

MASKED PARAMETERS FS 250 – FS 270 – FS 270+

As we have tried to make the machine as friendly as possible, for maintenance purposes. We decided to develop only one control board. All programs possible in the FS 2XX series are already installed on the board. We only have to change the different setting for some parameters to switch On or Off these different functions.

To enter the parameter section:

Press the STOP button for five seconds

The indication of the parameter (F0, F1, F2, F3, F4, F5, F6 etc.), which may be changed by means of the «+» or «-», is shown on the left-hand side of the display.

The value of the parameter, which may be changed by means of the «+» or «-» is shown on the right-hand side of the display.

These parameters are associated with:

F0 = Pallet overlap	(7)	(Settings between 0 – 100)
F1 = Friction delay	(0 – 11)	
F2 = Friction voltage		(motor pre stretch 100)
F3 = Film cutting system	(0 = OFF, 1 = ON)	
F4 = Friction voltage before cutting		(Settings between 0 – 255)
F5 = Cutting time (10 = 0,1 sec)		(Settings between 0 – 255)
F6 = Slow time (10 = 0,1 sec)		(Settings between 0 – 255)

We also have the possibility to regulate some parameters. This regulation can also be done on the inverter itself. In any case it is advisable to check the standard settings before any adjustment is done.

Regulation of the parameters

Push the button Stop + Manual top press for 5 seconds



Insert password 16-07 then press stop again

T0 = Analog output 1 Inverter turntable	(55Hz = 100 = 10V)	
T1 = Analog output 2 Inverter carriage	(60Hz = 100 = 10V)	
T2 = Analog output 3 Inverter Pré – Stretch	(60 Hz = 100 = 10V)	
T3 = Analog signal offset = 10 Inverter		
T4 = Gain signal offset = 10 Inverter		
T5 = Pré stretch	(0 = No, 1 = Yes)	
T6 = Top press	(0 = No, 1 = Yes)	
T7 = Film broken	(0 = OFF, 1 = ON)	
T8 = Block parameters possible	(0 = No, 1 = Yes)	(Standard 1)
T9 = Horse shoe turntable	(0 = No, 1 = Yes)	
T10 = Pre stretch independently adjustable during carriage movement up and down	(0 = No, 1 = Yes)	
T11 = Sound of the alarm during the cycle	(0 = No, 1 = Yes)	(Standard 0)
T12 = Different parameters for every cycle	(0 = No, 1 = Yes)	(Standard 0)
T13 = Left side PW for un-blocking parameters	(22)	
T14 = Right side PW un-blocking parameters	(3)	

After changing or regulation of the parameters always switch of the machine. Wait for approx. 10 seconds and switch on the machine again.

Differences with F7:

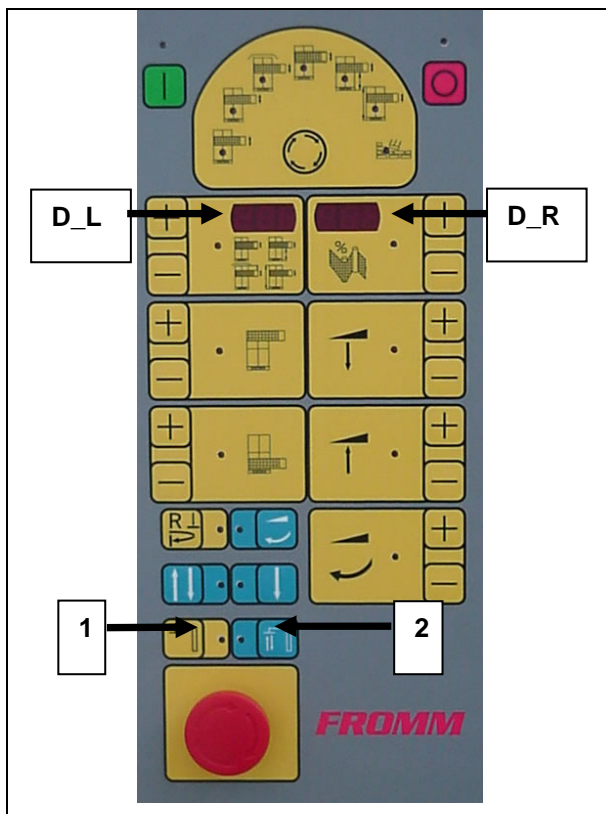
1. When you push START the 3 beeps of the buzzer are much faster (150msec vs 1sec),
2. Password for un-block the parameters
 To block the parameters press the 2 buttons of the top presser for approx. 5 seconds, **(1) + (2)**
 To un-block parameters press the 2 buttons of the top presser for approx. 5 seconds, **(1) + (2)**
 then this will appear on the displays
 Left side : "B_L" (D_L)
 Right side: "B_R" (D_R)

