

SERVO-TOP

QE5542

CE

Type

S60SE

Instruction Manual

Part 3

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Technical updatings reserved!

11. Survey and List of Parameters

11.1 Explanation of Parameter Survey

The parameter survey is designed as an aid for finding parameters quickly. It is a summary of references for the parameter list. Listed behind each reference are all parameters which exert an influence on the function described by the reference.

The parameter survey is divided into five columns:

Column 1 shows the references (functions) to which parameters are assigned.

Column 2 shows the abbreviations of the respective functions.

Column 3 shows all parameters (setting numbers) belonging to the respective reference.

Column 4 shows, for each function (reference) which controls inputs or outputs, the applicable indications such as Ex or Ax which can also be found on the connections diagram.

Column 5 shows, for each function (control inputs (Ex) or control outputs (Ax)), the respective plugs with the number of contacts (see connections diagram).

Example for searching a parameter:

Keyword (function): inverse rotation

The parameter survey shows in column 3 the parameter numbers 618, 623, 801.

Suppose that the inverse rotation function is to be enabled. The parameter list shows this function under parameter number 618.

11.2 Explanation of Parameter List

The parameter list is divided into 5 columns. These comprise, in

column 1: the parameter number,

column 2: is the explanation (meaning) of the parameters and the coding system of row 1 of the keys of the mini operator's panel, used when the parameter concerned can be programmed with the mini operator's panel,

column 3: the programming level (A, B, C) on which the parameter in question can be accessed,

column 4: the range of values within which the parameter in question can be set,

column 5: the value of the parameter in question is set on delivery ex factory.

Parameters having "either/or" validity (software switches) can merely be set to value I or II. In the case of such parameters, column 4 is empty.

Parameter numbers in acute brackets; e.g. <105>, mean the value (content) set for the parameter in question.

Example:

107 Speed for front backtack when <106> = I

I limited by <105>

II limited by <607>

Explanation:

Parameter 107 is valid only the the value (content) of parameter <106> = I.

If parameter 107 is set to I (<107> = I), then the speed for the front backtack is limited by parameter 105, e.g. <105> = 1500. If parameter 107 is set to II (<107> = II), then the speed for the front backtack is limited by the value of parameter 607, e.g. <607> = 4000.

11.3 Parameter survey (2A_C09_3.ENO)

Function	Abbrev'n	Parameter	Input Output	Connection Socket/Contacts
Accelerate	DRZAN	722		
Backtack	RIE	102/103/104 107/108/109 110/523/584 585		
Backtack inversion	RIV	419		
Backtack suppression	RIUNT	419		
Blower	BLA	668	A12	X3:2
Brake	DRZAB	723/851		
Catcher	FANG	707		
Chopper	MESSE	427		
Clean-cut	CC	626/671		
Control	REG	884/885/886 887/889/890 891/894		
Decorative backtack	ZRIE	505/506/507 508/522/523 530/679/775		
Defect search	HWT	797		
Delay	VERZ	403/581/623 679/730/731 732/739/740		
Direction of rotation	DRR	800		
End backtack	ER	108/109/110 149/604/731 732/740		
Feed reverse	TUM	721	E1 A5	X2:5 X5:2
Front backtack	AR	102/103/104 105/106/107 148/739		
Hardware test	HWT	797		
Inverse rotation	RDR	618/623/801		
Machine class	MAKL	799		

Needle position	NAPO	522/654/700 701/702/703 704/705/707 710		
Needle position change-over	NPW	616	E2	X2:3
Needle up without trimming	NHOS	616/710		
Photocell	LS	111/112/113 199/615		
Presser foot	PF	427/554/651 719/729/730	E4	X7:1
Program	PR	114/206/221 304/554/851		
Programming level C	EBC	798		
Puller	PULL	427		
Repeat backtack	WRIE	731/740		
Residual brake	STBR	718		
Seam end	NE	114/206		
Single stitch	EST	440	E10	X1:13
Soft start	SANL	116/117/120		
Speed	DRZ	105/106/107 110/117/199 221/402/403 428/530/585 605/606/607 608/609/676 850/901		
Speed decrease	DRZAB	723/851		
Speed increase	DRZAN	722		
Speed limitation	DB	221/402/428 585/676		
Start	START	113/603		
Start delay	STVERZ	729		
Starting block	ANLSP	665		
Stitch condensation	STVD	102/105/106 107/108/110 419/572/671 739	A13	X4:2
Stop	STOP	114/206/427 665		
Stop time	STOPZ	712/775		

