

SERVO-TOP

QE5542

CE

Type

P40SE₀₂

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 P40SE02 (2z_006_w.hex)

| Function | Abbrev'n | Parameter | Input Output | Connection Socket/Contacts |
|-----------------------|----------|---|--------------|----------------------------|
| Accelerate | DRZAN | 722 | | |
| Affichage | ANZ | 605 | | |
| Backtack | RIE | 102/103/104 105/107/108 109/110/140 523/584/585 768 | | |
| Backtack inversion | RIV | 419/617 | | |
| Backtack suppression | RIUNT | 419 | | |
| Blower | BLA | 668 | | |
| Brake | DRZAB | 723/758/851 | | |
| Chopper | MESSER | 105/110 | | |
| Control | REG | 758/884/885 886/887/889 890/891/894 990 | | |
| Decorative backtack | ZRIE | 505/506/507 508/522/523 530/775 | | |
| Defect search | HWT | 797 | | |
| Delay | VERZ | 623/730/731 732/739/740 770 | | |
| Direction of rotation | DRR | 800 | | |
| Display | ANZ | 605 | | |
| End backtack | ER | 108/109/110 149/604/731 732/740 | | |
| Engine | MOT | 897 | | |
| Feed reverse | TUM | 721/768 | E1 A5 | X5:3 X4:4 |
| Front backtack | AR | 102/103/104 105/106/107 140/148/739 | | |
| Hardware test | HWT | 797 | | |

| | | | | |
|-----------------------------|-------|--|----|------|
| Inverse rotation | RDR | 618/623/801 | | |
| Machine class | MAKL | 799 | | |
| Needle bar | NASTA | 987 | | |
| Needle position | NAPO | 522/700/701 702/703/705 706/710/768 | | |
| Needle position change-over | NPW | 616 | E2 | X1:1 |
| Needle up without trimming | NHOS | 616/710 | | |
| Number of stitches | STZA | 102/103/108 109/111/112 505/506/507 508 | | |
| ON period | EINZ | 715/889 | | |
| Operator panel | BDF | 681 | | |
| Photocell | LS | 111/112/113 199/615 | | |
| Presser foot | PF | 554/624/651 719/729/730 770 | A4 | X4:5 |
| Program | PR | 114/206/221 304/313/554 851 | | |
| Programming level C | EBC | 798 | | |
| Repeat backtack | WRIE | 731/740 | | |
| Residual brake | STBR | 718 | | |
| Seam end | NE | 110/114/206 602 | | |
| Seam start | NA | 105 | | |
| Single stitch | EST | 617 | E3 | X1:3 |
| Soft start | SANL | 116/117 | | |
| Speed | DRZ | 105/106/107 110/117/199 221/530/585 605/606/607 608/609/676 850/901 | | |
| Speed decrease | DRZAB | 723/758/851 | | |
| Speed increase | DRZAN | 722 | | |
| Speed limitation | DB | 221/585/676 | | |

| | | | | |
|--------------------------|--------|---|----|------|
| Start | START | 113/603 | | |
| Start delay | STVERZ | 729 | | |
| Starting block | ANLSP | 624/665 | | |
| Stitch condensation | STVD | 102/105/106 107/108/110 419/617/739 | | |
| Stop | STOP | 114/206/624 665 | E4 | X4:3 |
| Stop time | STOPZ | 775 | | |
| Target stitch | PEIPO | 653/789 | | |
| Thread puller | FZ | 761 | | |
| Thread tension release | FSL | 761 | | |
| Thread trimming | SN | 601/604/609 705/706/732 901 | | |
| Thread wiper | WI | 668/715 | A3 | X3:5 |
| Time needed to switch on | EINZ | 715/889 | | |
| Timing output | TA | 719/721 | | |
| Vacuum | SAUG | 105/110 | | |
| Zigzag machine | ZZ | 711 | | |