Notice!**ATTENTION NOW YOU ARE IN A SPECIAL MODE**

DO NOT PRESS STOP
DO NOT PRESS EMERGENCY

Input value T13 on the left side
 Input value T14 on the right side

then **PRESS STOP** and you have un-blocked the parameters.

**Important NOTE:**

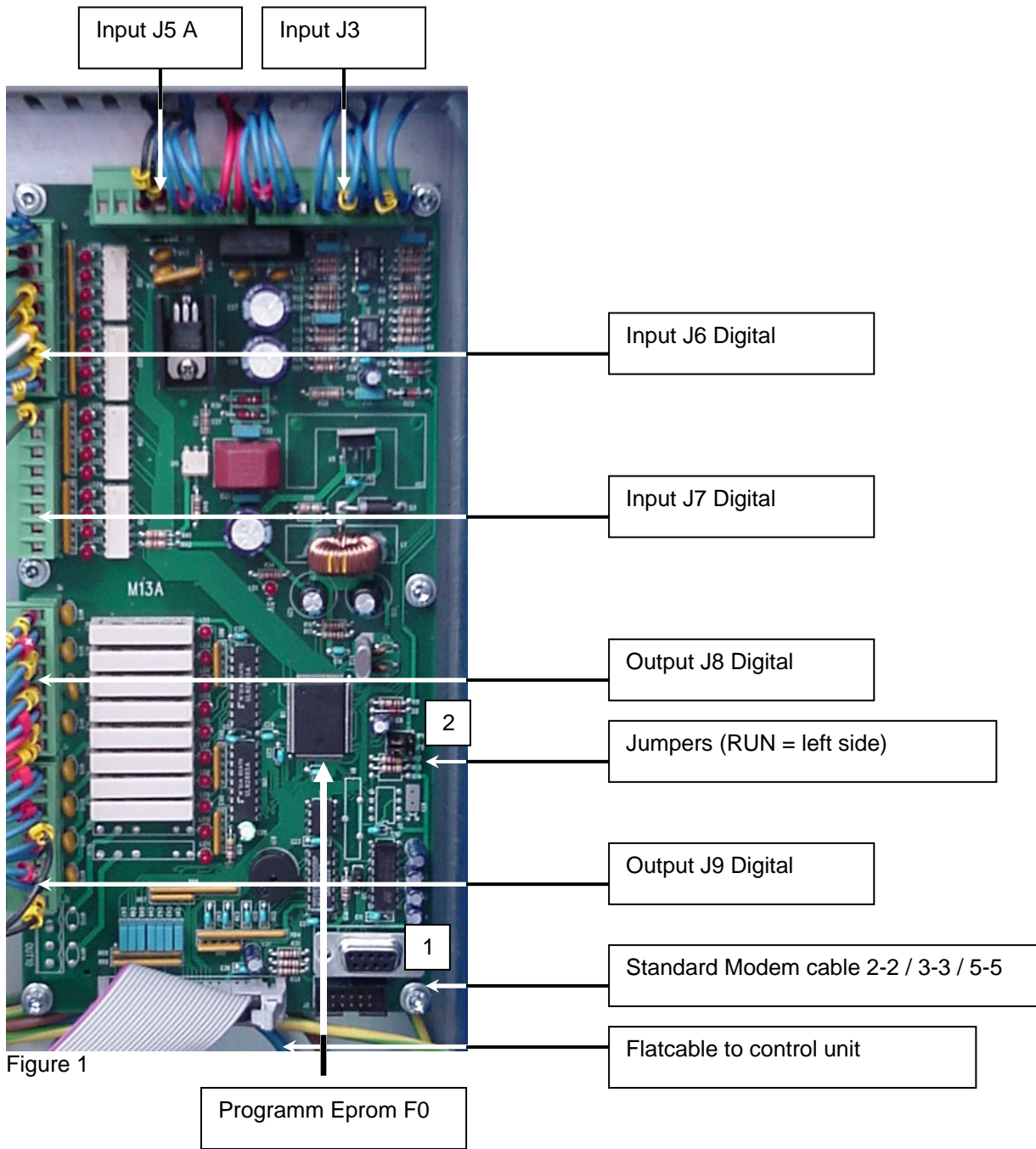
If you put program F8 in a board, in which there was F7 or older releases you have to enter the hidden parameter menu to input all the correct values. See page 20 for the standard values

