

JIN

NA-35DUT-1

Direct Drive, 1-needle, Post-bed, Top and Bottom Wheel-Feed and Needle-Feed,
Lockstitch Machine with Automatic Thread trimmer (Digital Stitch Length Control)

INSTRUCTION MANUAL (Panel)

NA-35DUT Operation Instructions for Stepping Rolla

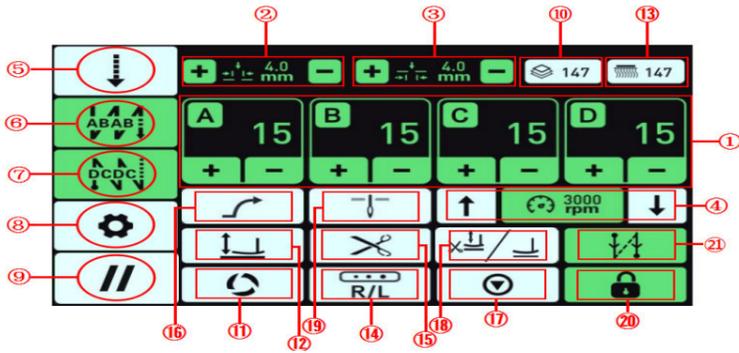
IV. System Parameter Table:

I. Security considerations

1. safety precautions:

- Please read this technical information and the matching sewing machine instructions before use, with the correct use.
- 1.1(1)** Power supply voltage and operating frequency: please follow the specifications of the nameplate of motor and control box.
- (2)** Electromagnetic wave interference: Please keep away from high frequency magnetic wave machine or radio wave transmitter, etc., so as not to cause the electromagnetic wave to interfere with the wrong action of this drive device.
- (3)** Grounding: In order to prevent noise interference or leakage accidents, please do a good grounding project (including sewing machines, motors, control boxes, positioners).
- 1.2** Do not pull in when removing the motor or control box; there is dangerous high voltage in the control box, so wait more than 1 minute before opening the control box cover.
- 1.3** To ensure personal safety, please turn off the power supply during maintenance of machinery or needle piercing.
- 1.4** This symbol indicates that when the machine is installed, any error may damage the human body or the machine. So there will be this sign where the machine is dangerous.
- This symbol indicates that there is high voltage and so on, electrical danger will have this sign.

II. Instructions for the operation of the box



Serial number	Function	Press button	Description
1	Number of stitches shown		1. Adjust and display the number of trips back and forth between the free / W joints; 2. Under the pattern seam for the various pattern number editor;
2	Synchronization key		Adjust the needle distance of upper roller;
3	Lower Synchronous Distance Adjustment Key		Lower roller needle distance adjustment;
4	Speed keys		Each sewing interface under the addition and reduction of the key to play the role of speed regulation;
5	Sewing mode switch key		Contact switchable W seam / pattern seam / free seam;
6	Front Seam Bond		Front fixed joint / front double fixed joint / front four fixed joints / closing cycle;
7	Post-seam bond		Rear fixed joint / rear double fixed joint / rear four fixed joints / closed cycle;
8	Parameter keys		One key into the internal parameter settings;
9	One key recovery key		Under the standby interface, the touch is used to restore the factory setting;
10	Surface line count display		Surface line count display;
11	Trigger key		Continuous fixed seam mode, this key corresponding to the light, indicating that the continuous fixed seam mode default to trigger mode;
12	Key to Lift Foot Function		Automatic lifting foot function on and off;
13	Bottom line count		Bottom line count shows;
14	Compensation left and right		Shortcut keys for left and right corner compensation;
15	Scissors Function Key		Scissors function on/off;
16	Soft Start Function Key		Soft start function on / off;
17	Pattern Cycle Startup Key		In pattern seam mode, automatic operation can be opened;
18	Lift the foot after the middle pause		The function of lifting and pressing the foot after cutting the wire in the middle is on / off;
19	Upper and lower needle selection		The function switch between the upper stop needle position and the lower stop needle position;
20	Lock screen function keys		Lock screen function on / off;
21	Close stitch function keys		Front stitch / rear stitch / front stitch / close;

III. system monitoring status

Operation panel default mode, press parameter settings key to enter the list of internal parameters, and then click on the system debugging-system information into the monitoring interface.