11.4 List of Parameters P40SE02 (2z_006_w.hex)

| No. | Function (Meaning) | Level | Range Values | of Value | Standard |
|-----|---|-------|--------------|----------|----------|
| 102 | (AR/RIE/STVD/STZA) Front backtack stitches forward (00000001) | C | 0 - 9 | 3 | Kl. 1 |
| 103 | (AR/RIE/STZA) Front backtack stitches backward | C | 0 - 9 | 3 | Kl. 1 |
| 104 | (AR/RIE) Front backtack correction (delayed disabling of feed reverse) | B,C | 0 - 16 | 8 | Kl. 1 |
| 105 | (AR/RIE/DRZ/MESSER/NA/SAUG/STVD) Speed for front backtack / stitch condensation (00000011) | B,C | 100 - 6400 | 1200 | Kl. 1 |
| 106 | (AR/DRZ/STVD) Speed for front backtack / stitch condensation I variable (treadle-controlled) II constant (corresponding to <105>) | B,C | | II | Kl. 1 |
| 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 |
| 108 | (ER/RIE/STVD/STZA) End backtack stitches backward | C | 0 - 9 | 3 | Kl. 1 |
| 109 | (ER/RIE/STZA) End backtack stitches forward (00000101) | C | 0 - 9 | 3 | Kl. 1 |
| 110 | (ER/RIE/DRZ/MESSER/NE/SAUG/STVD) Speed for end backtack / stitch condensation | B,C | 100 - 6400 | 1200 | Kl. 1 |
| 111 | (LS/STZA) Light barrier compensation stitches 1 (stitches from light barrier clear to seam end) | A,B,C | 1 - 255 | 6 | Kl. 1 |
| 112 | (LS/STZA) Number of stitches for light barrier fade-out on knit fabrics (according to stitch size) | A,B,C | 0 - 255 | 0 | Kl. 1 |
| 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 |
| 114 | (PR/STOP/NE) Stop before seam end after stitch count (last seam section) I yes II no | B,C | | II | Kl. 1 |
| 116 | (SANL) Soft start stitches (00000111) | A,B,C | 0 - 255 | 0 | Kl. 1 |
| 117 | (SANL/DRZ) Speed for soft start stitches | B,C | 30 - 640 | 400 | Kl. 1 |
| 140 | (AR/RIE) Front backtack correction (delayed enabling of feed reverse) | B,C | 0 - 16 | 0 | Kl. 1 |
| 148 | (AR) Front backtack I double II single | A,B,C | | I | Kl. 1 |
| 149 | (ER) End backtack I double II single | A,B,C | | I | Kl. 1 |
| 199 | (DRZ/LS) Speed for light barrier compensation stitches | B,C | 300 - 6400 | 1200 | Kl. 1 |
| 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 |
| 221 | (PR/DB/DRZ) Speed limitation for sewing program 1 (or for all sewing programs) | B,C | 300 - 6400 | 1200 | Kl. 1 |

