Machine list ZZ 1560 AUT series

Setting up the control box MD-4-ED-220, i70L-4-ED-220 or i60-4-GL-220 on Global ZZ 1560 AUT series

Connecting the machine cable:
Cable colours (D-sub 37-pin connector MD-4-ED-220, i70L-4-ED-220 and i60-4-GL-220):

Pin	Descript.	Function	Colour
1	R-SELEKT	Automatic machinecode setting (don't connect)	White (don't connect)
4	R-N-HP	Automatic machinecode setting (don't connect)	Brown (don't connect)
5	ZVR SW.	Reverse switch	Green
6	NHT SW.	Needle UP / DOWN switch	Yellow
8	STK SW.	Change of stitch length output (don't connect)	Grey (don't connect)
11	LSP	Safety switch (don't connect)	Pink (don't connect)
14	VRU SW.	Backtack suppression (don't connect)	Blue (don't connect)
15	WALZ	Puller output (don't connect)	Red (don't connect)
16 *	+ 24 Volt	+ 24 Volt (don't connect)	Red – Blue
17 *	+ 24 Volt	+ 24 Volt (don't connect)	Red - Blue
26	+ 24 Volt	+ 24 Volt (don't connect)	Red - Blue
27	FW	Thread wiper output (don't connect)	Purple (don't connect)
28	NK / US	Needle Cooling output (don't connect)	Grey – Brown (don't connect)
33	+ 24 Volt	+ 24 Volt	Red - Blue
34	VR	Reverse output	White - Green
35	FL	Foot lifter output	Green - Brown
36	FSPR	Thread Tension release output	Yellow - White
37	FA	Thread Trimmer output	Yellow - Brown

* = not connected on every Ho Hsing model

Parameter setting for under the table mounting. Drive by V-belt:

Parameter access	Action
1 – 46	In normal mode, press P button
47 – 122	Press P button and power ON
123 – rest	Press S button and power ON

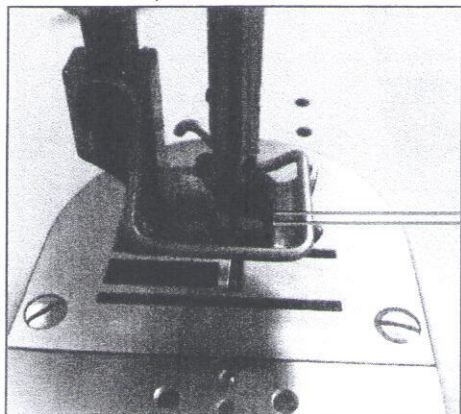NOTE: always set [047.MAC] machine code first

Parameter setting for MD-4-ED-220, i70L-4-ED-220 and i60-4-GL-220 on Global ZZ 1565 AUT series

Parameter	Value	Description	
[047.MAC]	0	Machine code setting	
[001.L]	- - -	Max. speed setting (depends on machine model)	
[004.N]	1000	Start backtack speed	
[005.V]	1000	End backtack speed	
[008.SLS]	0	Soft start stitch setting	
[046.DIR]	CCW	On MD-4-ED-220; direction of motor rotation	
	CW	On i60-4-GL-220; direction of motor rotation	
[053.POL]	OFF	Soft start after power ON	
[057.TRU]	ON	Turn back angle after trimming (set to ON after needle positions are set)	
[058.TR8]	25	Turn back angle in degrees	
[060.L]	150	Positioning speed	
[061.T]	190	Trimming speed	
[066.FD]	100	Motor run delay after presser foot down	
[079.LTM]	T2	Mode selection for trimmer sequence	
[080.LLM]	L2	Mode selection for thread tension sequence	
[081.TS]	30	Start trimmer signal after needle DOWN	
[084.TE]	110	Trimmer signal length	
[085.LS]	60	Start thread tension signal after needle DOWN	
[088.LE]	220	Thread tension signal length	
[122.HL]	- - -	Maximum speed limiter (depends on machine model)	
[164.MXi]	500 W. motor: 14	600 Watt motor: 15	750 Watt motor: 18
[166.ACT]	240		
[167.DCT]	260		
[168.HKP]	25		
[169.LKP]	35		
[170.KP]	25		
[176.VDN]	OFF	Needle positioning by synchronizer	
[192.PTE]	OFF	Positioning Teach in mode	
[209.IDX]	UP	Source of index	

Setting the needle positions for under the table mounting. Drive by V-belt:

For setting the needle positions parameter [057.TRU] (turn back angle after trimming) must be set to OFF first. After the needle positions are set parameter [057.TRU] must be set to ON again. Needle positions are set by disc A (needle UP position) and disc B (needle DOWN position) inside the external synchroniser (see picture).
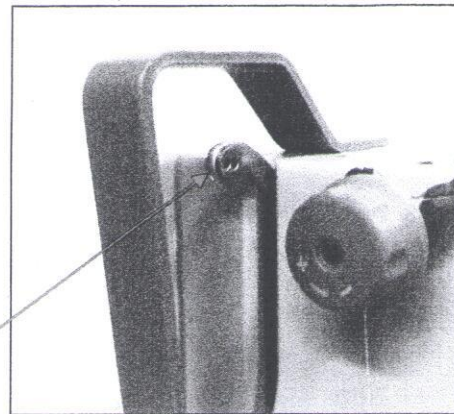
Needle DOWN position:
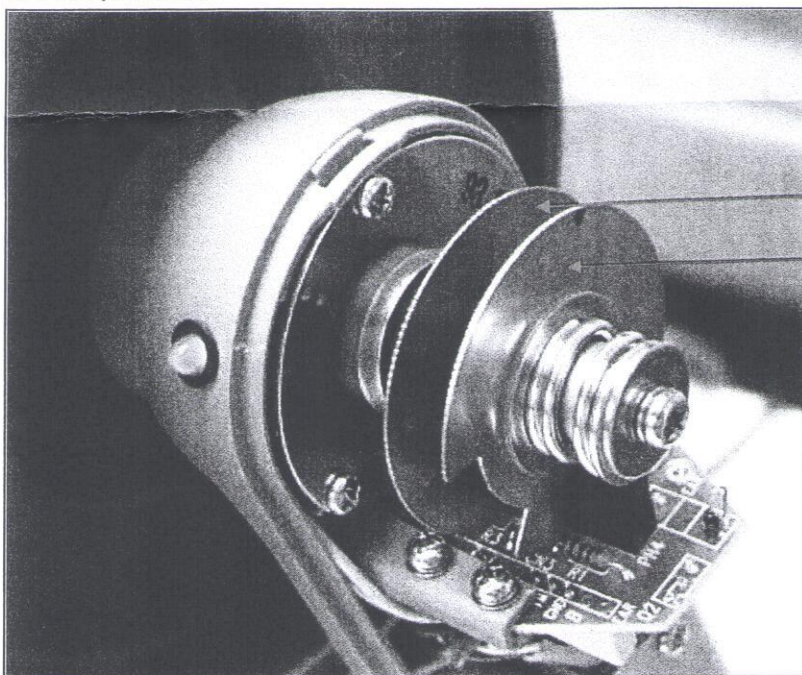

With the presserfoot UP, the presserfoot can not touch the needle bar

Thread lever upper dead point

Needle UP position

External synchroniser

Disc A (Needle UP)

Disc B (needle DOWN)

Parameter setting for Direct drive:

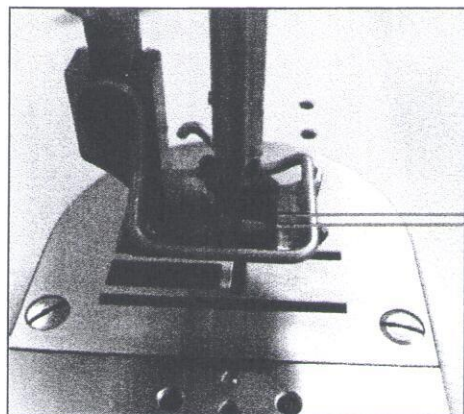NOTE: always set / check [047.MAC] machine code first

Parameter setting for MD-4-ED-220, i70L-4-ED-220 and i60-4-GL-220 on Global ZZ 1565 AUT series

Parameter	Value	Description	
[047.MAC]	0	Machine code setting	
[001.L]	- - -	Max. speed setting (depends on machine model)	
[004.N]	1000	Start backtack speed	
[005.V]	1000	End backtack speed	
[008.SLS]	0	Soft start stitch setting	
[046.DIR]	CCW	On MD-4-ED-220; direction of motor rotation	
	CW	On i60-4-GL-220; direction of motor rotation	
[053.POL]	OFF	Soft start after power ON	
[057.TRU]	ON	Turn back angle after trimming	
[058.TR8]	25	Turn back angle in degrees	
[060.L]	150	Positioning speed	
[061.T]	190	Trimming speed	
[066.FD]	100	Motor run delay after presser foot down	
[079.LTM]	T2	Mode selection for trimmer sequence	
[080.LLM]	L2	Mode selection for thread tension sequence	
[081.TS]	30	Start trimmer signal after needle DOWN	
[084.TE]	110	Trimmer signal length	
[085.LS]	60	Start thread tension signal after needle DOWN	
[088.LE]	220	Thread tension signal length	
[122.HL]	- - -	Maximum speed limiter (depends on machine model)	
[164.MXi]	500 Watt motor: 14	600 Watt mini motor: 15	750 Watt mini motor: 18
[166.ACT]	240		
[167.DCT]	260		
[168.HKP]	25		
[169.LKP]	35		
[170.KP]	25		
[176.VDN]	A	Needle positioning by synchronizer	
[192.PTE]	ON	Positioning Teach in mode	
[209.IDX]	UP	Source of index	