We advise after uploading a new program to check all the parameters:

- F0 – F6,
- Speeds and turns,
- Parameters of the cycles

CONTROL CARD FS 250 – 270

CONTROL CARD FS 250 – FS 270 – FS 270+



Uploading a new programm

- ✓ Turn OFF the machine by switching the main switch to Zero
 - ✓ Connect the standard modem cabel to (1)
 - ✓ Replace the jumpers (2) both to the right (RUN = Left)
 - ✓ Turn On the machine (Output on the machine display is **— — — —**)
 - ✓ Start up the programm Flash 16
- When you have started the programm you should see the screen at the next page.
Please see to it that all setting are equal.

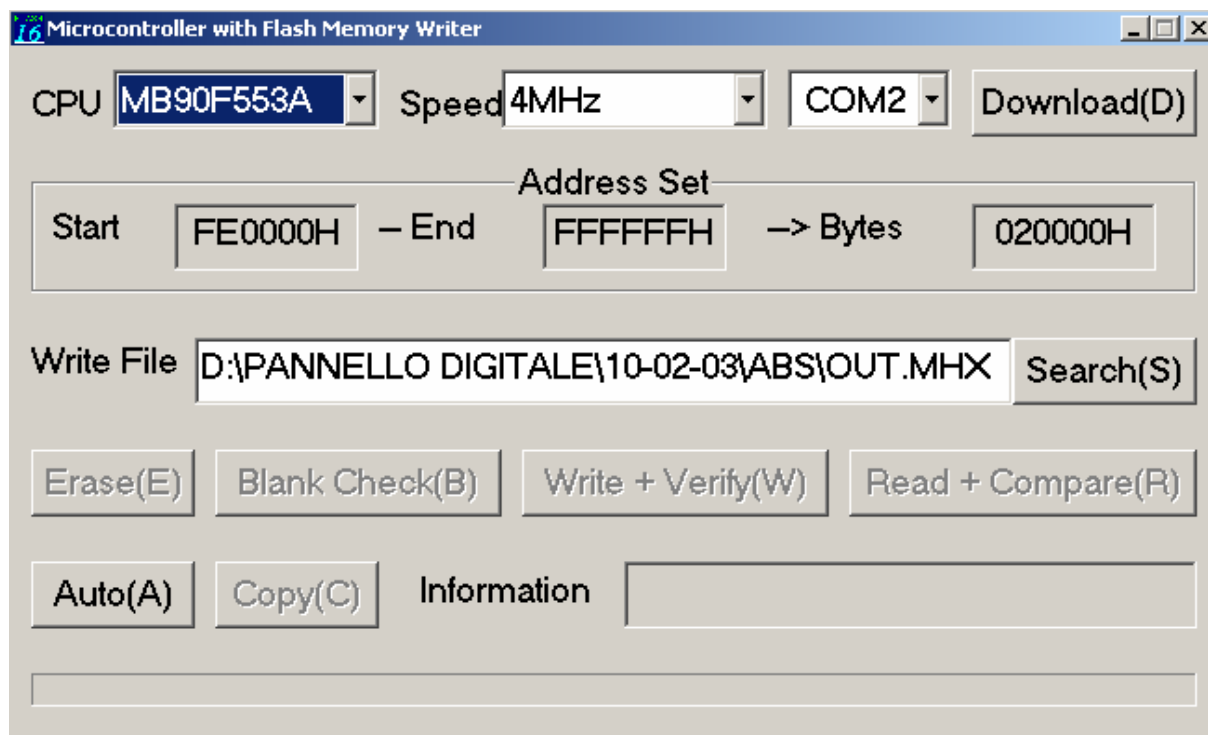
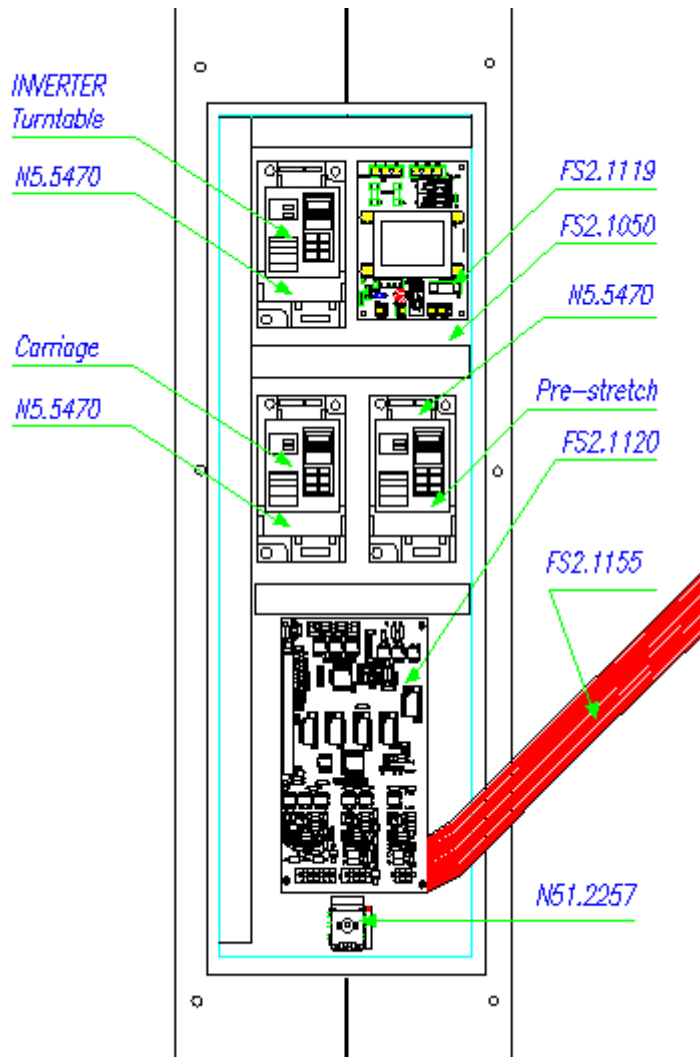


Figure 2

- ✓ Search for the program on your hard disk, with extension .mhx (standard = out.mhx)
- ✓ Select the name AUTO (A) on your computer screen (The program will check the settings of the machine and will upload the new program which is selected. When the computer is ready with the uploading it will display the message "ALL OK")
- ✓ Select OK on the screen
- ✓ Turn off the stretch wrapping machine
- ✓ Take away the standard modem cable from (1) (Figure 1)
- ✓ Place the jumpers (1) in the original position (**Leftside**)
- ✓ Turn On the machine
- ✓ After pushing RESET the machine is ready for production

INVERTER SETTING FS 250 - 270

Drawing Cabinet FS250 – 270



INVERTER SETTINGS FS 250 – FS 270



N5.5470

How to change the inverters parameters.