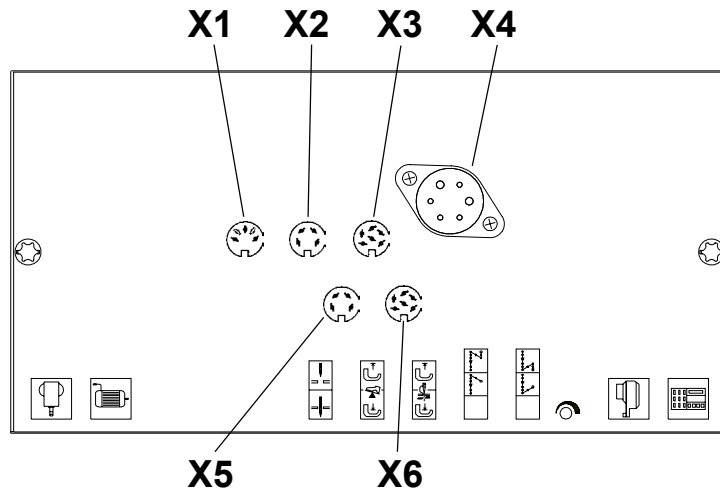
| | | | | | |
|-----|---|-------|-------------|------|-------|
| 304 | (PR) Stitch compensation at feed reverse for a seam section | B,C | 0 - 255 | 3 | Kl. 1 |
| 313 | (PR) Programs are backtack programs (darning programs) I yes II no | B,C | | II | Kl. 1 |
| 419 | (RIV/RIUNT/STVD) Function of external key I backtack / stitch condensation inversion II backtack / stitch condensation suppression (flip-flop function) | B,C | | I | Kl. 1 |
| 505 | (ZRIE/STZA) Number of stitches for front decorative backtack forward (stitch in stitch, speed = <530>) (00001001) | C | 0 - 9 | 3 | Kl. 1 |
| 506 | (ZRIE/STZA) Number of stitches for front decorative backtack backward (stitch in stitch, speed = <530>) | C | 0 - 9 | 3 | Kl. 1 |
| 507 | (ZRIE/STZA) Number of stitches for end decorative backtack backward (stitch in stitch, speed = <530>) (00001011) | C | 0 - 9 | 3 | Kl. 1 |
| 508 | (ZRIE/STZA) Number of stitches for end decorative backtack forward (stitch in stitch, speed = <530>) | C | 0 - 9 | 3 | Kl. 1 |
| 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 |
| 523 | (RIE/ZRIE) Backtack I decorative backtack (stitch in stitch) II standard backtack | A,B,C | | II | Kl. 1 |
| 530 | (DRZ/ZRIE) Speed (max.) for decorative backtack (00001111) | B,C | 100 - 6400 | 1000 | Kl. 1 |
| 554 | (PF/PR) Presser foot position after seam section stitch count and treadle position > +1 I up II down | B,C | | I | Kl. 1 |
| 584 | (RIE) Backtack I four times II double | B,C | | II | Kl. 1 |
| 585 | (DRZ/DB/RIE) Speed limitation | B,C | 300 - 6400 | 2000 | Kl. 1 |
| 601 | (SN) Trimming I yes II no | B,C | | I | Kl. 1 |
| 602 | (NE) Seam end at treadle position I slightly heeled (-1) II fully heeled (-2) | B,C | | II | Kl. 1 |
| 603 | (START) Start after seam end I after treadle 0 only II immediate start of operation | B,C | | I | Kl. 1 |
| 604 | (SN/ER) Trimming after single end backtack I forward II backward | B,C | | I | Kl. 1 |
| 605 | (DRZ/ANZ) Actual speed in display I yes II no | B,C | | II | Kl. 1 |
| 606 | (DRZ) Speed: level 1 (min.) (00010001) | B,C | 30 - 640 | 180 | Kl. 1 |
| 607 | (DRZ) Speed: level 12 (max.) | B,C | 100 - 10000 | 1200 | Kl. 1 |

| | | | | | |
|-----|---|-----|----------|-----|-------|
| 608 | (DRZ) Speed level curve (treadle characteristic) I linear II not linear | B,C | | I | Kl. 1 |
| 609 | (SN/DRZ) Trimming speed 1 (00010011) | B,C | 30 - 300 | 180 | Kl. 1 |
| 615 | (LS) End recognition when photocell goes I from light to dark II from dark to light | B,C | | II | Kl. 1 |
| 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 |
| 617 | (EST/RIV/STVD) Function of external key (input E3) I single stitch (EST) II backtack / stitch condensation inverted (RIV) | B,C | | I | Kl. 1 |
| 618 | (RDR) Inverse rotation after seam end I yes II no | B,C | | II | Kl. 1 |
| 623 | (RDR/VERZ) Delay in start-up time (ms) for inverse rotation | B,C | 0 - 2550 | 40 | Kl. 1 |
| 624 | (ANLSP/STOP/PF) Function of external key (input E4) I stop / safety switch no run II presser foot | B,C | | II | Kl. 1 |
| 651 | (PF) Presser foot with automatic descent on machine stop I yes II no | B,C | | I | Kl. 1 |
| 653 | (PEIPO) Target stitch before sewing I yes II no | B,C | | II | Kl. 1 |
| 665 | (ANLSP/STOP) Run locking/stop I contact closed II contact open | C | | I | Kl. 1 |
| 668 | (BLA/WI) Thread wiper/thread clearer I yes II no | B,C | | I | Kl. 1 |
| 676 | (DRZ/DB) Speed adjustment via potentiometer possible I yes II no | B,C | | I | Kl. 1 |
| 681 | (BDF) Operator panel push-button locked I yes II no | B,C | | II | Kl. 1 |
| 700 | (NAPO) Needle position 0 (reference position of the needle) | B,C | 0 - 239 | 0 | Kl. 1 |
| 701 | (NAPO) Angular adjustment I with handwheel (teach-in) II by keys (+/-) | B,C | | I | Kl. 1 |
| 702 | (NAPO) Needle position 1 (needle down) (00010111) | B,C | 0 - 239 | 75 | Kl. 1 |
| 703 | (NAPO) Needle position 2 (thread take-up lever up) | B,C | 0 - 239 | 213 | Kl. 1 |
| 705 | (NAPO/SN) Needle position 5 (end of trimming signal 1) (00011001) | B,C | 0 - 239 | 125 | Kl. 1 |
| 706 | (NAPO/SN) Needle position 6 (start trimming signal 2) | B,C | 0 - 239 | 119 | Kl. 1 |

