

570II Split Model Operating Instruction V1.0

1. Safety Precautions

Before using, please read this technical data and attached instructions for sewing machinery for your correct use.

- 1.1 (1)Power supply voltage and operating frequency: please follow the specifications on the nameplate of motor and control box.
- (2) Electromagnetic wave interference: Keep away from machines with HF magnetic wave or electric wave transmitter to prevent malfunction due to generated electromagnetic wave interference to the drive device.
- (3) Grounding: to prevent noise interference or leakage accidents, please complete grounding (including sewing machine, motor, control box, positioner).
- 1.2 When removing the motor or control box, do not plug or unplug when electrified; there is dangerous high voltage in the control box, open the cover of control box after the power supply is turned off for more than 1min.
- 1.3 To ensure personal safety, please turn off the power when repairing machinery or threading a needle .
- 1.4 ⚠ This sign indicates that error occurred in machine installation may be harm to body or damage the machine.
- This sign will appear at the position where the machine is dangerous.
- ⚡ This sign indicates high voltage, which will appear at the position where has danger in electricity.
- 1.5 In the premise of normal operation without human caused error, warranty period of the device is one year.

2.1 System Parameter:

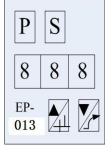
A01: ZJ9600 A02: ZJ9600-5 A03: JY-Z930-BD A04: JY-A520A-BD A05:Flatcar JY-H329-BD
A06: Chain Stitch Machine with Simple Direct Drive A51:direct drive belt B01: ZJC2500 ZJ2500A ZJ-E007 ZJ-C1
B02: ZJ2479 ZJS2500A B03: JY-C562-1-BD B04: JY-C662-1-BD B05:JT simple flat-seam
C01: ZJ900 C02: ZJ700 C03: ZJ600 D01 : ZJ2842-BD F01: 9610
F02: 9620 H01 : ZJ3600

N o	Item	(cont.)	Applicable Models	Range of setting	Defailure Value	Grade
1	Sewing speed	Set the highest speed of pedal	C03 B01	200～6000 rpm	3500 rpm	I
			A01	200～5000 rpm		
			A04 B03 B04 A06	200～4000 rpm		
			C01	200～8000 rpm	4500 rpm	
			C02	200～7000 rpm	4000 rpm	
			B05	300～6000 rpm	3000 rpm	
			A02	200～3500 rpm		
			B02	200～5000 rpm		
			A51	200～5000 rpm	3700 rpm	
			F01	200～3000 rpm	2400 rpm	
			D01	200～3500 rpm	2200 rpm	
			H01	200～4200 rpm	2000 rpm	
			A05	200～2000 rpm	1800 rpm	
			A03	200～2000 rpm	1700 rpm	
			F02	200～2000 rpm	1600 rpm	
2	Number of stitches for soft start	Function of low-speed sewing for several stitches at the beginning of sewing 1 ～ 10: number of stitches for soft start	All models	1～10	2	I
3	Soft start speed 1	The first needle speed of soft start	All models	200～2000rpm	600 rpm	I
4	Soft start speed 2	The second needle speed of soft start	All models	200～2000rpm	1000 rpm	I
5	Soft start speed 3	The 3～10 needle speed of soft start	All models	200～2000rpm	1500 rpm	I
8	Simple sewing model setting	0:invalid 1:valid	All models	0/1	0	I
9	Needle positioning upon energization	0:not set the needle position 1:automatic set the needle position	A01 A02 A03 A04 A05 A06 A51 B01 B02 B03 B04 C01 C02 C03 D01 F01 F02 H01	0/1	0	I
		B05		1		
10	signal mode for turn/lift switch	0: always open 1:always close a protection 2:forbid	A01 A02 A03 A04 A05 A06 D01	0/1/2 0/1/2	0 1	I
11	Pedal curve selection	0:normal 1:slow acceleration 2:quick accerleration	All models	0/1/2	0	I
18	Lower needle signal	0-1	A51	0/1	0	I
19	Lower needle stop position angle	Adjustment of lower needle stop position	A01 A02 A03 A04 A05 A06 A51 B01 B02 B03 B04B05 C01 C02 C03 F01 F02 D01	30 ～240	177 60 120	I
20	Factory parameter restore	0:not restore 1:restore the general parameters 2:restore all the paramters	All models	0/1/2	0	I
21	Highest sewing speed	Highest sewing speed	C01 C02 B05 A51 A01 B02 C03 B01 B03 B04 A06 H01 A04 F01 A02 D01 F02 A05 A03	300～8000 rpm 300～7000 rpm 2000～6000 rpm 1000～5000 rpm 300～5000 rpm 200～5000 rpm 300～6000 rpm 300～4000 rpm 200～4200 rpm 300～4000 rpm 200～3000 rpm 300～3500 rpm 300～3500 rpm 200～2000 rpm 300～2000 rpm 300～2000 rpm	6500 rpm 5000 rpm 4000 rpm 4500 rpm 3800 rpm 3500 rpm 3000 rpm 2700 rpm 2000 rpm 1800 rpm	I
22	Low-speed stress-application gear election	0:no stress application 1～15:overthickness stress-application gear	All models	0～15	0	I
23	Needle position adjustment	Needle position adjustment	C01 C02 C03 A01 A02 A03 A04 A05 A06 A51 B01 B02 B03 B04 D01 F01 F02 H01 B05	0～240 0～240	185 0 130	II
25	The neutral position of the pedal	Trimming the neutral position of the pedal	All models	-15～+15	0	II
26	Pedal travel upon start	Pedal position upon start Travel relative to medium pedal	All models	10～50	25	II
27	Pedal travel upon acceleration	Pedal position upon start acceleration Travel relative to medium pedal	All models	10～100	50	II
28	Pedal travel at highest rotation speed	Pedal position at highest rotating speed Travel relative to medium pedal	All models	10～150	110	II
29	Pedal stroke of back stepping motion	Pedal position by the end Pedal stroke at the neutral position	All models	-99～-10	-30	II
30	test mode	test mode	All models	0～3	3	II
31	test g rate	test rate	B01 C01 C02 C03 A01 B02 B03 B04 H01 A04 B05 A06 A51 F01 A02 D01 F02 A05 A03	300～6000 rpm 300～8000 rpm 300～7000rpm 300～6000 rpm 300～5000 rpm 300～4000 rpm 300～4200rpm 300～4000 rpm 300～5000 rpm 300～3000rpm 300～3500 rpm 300～3500rpm 300～2000rpm	4500 rpm 4000 rpm 3800 rpm 3500 rpm 3000 rpm 2700 rpm 2000 rpm 1800 rpm	II
32	test running time	test running time	All models	1～200	30	II
33	test pause time	test g pause time	All models	1～200	20	II
34	Number of test needles	Number of test needles (effective only in one mode)	All models	1～99	30	II
40	Model setting	Set model manually	All models	-----	-----	II