Project name	Unit	Project name	Unit
Motor speed	rpm	Motor Current	0.01 A
Bus voltage	V	Pedal voltage	0.01 V
Mechanical Angle of Head	Degree	Initial motor angle	Degree
Master version number	/	HMI version number	/
Main control model	/	HMI model	/

No	Project	Content	Scope	Default	Level
1	Front reinforcement speed	Pre-reinforcement Joint Speed	200 1800 rpm	1200	1
2	Post-reinforcement Speed	Post-reinforcement Joint Speed	200 1800 rpm	1200	1
3	Prior reinforcement compensation	Compensatory parameters of front stitch stitch	0~100	0	1
4	Post-reinforcement Compensation	Compensatory parameters of post-fix stitch	0~100	0	1
5	Continuous reinforcement speed	Continuous reinforcement joint speed	200~1800 rpm	1500	1
6	Continuous reinforcement compensation1	Compensatory parameters of continuous stitch	0~100	0	1
7	Continuous reinforcement compensation2	Compensatory parameters of continuous stitch	0~100	0	1
8	Reinforcement Speed Mode	0: Auto Fix Speed 1: Pedal Speed	0/1	0	1
9	Number of needle locks	Number of needle locks	0~10	1	1
10	Direction of locking needle	Direction of locking needle	0/1	0	1
11	Wheel gauge for locking needle	Wheel gauge for locking needle	0~50	0.8	1
12	Wheel needle distance	Wheel needle distance	0~50	0.8	1
Pressing Foot Parameters					
1	Press the foot so that	0: lift foot enable set 0: invalid 1: valid	0/1	0	1
2	Hold your foot down so you can	0: invalid 1: valid	0/1	0	1
3	Start-up delay after drop	Delay to confirm that the pin has been lowered	800 ms	100	1
4	Maintain duty cycle	Duty cycle of lift pin output	0~60	30	1
5	Lift hold time	Force off when lifting foot holds	1~12(s)	12	1
6	Slow Down time	Slow down output time of lifting foot	0~500 ms	150	1
7	Full pressure time of lifting foot	Full pressure output time of lifting foot	800 ms	150	1
8	Press the foot to lift the duty cycle	Press the foot to lift the duty cycle	50~95	90	1
9	Soft drop duty ratio	Soft drop duty ratio	1~30	10	1
Parameters of shear line					
1	Loose electromagnet duty cycle	Loose electromagnet duty cycle	10~100	60	1
2	duty cycle of shear electromagnet	duty cycle of shear electromagnet	10~100	80	1
3	Cutting Speed	Cutting speed	rpm 100 500	250	1
4	Starting adjustment of shear line	Setting line suction angle setting	10~200	45	1
5	Cut-off adjustment	Setting of release angle of shear line	300~360	346	1
6	Starting adjustment of loose line	Starting Angle of Loose Line	0~360	300	1
7	Loose end adjustment	Loose ends angle	0~360	350	1
Parameters of sewing section					
1	Soft start enable	0: invalid 1: valid	0/1	1	1
2	Number of soft start pins	0: 99: number of soft-start pins	0~9	3	1
3	First speed	Soft Start 1 Pin Speed	200 800 rpm	600	1
4	Second speed	Soft Start Needle 2 Speed	900 1200 rpm	1000	1
5	Three - pin	Soft Start 3-9 Pin Speed	1300 1800 rpm	1500	1
6	Automatic running	0: invalid 1: valid	0/1	0	1
7	Maximum stitch length	Maximum stitch length setting	0.0~7.0	5.0	1
8	Follow the needle pitch of the upper and lower rollers	Follow the needle pitch of the upper and lower rollers	0~10	0	1
Piecework parameters					
1	Bottom line rate setting	0: invalid 5/10/15/2 0: bottom line rate	0~50	10	1
2	Bottom line count	Bottom line initial setting	0~1000	100	1
3	Piecework rate setting	0: no piece function 1 5 pieces + multiple 1	0~50	10	1
4	Number of pieces	Number of pieces initial setting	0~1000	100	1
5	Machine Lubricating Switch	0: No Lubricating 1: valid	0/1	0	1
6	Lubrication count	0: No Lubricating Counting Function 1 2 0: Lubricating Parts by Multiple *1	0~9999	0	1
Panel parameters					
1	Selection of key function	0: suture flip 1: patch 2: Reverse stitch	0/1/2	1	1
2	Model selection	Model selection	1~99	2	1
3	Tilt switch	Head Safety Switch Signal Mode Setting	0/1/2	2	1
4	Automatic screen lock	After turning it on, the screen cannot operate on the interface after the set time;	0/1	1	1
5	Lock screen time	Lock screen time setting	0~240	10	1
Pedal parameters					
1	Pedal speed curve	0: Normal 1: Acceleration Slow 2: Acceleration Fast	0/1/2	0	1
2	Pedal neutral position	Pedal neutral trim	0~200	100	1
3	Running high-speed	Run to the highest speed pedal position relative to the pedal neutral stroke	0~300	210	1
4	Foot lifting command time	Stop behind the pedal and confirm the time when the command is valid	10 300 ms	80	1