When the inverter is in running mode the LED on is FREF (1)

In order to enter in programm mode push the cycle button (2) until the LED PRGM (3) becomes ON

On the display there is now **n01**, in order to enter another parameter push on the button (4) and (5)

Pushing the button (6) we enter in the actual parameter program, in order to change the values use the buttons (4) and (5) and memorize it with (6)

With the button (2) you can turn-off the LED PRGM (3) and turn-on FREF (1)

STANDARD INVERTER SETTINGS

	INVERTER OMRON	SETTINGS		
		Turntable	Carriage	Pre - stretch
N01	Initialization	1	1	1
N02	Selection for the run control	1	1	1
N03	Selection for reference frequency	2	2	2
N09	Max. output frequency	55.00	60.00	90
N10	Max. voltage	230	230	230
N16	Acceleration ramp time	6.00	0.3	0.3
N17	Deceleration ramp time	3.00	0.1	0.3
N30	Upper output frequency limit	100	100	100
N31	Lower output frequency limit	8	30	0
N40	Assignment for the multifunctional exit	0	0	0

After installation of a NEW inverter please do not forget to start the inverter first!

Otherwise the inverter will never work!!!

Start up procedure to decrease the intervent threshold with alarm Uul
 N01 = 15
 N97 = 2 + 10 = 12
 N01 = 20
 N01 = 12

Usefull to know !

Before maintenance ore trouble shooting always check the digital inputs of the machine. No digital input mostly the connect switch is broken en has to be replaced. Always check the connections very thoroughly.

Or check the latest version at the website www.fromm-stretch.com

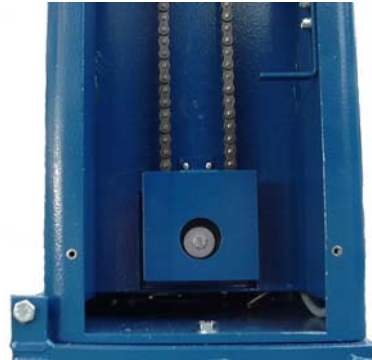
Instruction FLASH MCU Programmer for F2MC-16LX.pdf

ALARMS AND ERRORS**THE CARRIAGE DOES NOT STOP AT THE LOWER OR UPPER LIMIT STOP MICROSWITCH****The arised problem**

- Limit switches and not connected properly
- Limit switch malfunctioning
- Limit stop cam incorrectly positioned

Possible remedies

- Check the wiring
- Replace the limit switch
- Check for the position of the cams by adjusting the respective adjuster screws

**THE PHOTO ELECTRIC CELL IS NOT WORKING****The arised problem**

- Photo electric cell is not detecting the pallet

Possible remedies

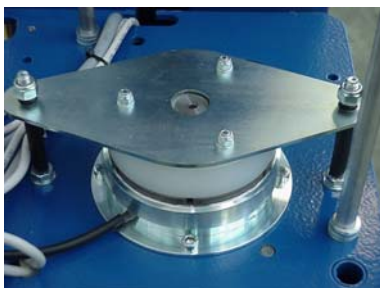
- Check if the machine is not in program 6
- Check parameter 0 "pallet overlap"
- Check the background of the machine (Too much white gives problems)
- Is the colour of the stretchfilm corresponding with the required photo cell

WHEN THE FILM TENSION VALUE IS INCREASED OR DIMINISHED, TENSION DOES NOT CHANGE**The arised problem**

- clutch not connected properly
- clutch not working

Possible remedies

- Check the connection
- Replace the clutch



Option kit 16.8240

THE MACHINE DOES NOT STOP WHEN THE EMERGENCY MUSHROOM-HEAD BUTTON IS PRESSED**The arrised problem**

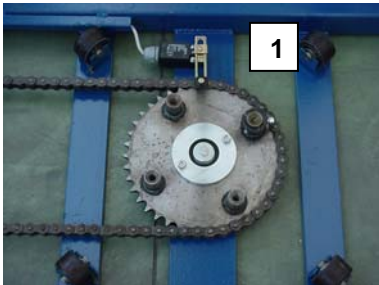
- emergency circuit failure
- emergency mushroom-head button not working

**Possible remedies**

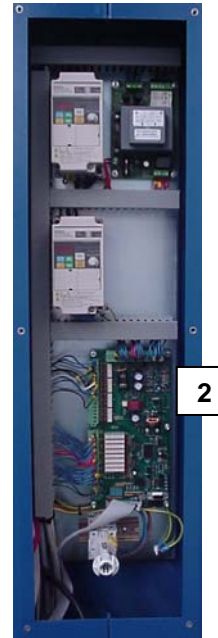
- Check the circuit
 - Replace the emergency mushroom-head button

