## Automatic integral manual Sunstar version V1.1

### **4.**System Info

Operation panel default mode, press the button at the same time in P made sewing needle trigger select key, enter the system monitoring state through the +-key choose need to look at the project, according to the S button to enter/exit the selected projects such as the need to exit monitoring interface, according to P keys can be.

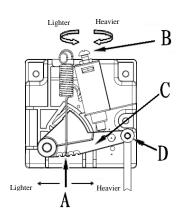
interface, according to 1 keys can be.							
show frame numbers	Item Name	unit		show frame numbers	Item Name	unit	
JJ	Plan number	piece		U5	Mechanical Angle with	limit	
U1	speed of motor control	rpm		U6	Motor initial Angle	limit	
U2	Motor Current	0.01A		U7	Master control program version	/	
U3	Motor Voltage	V		U8	Head type	/	
U4	Pedal voltage	0.01V		vEr	Operation box version of the program	/	

# **5.appearance and Adjustment 5.** 1 Motor classification



Direct drive motor

#### 5.2 Pedal Installation and adjustmentPedal



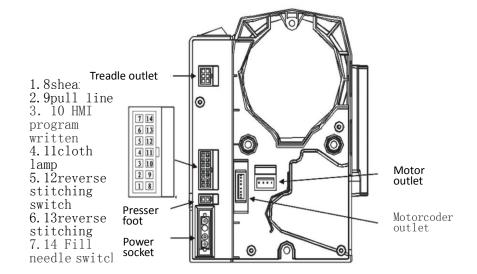
#### 2.2 Adjustment of pedal

The parts of pedal are as shown in the right figure.

- A. Operation spring
- B. Bolt for heeling adjustment
- C、Pedal lever
- D、Ball joint link

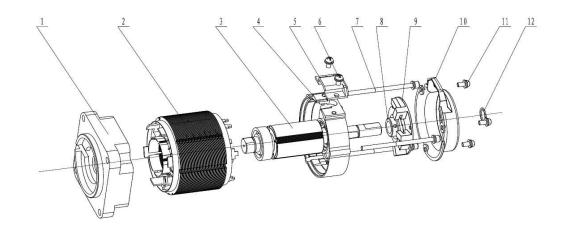
_						
	Р	Adjustment	Result			
1 Adjustment of toeing force		Adjustment of	Move spring A to the right to increase the toeing force. Move spring A to			
		toeing force	the left to reduce the toeing force.			
	Adjustment of		CCW 🕏 turn the bolt to reduce the heeling force.			
		heeling force	CW 🦃 urn the bolt to increase the heeling force.			
		Adjustment of	Secure the ball joint link D to the right hole to increase the pedal stroke.			
3		pedal stroke	Secure the ball joint link D to the left hole to reduce the pedal stroke.			

#### 5.3 Electric wiring definition



3

### 6.electric machinery



NO	name	material	Amount	NO	name	material	Amount
1	The rear end cover	ADC12	1	7	Screw M4*70	steel	3
2	The stator assembly		1	8	Grating		1
3	The rotor assembly		1	9	Encoder		1
4	The rear end cover	ADC12	1	10	The rear housing	PA66	1
5	The cover plate	PA66	1	11	Screw M4*12	steel	3
6	Screw M4*8	steel	2	12	bead flange D12	steel	1