Stroke adjustment	HV	401/402/403 404/427/428		
Target stitch	PEIPO	653/789		
Thread clamp	FK	581		
Thread puller	FZ	581/761	A9 A9	X6:3 X3:4
Thread tension release	FSL	557/707/749 761	A10	X4:4
Thread trimming	SN	601/604/609 654/704/705 732/901	E5	X1:4
Thread wiper	WI	668/715	A3	X2:2
Time needed to switch on	EINZ	715/749/889		
Timing output	TA	719/721		

11.4 List of Parameters (2A_C09_3.EN)

No.	Function (Meaning)	Level	Range of Values	Standard Value	
102	(AR/RIE/STVD) Front backtack stitches forward	C	0 - 9	3	Kl. 1, 2, 3
103	(AR/RIE) Front backtack stitches backward	C	0 - 9	3	Kl. 1, 2, 3
104	(AR/RIE) Front backtack correction (delayed disabling of feed reverse)	B,C	0 - 16	8	Kl. 1, 2, 3
105	(AR/DRZ/STVD) Speed for front backtack/stitch condensation (00000011)	B,C	100 - 6400	1500 1200	Kl. 1 Kl. 2, 3
106	(AR/DRZ/STVD) Speed for front backtack / stitch condensation I variable (treadle-controlled) II constant (corresponding to <105>)	B,C		II	Kl. 1, 2, 3
107	(AR/RIE/DRZ/STVD) Speed for front backtack / stitch condensation when <106> = I I limited by <105> II limited by <607>	B,C		II	Kl. 1, 2, 3
108	(ER/RIE/STVD) End backtack stitches backward	C	0 - 9	3	Kl. 1, 2, 3
109	(ER/RIE) End backtack stitches forward	C	0 - 9	3	Kl. 1, 2, 3
110	(ER/RIE/DRZ/STVD) Speed for end backtack/stitch condensation	B,C	100 - 6400	1500 1200	Kl. 1 Kl. 2, 3
111	(LS) Light barrier compensation stitches 1 (stitches from light barrier clear to seam end)	A,B,C	1 - 255	6	Kl. 1, 2, 3
112	(LS) Number of stitches for light barrier fade-out on knit fabrics (according to stitch size)	A,B,C	0 - 255	0	Kl. 1, 2, 3
113	(LS/START) Start with light barrier I when light barrier is dark only II also when light barrier is clear	B,C		II	Kl. 1, 2, 3
114	(PR/STOP/NE) Stop before seam end after stitch count (last seam section) I yes II no	B,C		II	Kl. 1, 2, 3
116	(SANL) Soft start stitches (00000111)	A,B,C	0 - 255	0	Kl. 1, 2, 3
117	(SANL/DRZ) Speed for soft start stitches	B,C	30 - 640	500 400	Kl. 1 Kl. 2, 3
120	(SANL) Soft start I yes II no	A,B,C		II	Kl. 1, 2, 3
148	(AR) Front backtack I double II single	A,B,C		I	Kl. 1, 2, 3
149	(ER) End backtack I double II single	A,B,C		I	Kl. 1, 2, 3
199	(DRZ/LS) Speed for light barrier compensation stitches	B,C	300 - 6400	1500 1200	Kl. 1 Kl. 2, 3
206	(NE/PR/STOP) Interrupt/discontinue seam sections at speed = constant (<203> = II) I with treadle -2 II with treadle 0	B,C		II	Kl. 1, 2, 3
221	(PR/DB/DRZ) Speed limitation for sewing programs (or sewing program 1)	B,C	300 - 6400	1500	Kl. 1, 2, 3
304	(PR) Stitch compensation at feed reverse for a seam section	B,C	0 - 2550	30	Kl. 1, 2, 3
401	(HV) Input „stroke adjustment“ I switch operation II push-button operation	B,C		II -	Kl. 1 Kl. 2, 3