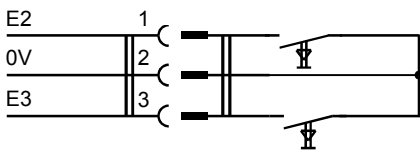
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|-----|--|-----|----------|------|-------|
| 710 | (NAPO/NHOS) Needle position 3 (needle up) (00011011) | B,C | 0 - 239 | 200 | Kl. 1 |
| 711 | (ZZ) Machine with Zigzag I yes II no | B | | II | Kl. 1 |
| 715 | (EINZ/WI) Duration (ms) of thread wiper | B,C | 0 - 2550 | 120 | Kl. 1 |
| 718 | (STBR) Timing of residual brake (0 = brake off) | B,C | 0 - 100 | 0 | Kl. 1 |
| 719 | (PF/TA) Timing output A4 (0 = 100% switching on) | B,C | 0 - 100 | 40 | Kl. 1 |
| 721 | (TUM/TA) Timing output A5 (0 = 100% switching on) | B,C | 0 - 100 | 40 | Kl. 1 |
| 722 | (DRZAN) Acceleration ramp 1 gradual 50 steep | B,C | 1 - 50 | 45 | Kl. 1 |
| 723 | (DRZAB) Brake ramp 1 gradual 50 steep | B,C | 1 - 50 | 25 | Kl. 1 |
| 729 | (STVERZ/PF) Start delay after lowering presser foot | B,C | 0 - 2550 | 120 | Kl. 1 |
| 730 | (PF/VERZ) Lift delay for presser foot after seam end | B,C | 0 - 2550 | 50 | Kl. 1 |
| 731 | (ER/WRIE/VERZ) Delay before stitch counting for end backtack (ERV) | B,C | 0 - 2550 | 60 | Kl. 1 |
| 732 | (SN/ER/VERZ) Delay (ms) for trimming after single end backtack | B,C | 0 - 2550 | 30 | Kl. 1 |
| 739 | (AR/STVD/VERZ) Delay (ms) for speed after front backtack / stitch condensation | B,C | 0 - 2550 | 120 | Kl. 1 |
| 740 | (ER/WRIE/VERZ) Delay before stitch counting for end backtack backward | B,C | 0 - 2550 | 80 | Kl. 1 |
| 756 | (WINK) angle 4 | B,C | 0 - 2550 | 0 | Kl. 1 |
| 758 | (REG/DRZAB) Deceleration ramp I braking as per <723> II braking with maximal moment | B,C | | II | Kl. 1 |
| 761 | (FSL/FZ) Prolongation Thread tension release / Thread puller | B,C | 0 - 2550 | 0 | Kl. 1 |
| 768 | (TUM/NAPO/RIE/ERIE) Needle position for backtack correction | B,C | 0 - 239 | 60 | Kl. 1 |
| 770 | (PF/VERZ) Lifting delay of presser foot at threadle- position „-1“ | B,C | 0 - 250 | 60 | Kl. 1 |
| 775 | (ZRIE/STOPZ) Stop time (ms) with stitch in stitch backtack (decorative backtack) | B,C | 0 - 2550 | 100 | Kl. 1 |
| 789 | (PEIPO) Needle position 10 (target stitch) | B,C | 0 - 239 | 225 | Kl. 1 |
| 797 | (HWT) Hardware test I yes II no | B,C | | II | Kl. 1 |
| 798 | (EBC) Programming level C I yes II no | B,C | | II | Kl. 1 |
| 799 | (MAKL) Machine class which has been selected (00011101) | B,C | 1 - 1 | 1 | Kl. 1 |
| 800 | (DRR) Direction of motor rotation viewed from belt pulley I left-hand rotation II right-hand rotation | B,C | | II | Kl. 1 |
| 801 | (RDR) Reverse rotation angle after seam end | B,C | 5 - 200 | 30 | Kl. 1 |
| 850 | (DRZ) Maximum motor speed | C | | 4500 | Kl. 1 |