THE TURNS AT THE BOTTOM AND AT THE TOP OF THE LOAD ARE NOT REGULATED PROPERLY**The arrised problem**

- limit switches (1) not connected properly
- limit switch malfunctioning
- The control card (2) is not working properly

**Possible remedies**

- Check the wiring
- Replace the limit switch
- Replace the faulty card by carefully referring to the wiring diagram attached to the machine documentation



ALARMS AND ERRORS FS 250 / 270 / 270+

- AL 1 = Carriage emergency limit switch
- AL 2 = Main contactor
- AL 3 = Inverter overload
- AL 4 = Transpallet sensor
- AL 5 = Film tearing alarm (optional)
- AL 6 = Encoder sensor
- AL 7 = Toppres sensor

ALARM RESET

After having cleared the fault, push the **RESET** button

AL1 CARRIAGE EMERGENCY LIMIT SWITCH**The arised problem**

- This alarm signals that exerted pressure on the carriage has been detected by the microswitch that interlocks the crush-proof guard
- Microswitch incorrectly positioned or connected
- Microswitch not working properly

**Possible remedies**

- Check the situation
- Position the microswitch correctly
- Replace the microswitch

AL2 MAIN CONTACTOR**The arised problem**

- This alarm signals that the emergency button was pressed
- Emergency button not working properly

**Possible remedies**

- Check the situation and deactivate the mushroom-head button
- Replace the emergency button

AL 3 INVERTER FAULT IN FS 250 – FS 270**The arrised problem**

- This alarm signals the blocking of an inverter

- Inverter gives the alarm "OL1"

- Pré stretch not working after building in option package **16.8242**

- Inverter not working properly

Possible remedies

- Turn off the machine. Wait 20 seconds and turn it on again.
- If the problem persists:**
- Check the situation on the display of the inverter referring to the inverter instruction manual that is enclosed with the machine documentation
- Check for the presence of mechanical motor locks, if any, and proceed as required

- Change parameter N32 to 2,77

If the alarm persist

- Increase the value of N31 for example from 18 to 22 (Minumum frequency)

If the alarm persist

- if the cycle is longer than 8 minutes. Increase value N34 from 8 to 12

- Check the connection of the wires
- Place the inverter manually on PNP
- Check the output on J3 analogue value Wire A3 = 10 Volts
- Parameter T5 = Pré stretch = 1

After changing the parameter switch OFF and ON the machine.

- Replace the inverter

AI 4 TRANSPALLET / Horse shoe turntable**The arrised problem**

- Phonic wheel sensor incorrectly positioned

- Sensor not connected properly

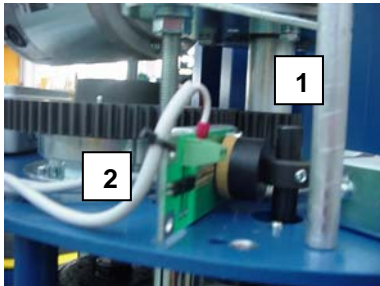
Possible remedies

- Check for the correct positioning of the sensor as compared to the phonic wheel The distance should not be more than 2mm
- Check for the correct connection of the sensor by means of the associated connector
- Replace the sensor

AL 5 FILM TEARING ALARM (Option 16.8242)**The arrised problem**

This alarm indicates that the non-work time set for the rubber pin (1) has elapsed due to:
Film roll finished

- Film tearing
- Card (2) not working

**Possible remedies**

- Replace the roll
- Restore the film
- Replace the card

COUNT SENSOR FOR CARRIAGE PHONIC WHEEL**The arrised problem**

-Phonic wheel sensor incorrectly positioned

- Sensor not connected properly
- Sensor not working properly

**Possible remedies**

- Check for the correct positioning of the sensor as compared to the phonic wheel
The distance should not be more than 2mm
- Check for the correct connection of the sensor by means of the associated connector
- Replace the sensor