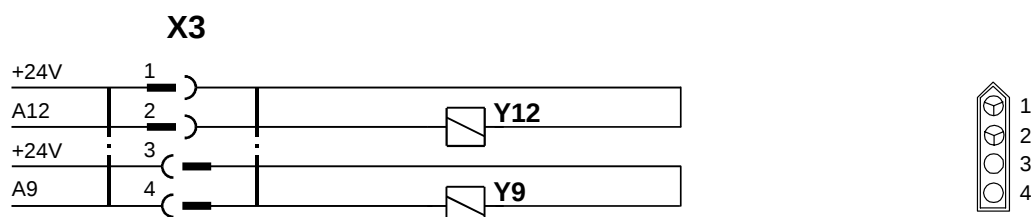
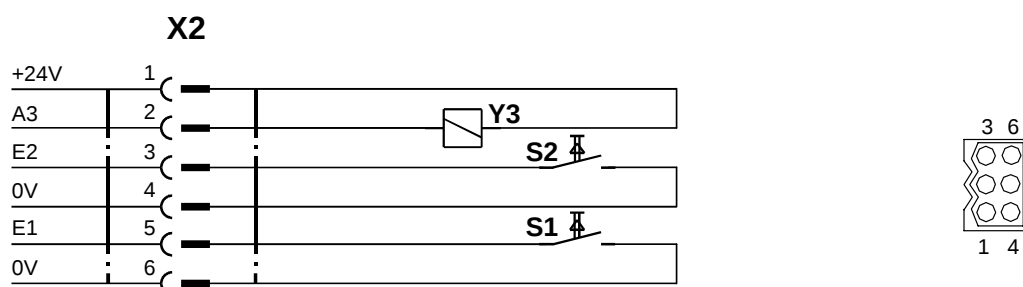
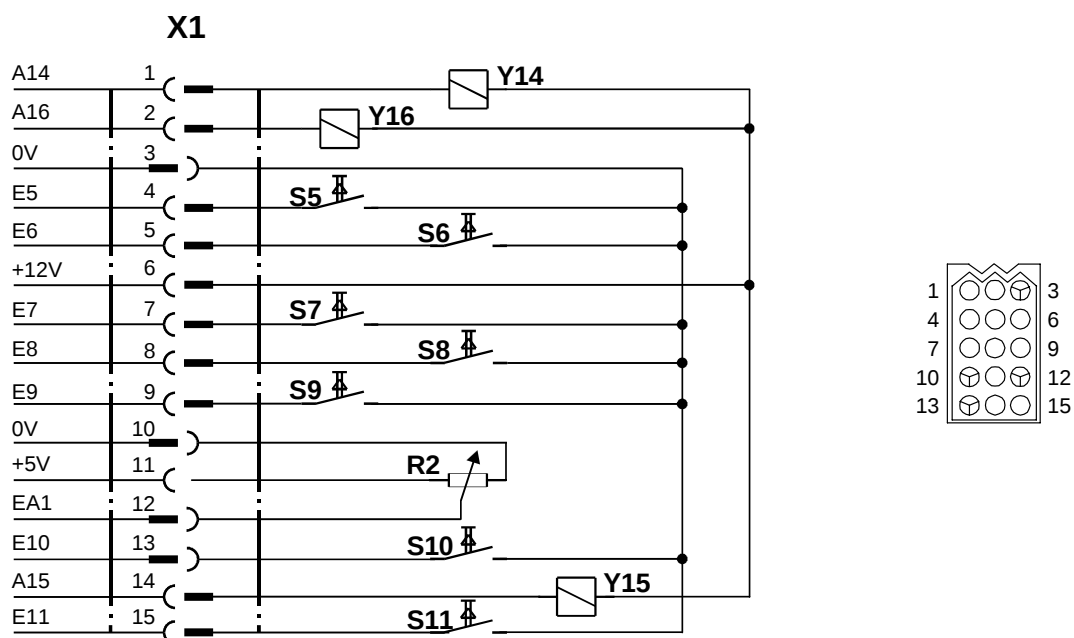
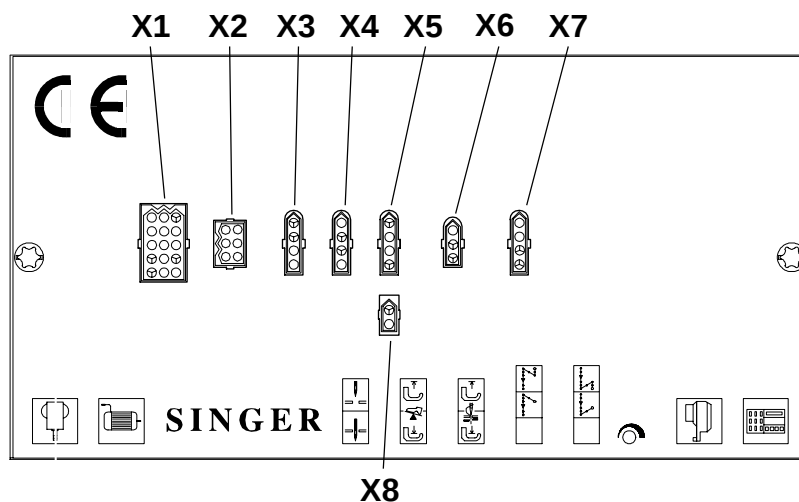
402	(HV/DRZ/DB) Speed at stroke adjustment	B,C	300 - 6400	2000	Kl. 1 - Kl. 2, 3
403	(HV/DRZ/VERZ) Delay (ms) of the speed variation at end of stroke adjustment	B,C	0 - 2550	200	Kl. 1 - Kl. 2, 3
404	(HV) Number of stitches with stroke adjustment	B,C	0 - 255	5	Kl. 1 - Kl. 2, 3
419	(RIV/RIUNT/STVD) Function of external key I backtack / stitch condensation inversion II backtack / stitch condensation suppression (flip-flop function)	B,C		I	Kl. 1, 2, 3
427	(PF/HV/PULL/STOP/MESSER) Selection of the function available with input E4 1 = presser foot 2 = stroke adjustment 3 = control of puller 4 = stop 5 = chopper 6-9 without function	B,C	0 - 9	1 -	Kl. 1 Kl. 2, 3
428	(HV/DB/DRZ) Speed limitation at stroke adjustment adjustable over 10 steps 0 = maximum speed (<607>)	B,C	0 - 9	1 -	Kl. 1 Kl. 2, 3
440	(EST) Key T4 (F4) on operator panel „OC-TOP“ is used for „single stitch“ I yes II no	B,C		II	Kl. 1, 2, 3
461	(SONST) Voltage U on analog output AA1 I linear rising with speed increase (U = 0 volt at n = 0, U = 5 volt at n-max) II linear drop with speed increase (U = 5 volt at n = 0, U = 0 volt at n-max)	B,C		I	Kl. 1, 2, 3
505	(ZRIE) Number of stitches for front decorative backtack forward (stitch in stitch, speed = <530>) (00001001)	C	0 - 9	3	Kl. 1, 2, 3
506	(ZRIE) Number of stitches for front decorative backtack backward (stitch in stitch, speed = <530>)	C	0 - 9	3	Kl. 1, 2, 3
507	(ZRIE) Number of stitches for end decorative backtack backward (stitch in stitch, speed = <530>) (00001011)	C	0 - 9	3	Kl. 1, 2, 3
508	(ZRIE) Number of stitches for end decorative backtack forward (stitch in stitch, speed = <530>)	C	0 - 9	3	Kl. 1, 2, 3
522	(NAPO/ZRIE) Needle position when stop occurs during decorative backtack (stitch in stitch) I position 2 (up) II position 1 (down) (00001101)	B,C		II	Kl. 1, 2, 3
523	(RIE/ZRIE) Backtack I decorative backtack (stitch in stitch) II standard backtack	A,B,C		II	Kl. 1, 2, 3
530	(DRZ/ZRIE) Speed (max.) for decorative backtack (00001111)	B,C	100 - 6400	1000	Kl. 1, 2, 3
554	(PF/PR) Presser foot position after seam section stitch count and treadle position > +1 I up II down	B,C		I	Kl. 1, 2, 3
557	(FSL) Activation pause (ms) for thread tension release	B,C	0 - 2550	10 20 -	Kl. 2 Kl. 3 Kl. 1
572	(STVD) Number of stitches for stitch condensation at seam end	B,C	0 - 5	1 -	Kl. 3 Kl. 1, 2

