WATER SUPPLY, PRESSURE IS LOW

Control Package Version: 19.01.00.00

PLC Activation Address: DB2.DBX575.6

Explanation: Displays when the Thru-Spindle Water Outlet is low.

Cause: The following conditions must be met to trigger this alarm:

- The Thru-Spindle Water Inlet pressure is outside the normal operating PSI.
- The Thru-Spindle Water Outlet pressure is outside the normal operating PSI.

Reaction: The alarm is latched until cleared.

Remedy: Check if the water being supplied to the machine is on.
Check analog Thru-Spindle Water Inlet sensor signal (0-10vdc, PLC IW264) and Thru-Spindle Water Outlet sensor signal (0-10vdc, PLC IW266).

700247 WARNING – CHANGE THRU-SPINDLE WATER FILTER

Control Package Version: 19.01.00.00

PLC Activation Address: DB2.DBX575.7

Explanation: Displays when the Thru-Spindle Water Outlet is low.

Cause: The following conditions must be met to trigger this alarm:

- The Thru-Spindle Water Inlet pressure is within the normal operating PSI.
- The Thru-Spindle Water Outlet pressure is outside the normal operating PSI.

Reaction: The alarm is latched until cleared.

Remedy: Change the Thru-Spindle water filter.
Check analog Thru-Spindle Water Inlet sensor signal (0-10vdc, PLC IW264) and Thru-Spindle Water Outlet sensor signal (0-10vdc, PLC IW266).

700248 Z AXIS BRAKE TEST ERROR 1 - INVALID SEQUENCE STEP

Control Package Version: 19.01.00.00

PLC Activation Address: DB2.DBX576.0

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.

Cause: The function that tests the Z axis brake encountered an error.

Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.

Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700249 Z AXIS BRAKE TEST ERROR 2 - AXIS NOT STATIONARY

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX576.1

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that tests the Z axis brake encountered an error.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700250 Z AXIS BRAKE TEST ERROR 3 - PULSE ENABLE MISSING

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX576.2

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that tests the Z axis brake encountered an error.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700251 Z AXIS BRAKE TEST ERROR 4 - BRAKE TEST NOT SUCCESSFUL

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX576.3

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that tests the Z axis brake encountered an error.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700252 Z AXIS BRAKE TEST ERROR 5 - TIME MONITORING ERROR

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX576.4

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that tests the Z axis brake encountered an error.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700253 Z AXIS BRAKE TEST ERROR 6 - RESET WHILE ACTIVE

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX576.5

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that tests the Z axis brake encountered an error.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700254 Z AXIS BRAKE TEST ERROR 7 - INVALID ERROR NUMBER

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX576.6

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that tests the Z axis brake encountered an error.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

700255 Z AXIS BRAKE TEST ERROR 8 - TIME OUT ERROR

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX576.7

Explanation: The Z axis brake requires testing every 24 hours or whenever the power is cycled. This brake test function encountered an error.
Cause: The function that tests the Z axis brake encountered an error.
Reaction: The alarm is latched until cleared.
Upon alarm activation, an NC Stop signal is triggered.
Remedy: Reset the alarm and activate the brake test again by pressing the System On button. If the error occurs again, notify Park Industries Service Department.

SYSTEM ON

Park Industries (User) Alarms

(700332 ~ 700358)

July 31, 2023 (up to version 1081-0401)

OVERVIEW: 700356 ~ 700358

These “system on” alarms indicate why a system on sequence was NOT started.

700356 ATTENTION - SYSTEM ON CYCLE NOT INITIATED – ENABLE SPINDLE (KEY SWITCH)

Control Package Version: 19.01.00.00

PLC Activation Address: DB2.DBX585.0

Explanation: The attempt to turn the system on has been blocked.

Cause: The spindle disable/enable switch is in the “disable” position. To facilitate a test-stop (a function of the system on sequence), the spindle must be enabled.

Remedy: Set spindle disable/enable switch to the “enable” position.

700357 ATTENTION - SYSTEM ON CYCLE NOT INITIATED – PROGRAMMING RUNNING

Control Package Version: 19.01.00.00

PLC Activation Address: DB2.DBX585.1

Explanation: The attempt to turn the system on has been blocked.

Cause: The NC is currently running a program. To facilitate a test-stop (a function of the system on sequence), the NC must not be running a program.

Remedy: Stop all running NC programs.

700358 ATTENTION - SYSTEM ON CYCLE NOT INITIATED – NCK NOT READY

Control Package Version: 19.01.00.00

PLC Activation Address: DB2.DBX585.2

Explanation: The attempt to turn the system on has been blocked.

Cause: The NCK CPU is not ready for operation. Refer to DB10 DBX104.7 (NC-CPU ready).

Remedy: Cycle power to the machine, allow adequate time for the NCK CPU to register itself cyclically with the PLC and exchange sign-of-life signals.

OVERVIEW: 700332 ~ 700350

The “system on” alarms are messages meant to indicate the progress of the system on sequence. All the messages are self-clearing. If the system on sequence gets “hung up” on a particular message, one can find out at what point in the sequence the process has stopped.

700332 SYSTEM ON SEQUENCE STEP 10 – WAITING FOR SAFETY RELAY TO LOGICALLY ENERGIZE

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX582.0

Action: Clear any latched Park alarms.
Permissive: Wait until no latched alarms are active.

700333 SYSTEM ON SEQUENCE STEP 20 – RESETING AND WAITING FOR NC E-STOP TO CLEAR

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX582.1

Action: Trigger a global safety acknowledge.
Permissive: Wait until the PLC logical safety relay energizes.