#### 7 Frrom codes

Motor signal error signal failure device has been broken; if sewing machine handwheel correctly installed.  E015 Model type error Unable identify operating box box model type  E021 E022 E023 Motor overload motor overload motor overload fault  E101 Hardware drivers fault  E111 E112 Voltage too high  Current detection abnormal fault  Current detection error  E121 E122 Voltage too low  Current detection abnormal fault  Current detection is wrong  E131 Current circuit fault  Current detection abnormal overload circuit fault  Current detection is wrong  E133 Oz circuit fault  Oz circuit fault  Oz circuit system is working properly.  Motor signal error signal failure  Check operating box  If electric engine plug is well contacted; if machine head or thread-cutting mechanism has been blocked completely; factor thick; Electrical signal detection signal whether the normal.  Current detection loop system is working properly; Whether the damage to the device driver.  System into line voltage is too high; Braking resistance are working properly.  E121 E122 Voltage too low  Actual low voltage  Voltage detection is wrong  Current detection circuit are working properly.  Current detection loop system is working properly.  Current detection loop system is working properly.	7. Error	codes codes					
Motor signal error   Signal failure   Signal motor overload   Signal motor overload   Signal machine handwheel correctly installed.		Contents	Possible reasons	Checking and treatment			
E01 E022 E021 E022 E023 Motor overload motor stall motor overload E101 E102 E101 Hardware drivers fault Voltage too high Voltage too high Voltage detection error Actual low voltage detection is wrong Voltage detection is wrong Voltage detection is wrong Voltage too low Voltage detection is wrong Voltage or circuit fault Voltage detection is wrong Voltage or circuit fault Voltage or circuit system voltage of circuit the normal work.  E133 Oz circuit fault Oz circuit fault Oz circuit fault Vore current magnet circuit Fault Septem voltage or circuit system is working properly.  E151 Magnet circuit or voltage Over current magnet circuit Fault Parlia (Current detection or or Current detection or or Current detection or or Current detection loop system is working properly.  E201 Over current Current detection error Current detection loop system is working properly.  E201 E212 E212 Pedal ID fault Pedal verification fault Pedal zero position over range Fault Pedal zero position over range Fault Pedal zero position over range Fault Pedal zero for Fault Pedal zero position over range Fault Fault Pedal zero for Fault Fault Safety switch fault Safety switch effective Put down the head or check turned up switch.  E101 Fault Fault Pedal repriced Fault Pewore for Fault Fault Pewore for Fault Fault Power off Tiral expired Fault Fault Power off Safety Safet		Motor signal error	signal failure	· ·			
Motor overload   motor stall motor overload   materials are too thick;   Electrical signal detection signal whether the normal.	E015	Model type error		Check operating box			
fault Driving hardware error High input voltage Brake circuit fault Voltage detection error Voltage detection error Voltage detection is wrong Voltage too low Voltage detection is wrong Voltage detection detection loop system is working properly.  E131 Current circuit fault Oz circuit fault Oz circuit system is working properly.  E152 Magnet circuit error Over current magnet circuit If machine head magnet suffers short circuit; Electromagnet circuit is working properly.  E201 over current Current detection error Current detection loop system is working properly; Electrical signal is normal detection error Voltage detection error If electric engine plug is well contacted; If electric engine signal is matched demanged.  E302 Operation inner failure Sci circuit error Sci circuit error If operation box plug is well contacted; If operation box components are damaged.  E402 Pedal ID fault Pedal verification fault Pedal connection is loosen.  E403 Pedal zero position fault The pedal zero position over range The pedal is damaged or it is not under stop state when correction.  E501 Safety switch fault Safety switch effective Put down the head or check turned up switch.  E704 Power off Display Power off Wait for power supply to resume.  E705 Control fault Pedal connection is loosen.  E706 Voltage detection circuit are working properly.  E707 Current detection loop system is working properly.  E708 Current detection loop system is working properly.  E709 Current detection loop system is working properly.  E709 Current detection loop system is working properly.  E709 Curre		Motor overload		if machine head or thread-cutting mechanism has been blocked completely; f materials are too thick;			