581	(FK/FZ/VERZ) Delay in start-up time (ms) for thread clamp or thread puller	B,C	0 - 2550	50 100 -	Kl. 2 Kl. 3 Kl. 1
584	(RIE) Backtack I four times II double	B,C		II	Kl. 1, 2, 3
585	(DRZ/DB/RIE) Speed limitation	B,C	300 - 6400	1500 1200	Kl. 1 Kl. 2, 3
601	(SN) Trimming I yes II no	B,C		I	Kl. 1, 2, 3
603	(START) Start after seam end I after treadle 0 only II immediate start of operation	B,C		I	Kl. 1, 2, 3
604	(SN/ER) Trimming after single end backtack I forward II backward	B,C		I	Kl. 1, 2, 3
605	(DRZ) Actual speed in display I yes II no	B,C		II	Kl. 1, 2, 3
606	(DRZ) Speed: level 1 (min.) (00010001)	B,C	30 - 640	200 180	Kl. 1 Kl. 2, 3
607	(DRZ) Speed: level 12 (max.)	B,C	100 - 10000	4000 1500	Kl. 1 Kl. 2, 3
608	(DRZ) Speed level curve (treadle characteristic) I linear II not linear	B,C		I	Kl. 1, 2, 3
609	(SN/DRZ) Trimming speed 1 (00010011)	B,C	30 - 300	200 180	Kl. 1 Kl. 2, 3
615	(LS) End recognition when photocell goes I from light to dark II from dark to light	B,C		II	Kl. 1, 2, 3
616	(NPW/NHOS) Function of external key (input E2) I needle position change-over (NPW) II needle up without trimming (NHOS)	B,C		II	Kl. 1, 2, 3
618	(RDR) Inverse rotation after seam end I yes II no	B,C		II	Kl. 1, 2, 3
623	(RDR/VERZ) Delay in start-up time (ms) for inverse rotation	B,C	0 - 2550	10 70	Kl. 1, 3 Kl. 2
626	(CC) Thread end trimming (clean-cut) I yes II no	B,C		II -	Kl. 2, 3 Kl. 1
651	(PF) Presser foot with automatic descent on machine stop I yes II no	B,C		I	Kl. 1, 2, 3
653	(PEIPO) Target stitch before sewing I yes II no	B,C		II	Kl. 1, 2, 3
654	(SN/NAPO) Positioning before thread trimming I yes II no	B,C		II -	Kl. 1, 2 Kl. 3
665	(ANLSP/STOP) Run locking/stop I contact closed II contact open	B,C		I	Kl. 1, 2, 3
668	(BLA/WI) Thread wiper/thread clearer I yes II no (00010101)	B,C		I	Kl. 1, 2, 3