700334 SYSTEM ON SEQUENCE STEP 30 – RESETING AND WAITING FOR ACTIVE ALARMS TO CLEAR

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX582.2

Action: If an NC Emergency Stop (DB10.DBX106.1) is active, trigger an NC Emergency Acknowledge (DB10.DBX56.2).
Permissive: Wait until the NC Emergency Stop (DB10.DBX106.1 is off) bit is not active.

700335 SYSTEM ON SEQUENCE STEP 40 – SENDING AN NC CHANNEL RESET SIGNAL

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX582.3

Action: Trigger an NC Channel Reset (DB21.DBX7.7).
Permissive: Wait for 0.250 second dwell.

700336 SYSTEM ON SEQUENCE STEP 50 – WAITING FOR NC CHANNEL RESET CONFIRMATION

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX582.4

Permissive: Wait until the NC Channel Reset bit comes on (DB21.DBX35.7).

700337 SYSTEM ON SEQUENCE STEP 100 – REQUEST AND WAIT FOR NC TO ASSUME JOG MODE

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX582.5

Action: Request the NC go to JOG mode (DB11.DBX0.2).
Permissive: Wait until the NC is in JOG mode (DB11.DBX6.2 is on).

700338 SYSTEM ON SEQUENCE STEP 110 – REQUEST AND WAIT FOR NC TO ASSUME REF MODE

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX582.6

Action: Request the NC go to REF mode (DB11.DBX1.2).
Permissive: Wait until the NC is in REF mode (DB11.DBX7.2 is on).

700339 SYSTEM ON SEQUENCE STEP 150 – PERFORMING A BRAKE TEST ON Z AXIS

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX582.7

Action: If Z axis requires a test stop (DB34.DBX166.5 is on), start a brake test via DB34.DBX11.0.
Permissive: Wait until the brake test completes (if triggered, DB34.DBX11.0 is off) and the test stop is not required (DB34.DBX166.4 is off).

700340 SYSTEM ON SEQUENCE STEP 200 – WAITING FOR GANTRY TO SYNCHRONIZE

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX583.0

Action: Wait until the Gantry Group Syn bit comes on (DB32.DBX101.5). The Y axes pull into synchronization.
Permissive: Wait for 0.250 second dwell.

700341 SYSTEM ON SEQUENCE STEP 210 – PERFORMING A SAFETY TEST STOP ON X AXIS

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX583.1

Action: If X axis requires a test stop (DB31.DBX166.5 is on), start a test stop via DB31.DBX140.0.
Permissive: Wait until the test stop completes (if triggered, DB31.DBX140.0 is off) and the test stop is not required (DB31.DBX166.4 is off).

700342 SYSTEM ON SEQUENCE STEP 220 – PERFORMING A SAFETY TEST STOP ON Y1 AXIS

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX583.2

Action: If Y1 axis requires a test stop (DB32.DBX166.5 is on), start a test stop via DB32.DBX140.0.
Permissive: Wait until the test stop completes (if triggered, DB32.DBX140.0 is off) and the test stop is not required (DB32.DBX166.4 is off).

700343 SYSTEM ON SEQUENCE STEP 230 – PERFORMING A SAFETY TEST STOP ON Y2 AXIS

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX583.3

Action: If Y2 axis requires a test stop (DB33.DBX166.5 is on), start a test stop via DB33.DBX140.0.
Permissive: Wait until the test stop completes (if triggered, DB33.DBX140.0 is off) and the test stop is not required (DB33.DBX166.4 is off).

700344 SYSTEM ON SEQUENCE STEP 240 – PERFORMING A SAFETY TEST STOP ON Z AXIS

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX583.4

Action: If Z axis requires a test stop (DB34.DBX166.5 is on), start a test stop via DB34.DBX140.0.
Permissive: Wait until the test stop completes (if triggered, DB34.DBX140.0 is off) and the test stop is not required (DB34.DBX166.4 is off).

700345 SYSTEM ON SEQUENCE STEP 250 – PERFORMING A SAFETY TEST STOP ON SPINDLE AXIS

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX583.5

Action: If the spindle axis requires a test stop (DB35.DBX166.5 is on), start a test stop via DB35.DBX140.0.
Permissive: Wait until the test stop completes (if triggered, DB35.DBX140.0 is off) and the test stop is not required (DB35.DBX166.4 is off).

700346 SYSTEM ON SEQUENCE STEP 300 – PERFORMING A FINAL RESET

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX583.6

Action: Trigger an NC Emergency Acknowledge (DB10.DBX56.2).
Trigger an NC Mode Group Reset (DB11.DBX0.7).
If a safety Internal Event bit is active on any axis, trigger an Internal Event Ack for that axis.
Permissive: Wait for 0.400 second dwell.

700347 SYSTEM ON SEQUENCE STEP 310 – WAITING FOR NCK READY SIGNAL

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX583.7

Action: Wait for NCK CPU ready for operation (DB10 DBX104.7 to be on).

700348 SYSTEM ON SEQUENCE STEP 320 – WAITING FOR NC READY SIGNAL

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX584.0

Action: Wait for NC CPU ready for operation (DB10 DBX108.7 to be on).

700349 SYSTEM ON SEQUENCE STEP 330 – WAITING FOR CHANNEL READY FOR OPERATION SIGNAL

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX584.1

Action: Wait for CHANNEL ready for operation (DB21 DBX36.5 to be on).

700350 SYSTEM ON SEQUENCE STEP 900 – WAITING FOR SYSTEM ON SIGNAL TO CONFIRM

Control Package Version: 19.01.00.00
PLC Activation Address: DB2.DBX584.2

Action: Wait for PLC logic to latch the system on circuit. Once confirmed, the system on sequence is complete and reset to step 0.

End of document.