E111 E112 Voltage too high  Circuit fault Voltage detection error  Actual low voltage Voltage detection is wrong  Current circuit fault  Current detection abnormal fault  Current detection abnormal fault  Oz circuit fault  Oz circuit fault  Oz circuit system into line voltage detection circuit are working properly.  Current detection loop system is working properly.  If machine head magnet suffers short circuit; Electromagnet circuit is working properly.  Current detection loop system is working properly.  Current detection loop system is working properly.  If machine head magnet suffers short circuit; Electromagnet circuit is working properly.  Current detection loop system is working properly.  If machine head magnet suffers short circuit; Electromagnet circuit is working properly.  Current detection loop system is working properly.  Cu	E101		Driving hardware error	Current detection loop system is working properly; Whether the damage to the device driver.			
Current circuit fault	E111 E112	Voltage too high	circuit fault	System into line voltage is too high; Braking resistance are working properly; System voltage detection circuit are working properly.			
fault Current detection abnormal Current detection loop system is working properly.  E133 Oz circuit fault Oz circuit fault Oz circuit system is working properly.  E151 Magnet circuit error Over current magnet circuit If machine head magnet suffers short circuit; Electromagnet circuit is working properly.  E201 over current Current detection error Current detection loop system is working properly; Electrical signal is normal properly.  E211 E212 Abnormal motor operation Current or voltage detection error Sci circuit error If electric engine plug is well contacted; If electric engine signal is matched admaged.  E301 Communication error Sci circuit error If operation box plug is well contacted; If operation box components are damaged.  E302 Pedal ID fault Pedal verification fault Pedal connection is loosen.  E403 Pedal zero position fault Pedal connection is loosen.  E404 Safety switch fault Safety switch effective Put down the head or check turned up switch.  E501 Safety switch fault Safety switch effective Wait for power supply to resume.  Eval Trial expired Contact the dealer processing  Current detection loop system is working properly.  Current detection loop system is working properly.  If machine head magnet suffers short circuit; Electromagnet circuit is working properly.  Current detection loop system is working properly.  Each in the properly.  Current detection loop system is working properly.  Current detection loop system is working properly.  E201 Factor and properly.  Current detection loop system is working properly.  E202 Factor and properly.  Current detection loop system is working properly.  E203 Factor and properly.  Current detection loop system is working properly.  E204 Factor and properly.  Current detection loop system is working pr	E121 E122	Voltage too low		If the voltage on the inlet wire is too low Whether the system voltage detection circuit the normal work.			
E151 Magnet circuit error Over current magnet circuit E201 over current Current detection error Current detection loop system is working properly; Electrical signal is normal E211 E212 Abnormal motor operation Current or voltage detection error E301 Communication error Sci circuit error if operation box plug is well contacted; If electric engine signal is matched if operation box plug is well contacted; if operation box components are damaged.  E302 Operation inner failure E402 Pedal ID fault Pedal verification fault Pedal connection is loosen. E403 Pedal zero position fault E501 Safety switch fault Safety switch effective Put down the head or check turned up switch. E501 Safety switch fault Safety switch effective Wait for power supply to resume. Eval Trial expired Trial expired Current magnet circuit is workin properly.  E102 If machine head magnet suffers short circuit; Electromagnet circuit is workin properly.  E102 Current detection loop system is working properly; Electrical signal is normal  If machine head magnet suffers short circuit; Electromagnet circuit is working properly.  E102 Current detection loop system is working properly; Electrical signal is normal  If electric engine plug is well contacted; If electric engine signal is matched if operation box plug is well contacted; If electric engine signal is matched admaged.  E103 Pedal ID fault Pedal verification fault Pedal connection is loosen.  The pedal is damaged or it is not under stop state when correction.  E501 Safety switch fault Safety switch effective Put down the head or check turned up switch.  E203 Wait for power supply to resume.  E204 Contact the dealer processing	E131		Current detection abnormal	Current detection loop system is working properly.			
Magnet circuit error Over current magnet circuit properly.  E201 over current Current detection error Current detection loop system is working properly; Electrical signal is normal Current or voltage detection error If electric engine plug is well contacted; If electric engine signal is matched if operation box plug is well contacted; If operation box components are damaged.  E301 Communication error Sci circuit error If operation box plug is well contacted; If operation box components are damaged.  E302 Operation inner failure Sci circuit error If operation box plug is well contacted; If operation box components are damaged.  E402 Pedal ID fault Pedal verification fault Pedal connection is loosen.  E403 Pedal zero position fault If pedal zero position over range If pedal is damaged or it is not under stop state when correction.  E501 Safety switch fault Safety switch effective Put down the head or check turned up switch.  E501 Power off Display Power off Wait for power supply to resume.  Eval Trial expired Contact the dealer processing	E133	Oz circuit fault	Oz circuit fault	Oz circuit system is working properly.			