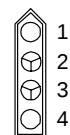
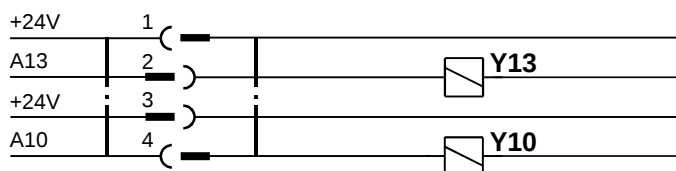
671	(CC/STVD) Stitch condensation for clean-cut after end backtack and before trimming I yes II no	B,C		II	Kl. 3 - Kl. 1, 2
676	(DRZ/DB) Speed adjustment via potentiometer possible I yes II no	B,C		II	Kl. 1, 2, 3
679	(ZRIE/VERZ) Fancy tack: time from positioning to switch-on of reverse feed	B,C	1 - 255	1	Kl. 1, 2, 3
700	(NAPO) Needle position 0 (reference position of the needle)	B,C	0 - 239	0	Kl. 1, 2, 3
701	(NAPO) Angular adjustment I with handwheel (teach-in) II by keys (+/-)	B,C		I	Kl. 1, 2, 3
702	(NAPO) Needle position 1 (needle down) (00010111)	B,C	0 - 239	75	Kl. 1, 2, 3
703	(NAPO) Needle position 2 (thread take-up lever up)	B,C	0 - 239	211	Kl. 1, 2, 3
704	(NAPO/SN) Needle position 4 (start trimming signal 1)	B,C	0 - 239	95	Kl. 1 - Kl. 2, 3
705	(NAPO/SN) Needle position 5 (end of trimming signal 1) (00011001)	B,C	0 - 239	168 150 -	Kl. 1 Kl. 2 Kl. 3
707	(NAPO/FSL/FANG) Needle position 9 (thread tension release or thread catcher start)	B,C	0 - 239	119 -	Kl. 1 Kl. 2, 3
710	(NAPO/NHOS) Needle position 3 (needle up) (00011011)	B,C	0 - 239	200	Kl. 1, 2, 3
712	(STOPZ) Time for stop in needle position 1	B,C	0 - 2550	70 -	Kl. 1, 2 Kl. 3
715	(EINZ/WI) Duration (ms) of thread wiper	B,C	0 - 2550	60 80 -	Kl. 1 Kl. 3 Kl. 2
718	(STBR) Timing of residual brake (0 = brake off)	B,C	0 - 100	0	Kl. 1, 2, 3
719	(PF/TA) Timing output A4 (0 = 100% switching on)	B,C	0 - 100	40	Kl. 1, 2, 3
721	(TUM/TA) Timing output A5 (0 = 100% switching on)	B,C	0 - 100	50	Kl. 1, 2, 3
722	(DRZAN) Acceleration ramp 1 gradual 50 steep	B,C	1 - 50	45	Kl. 1, 2, 3
723	(DRZAB) Brake ramp 1 gradual 50 steep	B,C	1 - 50	25	Kl. 1, 2, 3
729	(STVERZ/PF) Start delay after lowering presser foot	B,C	0 - 2550	130 120	Kl. 1 Kl. 2, 3
730	(PF/VERZ) Lift delay for presser foot after seam end	B,C	0 - 2550	30 20 50	Kl. 1 Kl. 2 Kl. 3
731	(ER/WRIE/VERZ) Delay before stitch counting for end backtack (ERV)	B,C	0 - 2550	0 40	Kl. 1 Kl. 2, 3
732	(SN/ER/VERZ) Delay (ms) for trimming after single end backtack	B,C	0 - 2550	30	Kl. 1, 2, 3
739	(AR/STVD/VERZ) Delay (ms) for speed after front backtack/stitch condensation	B,C	0 - 2550	30 100	Kl. 1 Kl. 2, 3
740	(ER/WRIE/VERZ) Delay before stitch counting for end backtack backward	B,C	0 - 2550	60	Kl. 1, 2, 3
749	(EINZ/FSL) Duration (ms) of thread tension release	B,C	0 - 2550	150 210 -	Kl. 2 Kl. 3 Kl. 1
761	(FSL/FZ) Prolongation Thread tension release/ Thread puller	B,C	0 - 2550	0	Kl. 1 Kl. 2, 3