3. Instructions for Operation Panel

3.1 Descriptions of Key Functions

Number	Key(s)	Description
1	[P]	Function Key
2	[S]	Save
3	[▲▼]	Plus / up and down
4	[▼]	Minus/ soft start



3.2 Operation Mode

3.2.1 Parameter Mode

Setup Parameter: the parameters are divided into general parameters and advanced parameters; password is needed for entering into advanced parameters. Do not start the system in parameter mode (except for P23 parameters)!! Keys are locked when motor runs.

Press “P”shortly for 1s to enter into general parameters mode, P01 will be shown: [P 0 1]

Press “▲▼” to change serial numbers of parameters. After pressing Key S, corresponding parameters will be shown, and press “▲▼” to change: [3 7 0]

a) After save by pressing “S”, press “P ”to exit .

b) If you press “P ” directly, exit with parameters saved.

3.2.2 Advanced Parameters Mode

Password is needed to access to advanced parameters. Long press “P” for more than 3s to enter into password input interface, and the system displays: [0 0 0] which flickers from the top digit, Press “▲▼” to change with the range of 0~F, Press “S” to switch the position. if password is correct, advanced parameter serial number [P 2 1] will be displayed.

If the password is incorrect, return to 000 (flickering from the top digit as before) Press “P” again to exit. Defailure password is 111. A all-purpose password shall be set in the software. After entry into advanced parameters, the general parameters can also be displayed. Reset Password: at the same time of powering on, press “[]” to enter into password resetting interface. The system will request to input the old password, and the screen will firstly display : [0 0 0]

Flickering from the top digit, press “S” to switch the position, and press “▲▼” to change, press “P” to confirm input.

- 1) If the password is correct (assumed to be 111), then the decimal point will be on, and the top digit will started to flicker to set new password (assumed to be 555) [range of value for each digit “0-9” “A-Z”] . Press “P” to enter into confirmation screen after setting; press “▲▼” and select “YES”, press “S” to save, “oFF” will be displayed. It is prompted to power off, and press “P” to exit [1.1.1.]→[5.5.5.]
- 2) [n 0]→[y E S]→[o F F] If the password is incorrect, return to display of 000. After mistaken input for 3 times, “oFF” will be displayed to prompt to power off.