| | | | | | |
|-----|--|-----|----------|-----|-------|
| 851 | (PR/DRZAB) Brake ramp for stitch-count seams I steep II gradual | B,C | | I | Kl. 1 |
| 884 | (REG) Proportional amplification of the speed control (in general) | B,C | 4 - 255 | 12 | Kl. 1 |
| 885 | (REG) Integral amplification of the speed control | C | 0 - 100 | 30 | Kl. 1 |
| 886 | (REG) Proportional amplification of the order controllers | C | 1 - 255 | 20 | Kl. 1 |
| 887 | (REG) Differential amplification of the order controllers | C | 1 - 100 | 30 | Kl. 1 |
| 889 | (EINZ/REG) Time required for order controlling (0 = always) | B,C | 0 - 2550 | 400 | Kl. 1 |
| 890 | (REG) Proportional amplification of the superior order controllers for the residual brake | C | 1 - 50 | 25 | Kl. 1 |
| 891 | (REG) Proportional amplification of the lower speed controllers for the residual brake | C | 1 - 50 | 20 | Kl. 1 |
| 894 | (REG) Rotational direction of motor and synchronizer I different II same | C | | I | Kl. 1 |
| 897 | (MOT) MINI motor version I long II short | C | | II | Kl. 1 |
| 898 | (SONST) Number of motor poles I 4 poles II 6 poles | C | | II | Kl. 1 |
| 901 | (DRZ/SN) Trimming release speed | C | 30 - 500 | 300 | Kl. 1 |
| 987 | (NASTA) Switch-off position for needle bars | B,C | | II | Kl. 1 |
| 990 | (REG) Removal of setpoint position upon change-over from speed control to position control | B,C | 1 - 255 | 16 | Kl. 1 |

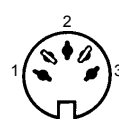
12. Electrical Connections Diagramm P40SE02



X1

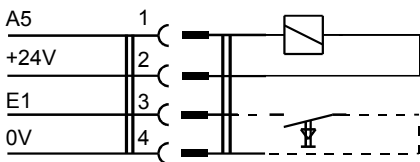


S2



S3

X2

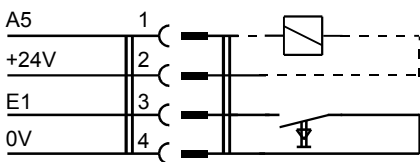


Y5

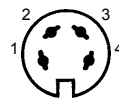


S1

X5

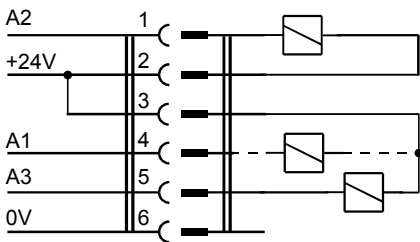


Y5

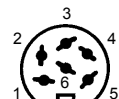


S1

X3



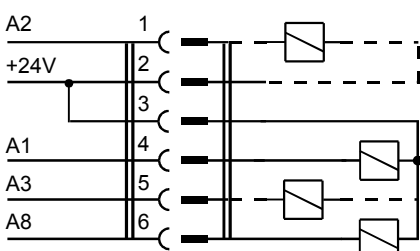
Y2



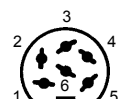
Y1

Y3

X6



Y2

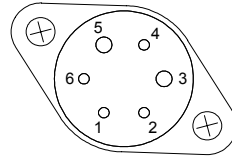
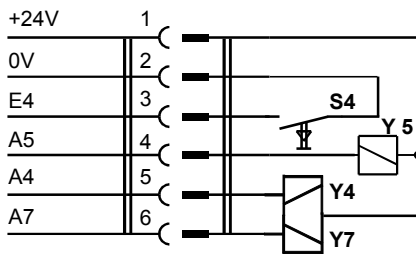


