# FB10000 Error Messages Troubleshooting

Error ID: 50027: M-Handling - T-Driver not Ready

**Error Severity: Critical** 

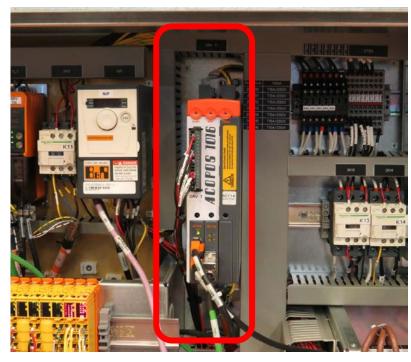
#### **Possible Causes**

Motor unable to move

• Faulty CC906-50243 Home sensor or CX161-01170 cable

Faulty driver

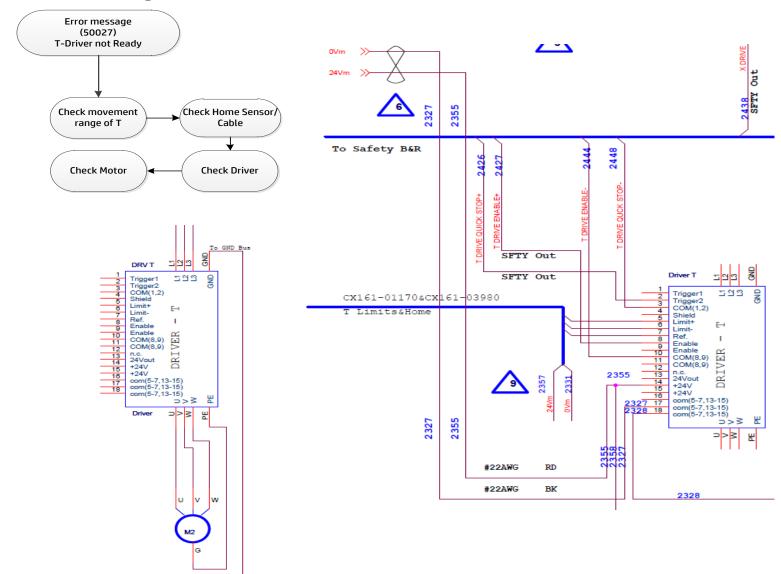
• Faulty motor





Troubleshooting Flowchart

# **Troubleshooting Flowchart**







## **Recommended Actions**

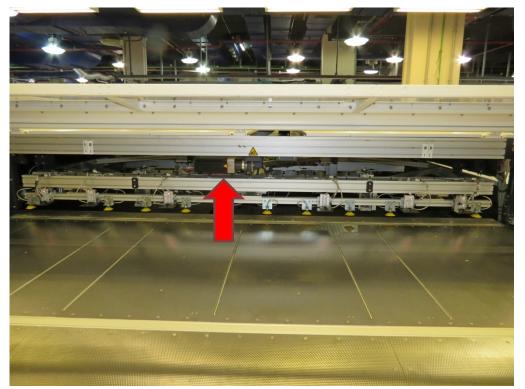
#### **Motor Unable to move**

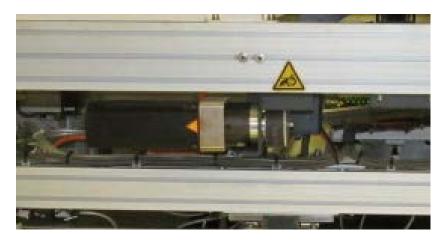
1. For easier access, move the loader table by releasing the locker on the table left side.





2. Open the front loader door.





- 3. Locate the T Motor and check its belt along the loader movement range (from loading table to unloading lift). Do this by manually moving the loader dynamic frame back and forth along its length.
- 4. INIT [Reset] the driver from the SW and check whether this solved the problem.
- 5. Check the T-motor itself. This motor is located on the loader dynamic frame front side. Check that the motor is intact and that nothing is interfering with its movement.
- 6. Check both power and encoder cables to ensure they are firmly in place.



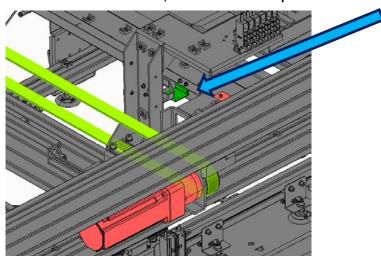






#### Faulty CC906-50243 T-Home position Sensor or CX161-01170 cable to B&R

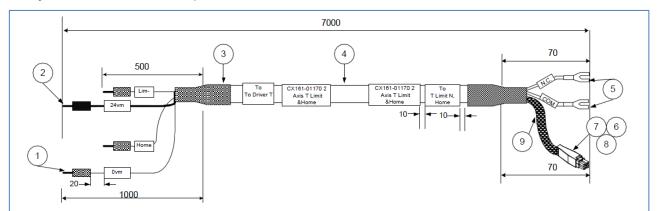
- 1. It is possible that the driver cannot find the home sensor, and therefore cannot initialize properly.
- 2. Locate the home sensor; it is located on a plate behind the IGUS chain of the T-axis.