5	Start-up trip	The starting position of the pedal relative to the stroke when the pedal is neutral	0~200	125	1
6	Start the acceleration	The position of the pedal starting to accelerate, relative to the stroke of the pedal when it is neutral	0~300	150	1
7	The rising stroke of the foot	The position of the pedal in which the foot is lifted, relative to the stroke when the pedal is neutral	0~200	70	1
8	Trip under foot pressure	The position of the pedal in which the foot is lowered, relative to the stroke of the pedal when it is neutral	0~200	110	1
9	Cut-line action stroke1	When there is no lifting function, the pedal position of the starting shear line is relative to the stroke when the pedal is neutral	0~150	70	1
10	Cut-line action stroke 2	When the foot is lifted, the pedal position of the starting shear line is relative to the stroke when the pedal is neutral	0~150	40	1
Spindle Parameters					
1	Maximum speed	Maximum sewing speed	2000 3500 rpm	2500	1
2	Minimum speed	Minimum sewing speed	150 300 rpm	200	1
3	Upper dead angle	Upper dead angle	250~360	290	1
4	Lower pin position	Position adjustment of lower stop needle	0~200	60	1
5	Stop angle	Stop angle	180~360	360	1
6	Noise Reduction Function	0 150 Noise Reduction Regulation	0~150	8	1
7	Motor weighting	0: invalid 1: valid	0/1	0	1
8	Motor weighting	1 15 Strength regulation	0~15	2	1
9	Reverse lift enable	0: invalid 1: valid	0/1	0	1
10	Reverse lift angle	Reverse needle angle	0~45°	20	1
11	Fine tuning of the pin	Fine tuning of the pin	0~200	100	1
12	Maximum pedal speed	Set the maximum pedal speed	200 2500 rpm	2500	1
13	Pin mode settings	Pin mode settings	0/1/2/3	0	1
14	Needle angle	Needle angle	0~200	180	1
15	Upper angle	Upper angle	0~360	300	1
16	Layout angle settings	Layout angle settings	0~180	40	1
17	Layout angle setting	Layout angle setting	150~300	195	1
18	Pin position enables	0: invalid 1: valid	0/1	1	1
Upper and lower roller compensation					
1	Upper roller compensation	Upper roller compensation	0~40	0	1
2	Lower roller compensation	Lower roller compensation	0~40	0	1
3	Positive compensation for the first needle of the upper roller	Positive compensation for the first needle of the upper roller	0~100	0	1
4	Positive compensation for the first needle of the lower roller	Positive compensation for the first needle of the lower roller	0~100	0	1
5	Negative compensation for the first needle of the upper roller	Negative compensation for the first needle of the upper roller	0~100	0	1
6	Negative compensation for the first needle of the lower roller	Negative compensation for the first needle of the lower roller	0~100	0	1
7	High-speed current of the upper roller	High-speed current of the upper roller	1~5	5	1
8	High-speed current of the lower roller	High-speed current of the lower roller	1~5	5	1
9	Upper roller low speed current	Upper roller low speed current	1~5	3	1
10	Lower roller low speed current	Lower roller low speed current	1~5	3	1
System debugging-system aging					
1	Mode selection	Automatic test mode setting 0: Standard time mode 1: Stitch number mode (P98 sets the number of stitches) 2: Simple time mode 3: Factory aging mode (do not use this mode on the machine head)	0~3	1	1
2	Running speed	Automatically test the maximum speed setting	200~3000rpm	2200	1
3	operation hours	Automatic test run time	0~360	30	1
4	Pause time	Automatic test pause time setting	0~360	20	1
5	Run switch	0: invalid 1: valid	0~2	2	1
Left and right boundary compensation					
1	Left and right boundary compensation switch	Left and right boundary compensation switch	0~2	0	1
2	Left compensation upper scroll wheel value	Left compensation upper scroll wheel value	0.0~10.0	0.0	1
3	Left compensation lower scroll wheel value	Left compensation lower scroll wheel value	0.0~10.0	0.0	1
4	Number of left compensation stitches	Number of left compensation stitches	0~9	0	1
5	Right compensation upper scroll wheel value	Right compensation upper scroll wheel value	0.0~10.0	0.0	1
6	Right compensation lower scroll wheel value	Right compensation lower scroll wheel value	0.0~10.0	0.0	1
7	Number of right compensation stitches	Number of right compensation stitches	0~9	0	1