Y1

Y3

Y8

X4



Bedeutung der Magnete bzw. Magnetventile, Taster / Meaning of magnets and/or solenoids and keys
 Signification des aimants resp. solenoides et touches / Significação dos imãs 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 <616> = I | 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 <616> = I | 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 <616> = II | 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 |
| S3 <617> = I | Einzelstich / single stitch / point unique / ponto individual / punto singolo / puntada individual / enkele steek |
| S3 <617> = II <419> = I | Nachfolgende Riegelfunktion invertieren / invert subsequent backtack function / inverser la prochaine fonction de bridage / invertir o próximo remate / invertire la funzione d'affr. successiva / invertir la próxima |
| S3 <617> = II <419> = II | Riegelunterdrückung / backtack suppression / suppression de bridage / supressão do remate / soppressione dell'affrancatura / supresión del remate / onderdrukking van het strookje |
| S4 <624> = I | STOP |
| S4 <624> = II | Presserfuß heben / lifting presser foot / relevage du pied presseur / levantar do calcador / sollevamento del alzapiedino / elevación de prensatelas / drukvoet optillen |
| Y1 I max 10 A * | Fadenschneider pneumatisch / pneum. thread trimmer / coupe-fil pneumatique / corte de linhas pneumático / rasafilo pneumático / cortahilos neumático / draadsnijder pneumatisch |

Bedeutung der Magnete bzw. Magnetventile, Taster / Meaning of magnets and/or solenoids and keys
 Signification des aimants resp. solenoides et touches / Significação dos imãs 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

| | | |
|---------------------------------|--|---|
| Y2 I max 10 A * | | Fadenschneider magnet. / magn. thread trimmer / coupe-fil magnétique / corte de linhas magnético / rasafilo magnetico / cortahilos magnético / draadsnijder magnetisch |
| Y3 I max 10 A * | | Fadenwischer / thread wiper / écarteur de fil / retira-linhas / scartafilo / retirahilos / draadwisser |
| Y4/Y7 I max 10 A * | | Y4: Presserfuß heben / lifting presser foot / relevage du pied presseur / levantar do calcador / sollevamento del alzapiedino / elevación de prensatelas / drukvoet optillen Y7: Presserfuß senken / lowering presser foot / descente du pied presseur /baixar o calcador / abbassare del alzapiedino / bajar el prensatelas / drukvoet laten zakken |
| Y5 I max 10 A * | | Transportumsteller / feed reverse / renversement de marche / mudança do transporte / commutazione trasporto / inversión de transporte / transportomschakeling |
| Y8 I max 300 mA | | Maschinenlauf / motor runs / moteur en marche / motor em movimento / motore in moto / motor en marcha / loop van de machine |

* 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 atuadores ligados ao mesmo tempo (ímans, 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 (magnetici, 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 (magnetten, 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 ist 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).

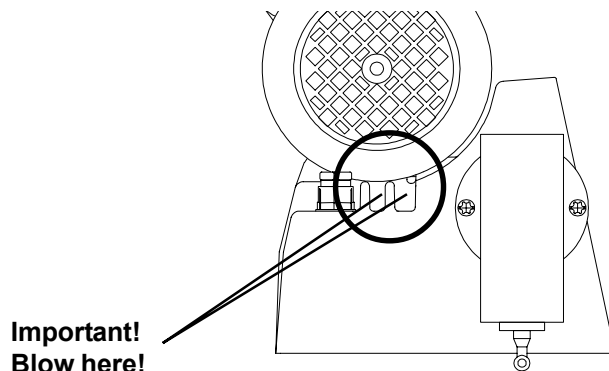


Fig. 13

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.