## 3 Fault finding

The fault code in case of a failure is displayed by pressing "MODE" key (12). (F-XX) appears in display (3), and the source of the failure is listed in the table below:

Error	Error reason	Assembly group
F-20	Internal watchdog	Mainboard
F-2122	ROM test	Mainboard
F-2324	RAM test	Mainboard
F-25	CPU test	Mainboard
F-26	Invalid function menu	
F-27	EEPROM data invalid	Mainboard
F-28	RTC (real time clock) data invalid	Mainboard
F-29	Stepper motor power test	Mainboard
F-30	Plunger position calculation failed	
F-31	Check for near empty	
F-32	5Volt supply out of range	Mainboard
F-33	20Volt supply out of range	Mainboard
F-34	Pressure reference out of range (LM385 2.5V)	Mainboard
F-35	Pressure signal out of range	
F-36	Pressure result invalid	Mainboard
F-37	Pressure sensor test failed	
F-38	Barrel diameter signal test failed	
F-39	Barrel diameter signal out of range	
F-40	Clamp diameter signal out of range	
F-4445	Address invalid for EEPROM	Mainboard
F-46	Frequency from $\mu C$ or RTC out of range	Mainboard
F-47	Displayboard not present	
F-48	Key(s) too long active	Displayboard
F-54	Movement result invalid	
F-55	Frequency calculation	Mainboard
F-5659	Volume control	Mainboard

Exceptionally a fault code may appear, which is not included in this list. In this case we recommend to change the main board.