775	(ZRIE/STOPZ) Stop time (ms) with stitch in stitch backtack (decorative backtack)	B,C	0 - 2550	100	Kl. 1, 2, 3
789	(PEIPO) Needle position 10 (target stitch)	B,C	0 - 239	225	Kl. 1, 2, 3
797	(HWT) Hardware test I yes II no	B,C		II	Kl. 1, 2, 3
798	(EBC) Programming level C I yes II no	B,C		II	Kl. 1, 2, 3
799	(MAKL) Machine class which has been selected (00011101)	B,C	1 - 3	1 2 3	Kl. 1 Kl. 2 Kl. 3
800	(DRR) Direction of motor rotation viewed from belt pulley I left-hand rotation II right-hand rotation	B,C		II	Kl. 1, 2, 3
801	(RDR) Reverse rotation angle after seam end	B,C	5 - 200	18	Kl. 1, 2, 3
850	(DRZ) Maximum motor speed	C		4500	Kl. 1, 2, 3
851	(PR/DRZAB) Brake ramp for stitch-count seams I steep II gradual	C		I	Kl. 1, 2, 3
884	(REG) Proportional amplification of the speed control (in general)	B,C	4 - 50	13	Kl. 1, 2, 3
885	(REG) Integral amplification of the speed control	C	0 - 100	30	Kl. 1, 2, 3
886	(REG) Proportional amplification of the order controllers	C	1 - 50	20	Kl. 1, 2, 3
887	(REG) Differential amplification of the order controllers	C	1 - 100	30	Kl. 1, 2, 3
889	(EINZ/REG) Time required for order controlling (0 = always)	C	0 - 1000	400	Kl. 1, 2, 3
890	(REG) Proportional amplification of the superior order controllers for the residual brake	C	1 - 50	25	Kl. 1, 2, 3
891	(REG) Proportional amplification of the lower speed controllers for the residual brake	C	1 - 50	20	Kl. 1, 2, 3
894	(REG) Rotational direction of motor and synchronizer I different II same	C		I	Kl. 1, 2, 3
897	(SONST) Commutation transmitter I ABB II QR	C		II	Kl. 1, 2, 3
898	(SONST) Number of motor poles I 4 poles II 6 poles	C		II	Kl. 1, 2, 3
901	(DRZ/SN) Trimming release speed	C	30 - 500	300 400	Kl. 1 Kl. 2, 3

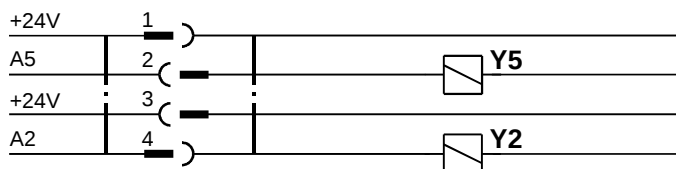
12. Electrical Connections Diagramm S60SE



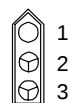
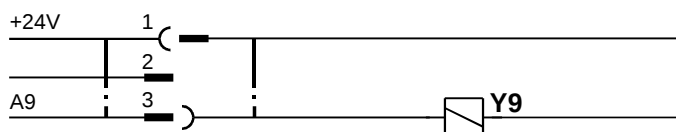
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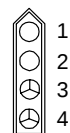
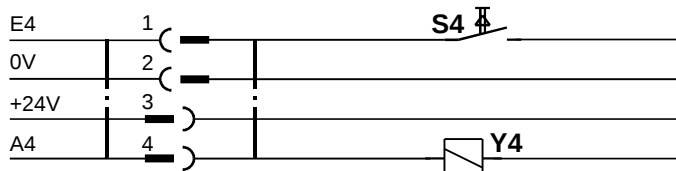
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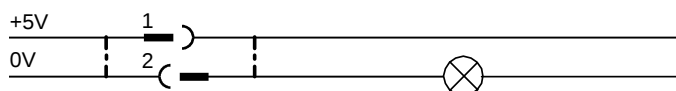
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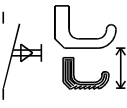
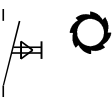
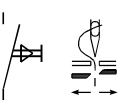
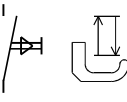
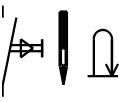
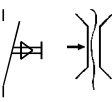
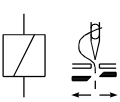
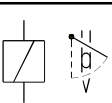
X8