MD-4-ED-220, Setting the needle positions for Direct Drive:

Action	Display shows

Action — **Display shows**

1. Press [A/B] button and [D/C/N] button to turn Start and End back tack OFF — display is blank

2. press [light] button and turn ON the power at the same time — 176.VDN

3. press [P] button 5 times — 181. PDA

4. press [S] button 1 time — PDA xxx (current value)

5. press pedal slowly to make the machine run at least 2 rotations — PDA xxx (new value)

6. rotate the hand wheel in normal sewing direction until the needle is in the position of picture 1

7. press [∧] button 1 time (under the display under "A") — PDA xxx will blink 2 times

8. press [S] button to confirm — display is blank

9. press [P] button for 2 seconds — 181. PDA

10. press [D/C/N] button 2 times — 179. PUA

11. press [S] button — PUA xxx (current value)

12. press pedal slowly to make the machine run et least 2 rotations — PUA xxx (new value)

13. rotate the hand wheel in normal sewing direction until the thread lever is in the Upper dead point position of picture 2

14. press [∧] button (under the display under "A") — PUA xxx will blink 2 times

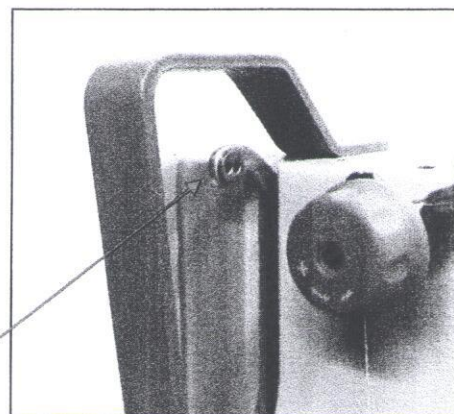15. press [S] button to confirm — display is blank

16. Finished

Picture 1

With the presser foot UP, the presser foot can not touch the needle bar
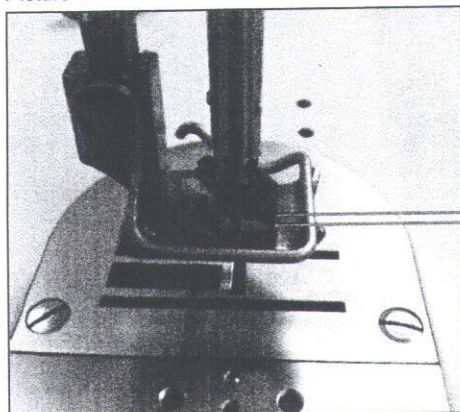
Picture 2

Thread Lever Upper Dead Point

	Action	Display shows
1	Press ![+] button and ![−] button to turn Start and End back tack OFF	display shows rotation "0"
2	press ↓↑↓ button and turn ON the power at the same time	176.VDN
3	press **P** button 5 times	181. PDA
4	press **S** button 1 time	PDA xxx (current value)
5	press pedal slowly to make the machine run at least 2 rotations	PDA xxx (new value)
6	rotate the hand wheel in normal sewing direction until the needle is in the position of picture 1	
7	press [A] button 1 time	PDA xxx will blink 2 times
8	press **S** button 1 time to confirm	display shows rotation "0"
9	press **P** button 1 time	181. PDA
10	press ![−] button 2 times	179. PUA
11	press **S** button	PUA xxx (current value)
12	press pedal slowly to make the machine run et least 2 rotations	PUA xxx (new value)
13	rotate the hand wheel in normal sewing direction until the thread lever is in the Upper dead point position of picture 2	
14	press [A] button 1 time	PUA xxx will blink 2 times
15	press **S** button to confirm	display shows rotation "0"
16	Finished	

Picture 1

With the presser foot UP,
the presser foot can not touch
the needle bar

Picture 2

Thread Lever Upper Dead Point