

TROUBLESHOOTING GUIDE

K3 & K4 WITH SERIAL NUMBERS > 3000

ELECTRONIC AND CABLE

- Electronic devices as hand-held programming unit, motor electronics and spiral cable are not interchangeable with ARTROMOT®-K3 serial number < 3000.
- Make sure that the characteristic values of your power supply correspond to the voltage and frequency data indicated on the power adapter.
- Error possibilities, showed by the Hand-held programming unit:

REFERENCE RUN: The reference was interrupted or the electronics were replaced	Perform a reference run. See assembly manual.
POTENTIOMETER: potentiometer shows incorrect value	Check plug connection, replace potentiometer if persistent
POTENTIOM. CABLE: Spiral cable for knee case defective	Replace spiral cable for knee case, check plug connection
MOTOR DRIVER: Motor electronics defective	Replace motor electronics if persistent
OVER CURRENT: Motor power to high	Replace motor electronics if persistent
UNWANTED BUSY: Motor control unit is not answering	Hand-held programming unit, motor electronics or spiral cable of the hand-held programming unit defective
CPM MEMORY RAM: Memory fault in the motor control unit	Replace motor electronics if persistent
CPM MEMORY ROM: Memory fault in the motor control unit	Replace motor electronics if persistent
COMMUNICATION: Communication problem between hand-held programming unit and the motor control unit	Hand-held programming unit, motor electronics or spiral cable of the hand-held programming unit defective
CPM-DEVICE ERROR: General mistake in the motor control unit	Replace motor electronics if persistent
MOT. EN. TIMEOUT: Motor can not be activated	Check motor electronics and plug connection for motor. Replace motor electronics and spiral cable of the hand-held programming unit if persistent
INVALID PARAMET: Motor control unit received a wrong parameter	Hand-held programming unit, motor electronics or spiral cable of the hand-held programming unit defective
STOP RELEASE ERR: Stop line can not be released	Remove hand-held programming unit or spiral cable if persistent
UNEXP. MOT. STOP: Motor stopped unexpectedly	Motor electronics or connecting line to motor defective
MOTOR DISABLED: Motor is disconnected	Motor electronics or connecting line to motor defective
MOTOR ERROR: Motor is not turning	Check motor cable and motor. Replace motor electronics if persistent
RTC INIT ERROR: Hand-held programming unit defective	Replace hand-held programming unit if persistent
RTC COM ERROR: Communication problem with hand- held programming unit	Replace hand-held programming unit if persistent

RTC ERROR: Hand-held programming unit defective	Replace hand-held programming unit if persistent
RANGE EXCEEDED: Potentiometer shows a value out of range	Replace Potentiometer and! or spiral cable
UNKNOWN CPM ERR.: Unknown error in the motor control unit	Replace motor electronics if persistent
UNDEFINED ERROR: Undefined error	Hand-held programming unit, motor electronics or spiral cable of the hand-held programming unit defective
CPM 24V SUPPLY: 24V supply in motor control out of range	Check power supply. Replace motor electronics if persistent
CPM 3.3V SUPPLY: 3.3V supply in motor control out of range	Replace motor electronics if persistent
HS 24V SUPPLY: 24V supply in hand-held programming out of range	Replace hand-held programming unit or spiral cable if persistent
HS 5V SUPPLY: 5V supply in hand-held programming unit out of range	Replace hand-held programming unit if persistent
HS 3.3V SUPPLY: 3.3V supply in hand-held programming unit out of range	Replace hand-held programming unit if persistent

MECHANICS

- The Threaded spindle is not interchangeable with ARTROMOT®-K3 serial number < 3000.
- Do not loosen the knurled handles completely for any adjustment. For operation or transport, make sure that the knurled handles are tight.

OTHERS

- Do not clean the casing or the support with grease or oil.
- Do not utilize any solvent for cleaning the K3.

HOW TO PERFORM A REFERENCE RUN

- Adjust a maximum femur length (red Point), a minimum lower leg length and the middle position of the foot rotation.
- Under special functions select the operation REFERENCE RUN by using „+” and „-”. Press „SET” for five seconds.
 - The display shows: REFERENCE RUN (flashing for 5 sec.)
FOR SERVICE ONLY
 - Then the display shows: REFERENCE RUN
ENTER KEY
- To start the reference run press „+” and „-” at the same time. While the reference run is in progress the display shows:
PERFORMING R-RUN
PLEASE WAIT
- The reference run starts automatically and will take up to 10 minutes. The ARTROMOT®-K3 will reach both points of the mechanical stud (first minimum at EXTENSION afterwards maximum at FLEXION).
Now the ARTROMOT®-K3 moves between 0 to 110 degrees or parts of this range with

different speed and will stop at a position of 0 degrees. After the ARTROMOT®-K3 stops the display will show: REFERENCE RUN
SUCCESSFUL

The ARTROMOT®-K3 is now ready for operation. Finally, a function- and safetytest has to be performed.

Attention:

If the reference run was interrupted the display shows:

REFERENCE RUN
INTERRUPTED (The ARTROMOT®-K3 stops)

If you try to start the ARTROMOT®-K3 the display will show:

DEVICE NEEDS
REFERENCE RUN (The ARTROMOT®-K3 is inoperable)

Perform a reference run.