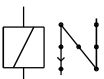
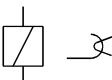
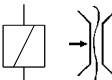
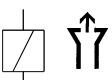
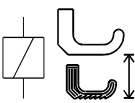
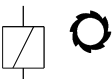
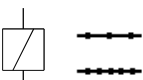
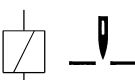
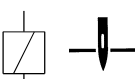
Bedeutung der Magnete bzw. Magnetventile, Taster / Meaning of magnets and/or solenoids and keys
 Signification des aimants resp. solenoides et touches / Significação dos ímãs e/ou as solenoidas e teclas
 Significato dei magneti, delle valvole magnetiche e dei tasti / Significación de los imanes y/o los solenoides
 y pulsadores / Betekenis van de magneten resp. magneetkleppen, toetsen

S1		Transportumstellung von Hand / manual feed reverse / renversement de marche manuel / mudança do transporte manual / commutazione trasporto a mano / inversión de transporte manual / handmatige transportomschakeling
S2		Nadelpositionswechsel / needle position change-over / changement de position d'aiguille / troca de posição da agulha / cambio di posizione dell'ago / cambio de posición de aguja / naaldpositie-verwisseling
S2		Nadel hoch ohne Schneiden / needle up without thread trimming / aiguille en haut sans coupe / agulha para cima sem corte de linhas / ago su senza taglio / aguja arriba sin corte / naald omhoog zonder snijden
S4		Presserfußlüftung / lifting presser foot / relevage du pied presseur / levantar do calcador / sollevamento del alzapiedino / elevación de prensatelas / drukvoet optillen

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S4  <427> = 2	Hubverstellung / stroke adjustment / variation de course / alteração do curso / regolazione della corsa / ajuste de carrera / hefhoogteverstelling
S4  <427> = 3	Puller / puller / puller / puller / puller / estirar / puller
S5 	Fadenschneiden / thread trimmer / coupe-fil / corte de linhas / rasafilo / cortahilos / draadsnijder
S6 	Presserfußlüftung / lifting presser foot / relevage du pied presseur / levantar do calcador / sollevamento del alzapiedino / elevación de prensatelas / drukvoet optillen
S7 	Rückmeldung - Pedal voll vorwärts / feedback - treadle fully forward / rétrosignal - pédale entièrement en avant / resposta - pedal plenamente avante / messaggio di conferma - pedalata completa avanti / retroaviso - pedal enteramente adelante / signaal - pedaal volledig vooruit /
S8 	Rückmeldung - Pedal voll rückwärts / feedback - treadle fully backward / rétrosignal - pédale entièrement en arrière / resposta - pedal plenamente para trás / messaggio di conferma - pedalata completa indietro / retroaviso - pedal enteramente atrás / signaal - pedaal volledig achterruit /
S9 	Positionieren / positioning / positionnement / posicionamento / posizionamento / posicionamiento / plaatsing
S10 	Einzelstich / single stitch / point unique / ponto individual / punto singolo / puntada individual enkele steek
S11 	Fadenspannungslösen / thread tension release / détenteur de fil / soltar tensão da linha / sbloccaggio tendifilo / detensión del hilo / verbreken van de draadspanning
Y2 I max 8 A * 	Fadenschneiden / thread trimmer / coupe-fil / corte de linhas / rasafilo / cortahilos / draadsnijder
Y3 I max 8 A * 	Fadenwischer / thread wiper / écarteur de fil / retira-linhas / scartafilo / retirahilos / draadwisser

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Y4 I max 8 A * 	Presserfuß heben / lifting presser foot / relevage du pied presseur / levantar do calcador / sollevamento del alzapiedino / elevación de prensatelas / drukvoet optillen
Y5 I max 8 A * 	Transportumstellung / feed reverse / renversement de marche / mudança do transporte / commutazione trasporto / inversión de transporte / transportomschakeling
Y9 I max 8 A * 	Fadenzieher / thread puller / tire-fil / tirar de linhas / tirafilo / tirahilos / draadtrekker
Y10 I max 8 A * 	Fadenspannungslösen / thread tension release / détenteur de fil / soltar tensão da linha / sbloccaggio tendifilo / detensión del hilo / verbreken van de draadspanning
Y12 I max 8 A * <799> = 1 <427> = 1 	Blasen / blowing / soufflage / soprar / soffiatura / soplar / blazen
Y12 I max 8 A * <799> = 1 <427> = 2 	Hubverstellung / stroke adjustment / variation de course / alteração do curso / regolazione della corsa / ajuste de carrera / hefhoogeteverstelling
Y12 I max 8 A * <799> = 1 <427> = 3 	Puller / puller / puller / puller / puller / estirar / puller
Y13 I max 8 A * 	Stichlängenumschaltung / stitchlength change-over / commutation longueur de point / mudança de comprimento dos pontos / commutazione lunghezza punti / cambio de longitud de la puntada / steeklengteomschakeling
Y14 I max 8 A * 	Nadel oben / needle up / aiguille en haut / agulha para cima / ago su / aguja arriba / naald boven
Y15 I max 8 A * 	Nadel unten / needle down / aiguille en bas / agulha em baixo / ago giù / aguja abajo / naald beneden
Y16 I max 80 mA INKREMENTE 	480 Impulse pro Umdrehung / 480 pulses per revolution / 480 impulsions/révolution / 480 impulsos/rotação / 480 impulsi/giro / 480 impulsos/revolución / 480 pulsen per omwenteling