3.2.3 Motor Angle Test Mode

Press “S” to power on, enter into motor angle test mode, and the system will display: [d J]

Press “P+▼” to start testing. The motor angle will be displayed after test is finished. [1 5 6] Exiting from this mode can be achieved only by powering off.

3.2.4 Monitoring Mode

In ready mode, long press “S” for 2s to enter into monitoring mode, press “▲▼” to change the serial number of monitoring, and the monitoring values can not be modified. Specific display contents:

Displayed S/N	PROJECT Name:	Unit	Displayed S/N	PROJECT NAME:	Unit
SPD	Speed:	(*10)rpm	DJ	Angle	degrees
CUR	Electric Current	0.01A	VER	Version :	/
UDC	Voltage:	v:	ID	Model	

Press “S” to enter into specific values, press “P” to exit and turn to ready mode.

3.2.5 Aging Mode Long press “P” to power on, enter into aging mode. Press “P+▼” to start, and press “P+▼” again to stop. Nixie tube will display: [] [A]

3.2.6 Analog Pedal Zero Position Correction Mode After powering on, the system will operate at low speed if pedal is found not being stepped in ready mode to start zero position correction function. At the same time of powering on, press “[]” to enter into pedal zero position correction mode, and the system will display: [P d L] Press “P+▼” to start correction. After correction is finished, correction value will be displayed (general range is +15～15) [- 0 2] In case of beyond the range, report failure.

3.2.7 Failure Display Mode In case of failure, failure code [E 0 8] will be displayed. Failure history is not saved.

3.2.8 Display Mode of Enabled Head Lift Switch [0 1 1]→[0 1 1]

Do not operate when the head lift switch is on!!! For example: set “normally open”, if the head lift, the above flash will be shown. Press “S” to cancel and return to normal (same as restoring the head to normal.). Press “S” again, monitoring information will be shown, same as displaying monitoring by press “S” in normal state.

4. Failure Display

Failure display	Failure:	Possible causes:	Remedies
E1	Overcurrent of hardware	Current detection is abnormal; drive hardware is damaged	Check whether the current detection circuit of system is operating properly; whether driving device is damaged
E2	Overcurrent of software	Current detection is abnormal; motor running is abnormal	Check whether the current detection circuit of system is operating properly; whether motor signal is normal
E3、E5	Overvoltage of system	Actual voltage is high; voltage detection is wrong	Check whether incoming line voltage of the system is too high; whether voltage detection circuit is operating smoothly
E4、E10	Undervoltage of system	Actual voltage is low; voltage detection is wrong	Check whether incoming line voltage of the system is too low; whether voltage detection circuit is operating smoothly
E6、E7、E11、E13、E20	Motor signal failure	Motor position sensor signal failure	Check whether motor plug contract is in good condition; whether motor signal detection device is damaged Whether sewing machine hand wheel is installed in position
E8、E12	Overload of motor	Motor is stalling; motor is overloaded	Check whether motor plug contract is in good condition; whether head or trimming mechanism is stuck Whether the fabrics above the specified thickness is sewed; whether current detection signal is normal
E9、E17	Overspeed fault (exceeding the maximum speed of revolution of set model)	Motor running is abnormal	Check whether motor plug contract is in good condition Whether motor signal is not matched
E14	Current detection circuit failure	Current detection is abnormal	Check whether the current detection circuit of system is operating properly;
E15	Overranging of pedal zero position detection	Pedal zero position correction value is out of range	Pedal is damaged or pedal is not in stop state when correction
E16	OZ circuit failure	OZ circuit is abnormal	Check whether OZ circuit of system is operating properly
E18	Motor angle test failure	Motor angle is out if range	Re-conform the motor angle
E21	Motor model code is empty	Slave computer of operation box has no model code	Re-conform model
E22	Motor model code is out of range	Model code of operation box slave computer is unrecognized	Re-conform model
E23	Lower needle stop position signal failure	Lower needle stop position sensor fault	Check whether lower needle stop position sensor is damaged

5. Accessories

Number	Product name	Qty.	Specifications	Remarks
1	Electric control box	1		
2	CORD SET	1		
3	Foot Plates	1	PL-302	
4	Linkage ball joint	1		
5	Fastening screw of electric control box	3	M4×8	Hexagon socket head cap screw
6	Fastening screw of pedal	3	M5×25	Hex flange self-tapping screws
7	Specification	1		