V. Error codes

Code	Fault display	Fault content	Possible causes of failure	Inspection Items, processing
1/2	E011 E012	Motor signal malfunction	Motor position sensor signal malfunction	Electrical plugs are in good contact Electrical Signal Detector Damage to Sewing Machine Handwheel Installed
6/8	E021 E023	Motor overload	Motor plug motor overload	Whether the motor plug is in good contact with the nose or the shearing mechanism is stuck Sewing fabric over gauge thickness Current detection signal is normal
9	E101	Hardware-driven failures	Detection	Whether the system current detection circuit is working properly
10/11	E111 E112	Over-voltage system	Failure of brake circuit with over-voltage Error in voltage detection	If the incoming voltage of the system is too high, the brake resistance will work properly the system voltage detection loop works properly
12/13	E121 E122	Low voltage system	Error in detection of actual low voltage	low incoming voltage the system voltage detection loop works properly
14	E131	Fault of Current Detection Circuit	Abnormal current detection	System current detection circuit is working properly
15	E133	0Z circuit fault	Abnormal 0Z circuit	Does the system 0Z loop work properly
16	E134	DBFLT fault	Automatic Resistance Circuit Unnormal	Automatic Resistance Plug in good Contact with Automatic Resistance Damage
18	E201	Excessive motor current	Abnormal current detection Abnormal operation of motor	System current detection circuit is working properly Motor signals are normal
19/20	E211 E212	Abnormal operation of motor	Abnormal operation of motor	Motor plugs are in good contact with motor signals
24	E402	Foot pedal ID malfunction	Pedal Identification Fault	Loose pedal joint
25	E403	Pedal Zero Correction Fault	Pedal zero correction beyond range	The pedal is not stopped when the pedal is damaged or corrected
26	E501	Troubleshooting switch	Turnover Switch	Drop the nose or check the flip switch
27	P.oFF	Power-down display	Power off	Waiting for power to re-open
28	EVAL	Trial protection failures	Trial time	Contact Agent
31	E601	Hardware-driven failures	Hardware overcurrent STEP2 pendulum motor	Whether the system current detection circuit is working properly
32	E602	Hardware-driven failures	Current STEP2 Software of Swing Needle Motor	System current detection circuit is working properly Damage to drivers
33	E603	Hardware-driven failures	STEP2 Current Detection Circuit of Swing Needle Motor	Whether the system current detection circuit is working properly
34	E604	Motor signal malfunction	Initial mechanical angle STEP2 swing needle motor	Electrical plugs are in good contact
35	E605	Motor signal malfunction	An initial encoder or rotor STEP2 a pendulum motor is stuck	Is the motor plug in good contact with the machine
36	E606	Hardware-driven failures	Electric winding circuit STEP2 swing motor	System current detection circuit is working properly Damage to drivers
40	/	Failure of the upper roller stepper motor	Hardware overcurrent of upper roller stepper motor	The upper roller stepper motor plug is in good contact Damage to drivers
41	/	Down Roller Stepping Motor Failure	Down Roller Stepping Motor Hardware Overcurrent	Whether the lower wheel stepping motor plug is in good contact with the drive device
/	L.bob	Bottom line tips	The bottom line count is negative	After changing the bottom line, press the S button to cancel the prompt
/	P.bob	Piecework Tips	The count value is zero	Press the S key to enter the interface, long press the "front fixed seam" key more than 2 seconds to cancel the state of prompt
43	E613	Fan failure	Fan stalled	Whether the fan plug is in good contact Whether the fan blades are contacted by foreign objects and cannot rotate

Note : 1, abnormal sewing action (abnormal steering, electromagnet action, etc.): enter the monitoring interface to see if the model is correct
2, flip the fault E501: determine whether the switch detection is normal, temporary use can change Turnover safety switch parameters.
3, if the above failure can not be eliminated according to the inspection items, please seek technical support.