- * Die Summe der Lastströme aller gleichzeitig eingeschalteten Stellglieder (Magnete, Magnetventile) darf den Wert von 4A nicht überschreiten (siehe hierzu Kapitel 2. Technische Daten).
- * The total of load currents of all servos activated simultaneously (solenoids, solenoid valves) is not allowed to exceed 4 amps (see also section 2. Technical Specifications)
- * Le total des courants de charge de tous les vérins (aimants,électro-vannes) activés simultanément ne doit pas dépasser 4 A (voir aussi le chapitre 2, „caractéristiques techniques“)
- * A soma das correntes sob carga de todos os actuadores ligados ao mesmo tempo (imans, solenóides) não pode ultrapassar o valor de 4A (ver também capítulo 2, Dados Técnicos).
- * La somma delle correnti di carico di tutti gli attuatori inseriti contemporaneamente (magneti, elettrovalvole) non deve essere superiore a 4 A (vedere il capitolo 2 dati tecnici).
- * La suma de las corrientes bajo carga de todos los elementos de todos los componentes de regulación conectados simultáneamente (imanes, válvula magnética) no podrá sobrepasar el valor de 4A (véase también el capítulo 2. de datos técnicos).
- * De belastingsstroom van alle tegelijkertijd ingeschakelde bedieningsschakels (magneten, magneetventielen) mag in totaal niet meer dan 4 A bedragen (zie hiervoor hoofdstuk 2. Technische gegevens)

13. Maintenance and Repair



!! Before starting maintenance or repair work, switch off the SERVO-TOP, separate the drive system from mains power (for instance by pulling out the mains plug) and wait for the motor to come to a complete stop.

General maintenance work must only be done by specially trained personnel paying close attention to the operating instructions.

The SERVO-TOP is largely maintenance-free.
However, make sure to perform the following maintenance work:

Depending on the operating conditions, clean the drive system regularly, at least once a week, from any dust or lint. Make sure in particular that the ventilation louvres and cooling fins of the motor, especially the cooling fins between the motor and the control box, are perfectly clean (Fig. 13).

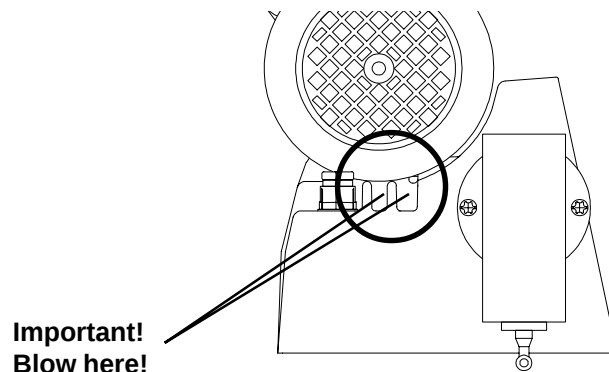


Fig. 13

Remove any threads caught on the synchronizer shaft or on the belt pulley and/or motor shaft.

Check if the drive system is perfectly secured to the stand and that the accessories (synchronizer on machine shaft, speed control unit on control box) are safely mounted in their respective positions.

Check the drive belt for any wear and for correct tension.
Incorrect belt tension can increase noise and vibrations.



When opening covers or removing parts, apart from those removable by hand, live elements can be exposed.
Connections can also be electrically live.

If you require to open the drive system before starting maintenance or repair work or before replacing any parts, disconnect the drive system from any and all power sources.

If maintenance or repair work on the open unit is unavoidable, this may only be done by qualified personnel familiar with the risks involved. Observe all regulations as per EN 50110.

There can still be capacitors carrying a charge in the power electronics system, even when the drive system has been disconnected from all power sources. To avoid injury by electrical shock, it is therefore essential to wait at least 10 minutes between mains power shutoff and opening the control box.

In order to protect semi-conductor components from overvoltage, use only high-resistivity measuring equipment when making checks on the control system.

Any repair or servicing work requiring skilled knowhow may only be done by qualified personnel authorized by Quick-Rotan.

We emphasize that in accordance with the product liability law we are under no responsibility for damages caused by our products if these are due to

- unqualified repair
- the use of components not authorized by us
- actions made by any persons not authorized by us.