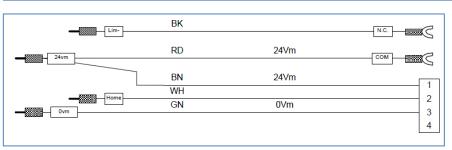
- 3. Check the integrity of the sensor, move a small piece of paper through it and confirm that the status LED changes accordingly.
- 4. If the sensor is broken, replace it.
- 5. If the sensor's LED does not respond, disconnect the sensor cable and check 24V.

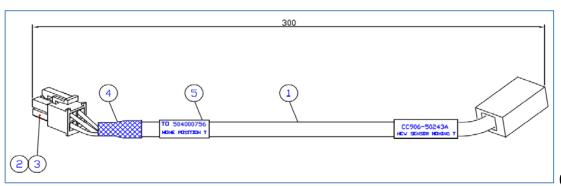
  Use a DVM to check voltage between leg 1 & 3 on the cable coming from the driver (not the cable of the sensor).
- 6. If you receive 24V then replace the sensor.



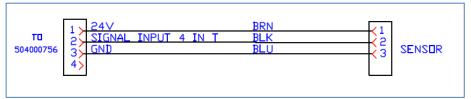


CX161-01170 cable



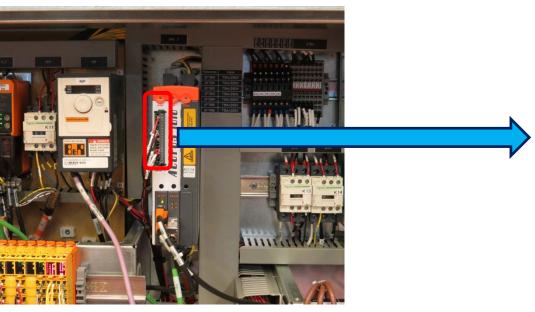


CC906-50243 T- Home Position sensor



Тор

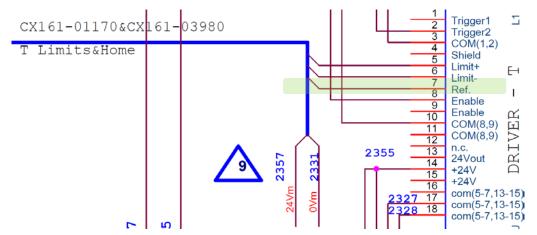
7. Open the REC and locate the T Driver, it is found in the middle of the cabinet. Go to the front wire connections.







8. Remove wire #7 (Ref).



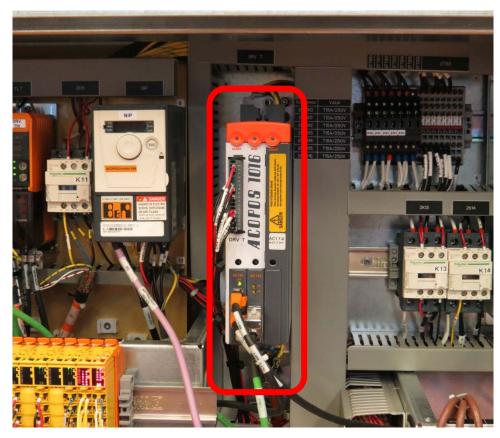


WARNING! High Voltage System! Do not touch any wiring while system is UP! From this stage and on, only an HP certified electrician may perform the tests.

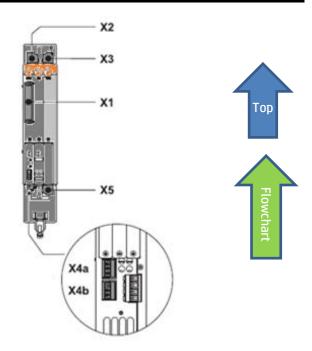
- 9. Using a multimeter, test DC voltage between #7 and any 0 V (ground) connection in the REC
  - a. Using either your hand or a small piece of paper cover the home sensor and check if the voltage changes in the multimeter, the signal voltage should be between 8-20V
  - b. If there is no change in the multimeter then the cable is faulty, replace it.

### **Faulty Driver**

- 1. Open the REC.
- 2. Locate the T Servo driver



- 3. Check that all connections to the driver are connected properly.
- 4. Turn off 24V to the drivers.



Connection	Description		
X1	I/0's		
X2	DC Bus – Not in use		
Х3	Main Power (Driver feeding Power)		
X4a	Motor holding brake, temperature sensor – not in use		
X4b	Motor holding brake, temperature sensor – not in use		
X5	Motor Power		
Х6	External braking resistor		
Slot 1	Can Ethernet PWR Link		
Slot 2	Encoder		

5. Check the Status of the Driver indicators LED on the top.

Label	Color	Function	Description		
Ready	Green	Ready	Green (lit)	The driver is operate and the power stage can be enabled (operating sys present and booted, no permanent or temporary errors	
			Green (blinking)	Module is not ready for operation Examples:  No signal in both enable inputs  DC bus voltage exceeds the tolerance range  Motor feedback not connected or defective  Network fault	
Run	Orange	Run	Orange (lit)	The module power stage enable	
Error	Red	Error	Red (lit)	There is a permanent error on the module. Examples: Permanent overcurrent Data EPROM not valid	



- a. If the machine is idle then the normal status of the LED' should be: Ready = lit, Run = off, Error = off
- b. In case Red light is lit then there is a problem with the driver.



### **Faulty Motor**

1. Before replacing the T motor, contact your local Product specialist to confirm replacement.