E211 E212 Abnormal motor operation Current or voltage detection error Sci circuit error if operation box plug is well contacted; If electric engine signal is matched damaged.  E301 Communication error Sci circuit error if operation box plug is well contacted; If electric engine signal is matched damaged.  E302 Operation inner failure Sci circuit error To check whether the operating box is damaged.  E402 Pedal ID fault Pedal verification fault Pedal connection is loosen.  E403 Pedal zero position fault The pedal zero position over range The pedal is damaged or it is not under stop state when correction.  E501 Safety switch fault Safety switch effective Put down the head or check turned up switch.  E502 Power off Display Power off Wait for power supply to resume.  E503 Current or voltage detection error if operation box components are damaged.  To check whether the operating box is damaged.  The pedal connection is loosen.  The pedal is damaged or it is not under stop state when correction.  E501 Safety switch fault Safety switch effective Wait for power supply to resume.  Eval Trial expired Contact the dealer processing	E151	Magnet circuit error	Over current magnet circuit	If machine head magnet suffers short circuit; Electromagnet circuit is working properly.			
communication error  E301 Communication error  E302 Operation of allure  E402 Pedal ID fault  E403 Pedal zero position fault  E501 Safety switch fault  E501 Safety switch fault  E501 Safety switch fault  E502 Operation inner fault  E503 Power off Display  E504 Power off Display  E505 Power off Display  E506 Power off Display  E507 Power off Display  E508 Power off Display  E509 Power off Display  E509 Power off Display  E500 Power off Display  E500 Power off Display  E501 Power off Display  E503 Power off Display  E504 Power off Display  E505 Power off Display  E506 Power off Display  E507 Power off Display  E508 Power off Display  E509 Power off Display  E509 Power off Display  E500 Power off	E201	over current	Current detection error	Current detection loop system is working properly; Electrical signal is normal			
Communication error Sci circuit error damaged.  E302 Operation inner failure Sci circuit error To check whether the operating box is damaged.  E402 Pedal ID fault Pedal verification fault Pedal connection is loosen.  E403 Pedal zero position fault The pedal zero position over range The pedal is damaged or it is not under stop state when correction.  E501 Safety switch fault Safety switch effective Put down the head or check turned up switch.  P. off Power off Display Power off Wait for power supply to resume.  Eval Trial expired Trial expired Contact the dealer processing	E211 E212			If electric engine plug is well contacted; If electric engine signal is matched			
Failure  Failure  Failure  For Circuit error  For Check whether the operating box is damaged.  For Check whether the operating box is damaged or it is not under stop state when correction.  For Check whether the operating box is damaged or it is not under stop state when correction.  For Check whether the operating box is damaged	E301	Communication error	Sci circuit error				
Pedal zero position fault The pedal zero position over range The pedal is damaged or it is not under stop state when correction.  E501 Safety switch fault Safety switch effective Put down the head or check turned up switch.  P. oFF Power off Display Power off Wait for power supply to resume.  Eval Trial expired Trial expired Contact the dealer processing	E302		Sci circuit error	To check whether the operating box is damaged.			
fault range The pedal is damaged or it is not under stop state when correction.  E501 Safety switch fault Safety switch effective Put down the head or check turned up switch.  P. oFF Power off Display Power off Wait for power supply to resume.  Eval Trial expired Trial expired Contact the dealer processing	E402	Pedal ID fault	Pedal verification fault	Pedal connection is loosen.			
P. oFF Power off Display Power off Wait for power supply to resume.  Eval Trial expired Trial expired Contact the dealer processing	E403	fault	1 1	The pedal is damaged or it is not under stop state when correction.			
Eval Trial expired Trial expired Contact the dealer processing				Put down the head or check turned up switch.			
	P. oFF			1 11 1			
			1				

- Note: 1. Sewing abnormal action (speed electromagnet work abnormal): in the control interface view model is correct;
  2. Turn up E501 fault when: sure it is normal to switch detection, temporary use can change the P-28 parameters;
  3. If the above according to check the project cannot rule out fault, please seek technical support.

4

#### 8. Accessories

NO	Product name	Amount	Product specification	Remarks
1	Electric control box	1		
2	Ball section connecting rod	1		
3	pedal	1	PL-302	with bracket
4	bracket	3	M5*25	screw
5	instructions	2	Chinese / English version	
6	Power cord	1		