

STOLL

Supplementary instructions for CMS 520 C+ (Type 652)



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Translation of the original operating instructions

Operating system of the machine: V_OKC_005.001.003_STOLL (oder höher)

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Our products are being developed further continuously. They are therefore subject to technical modifications.

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1 About this document

Supplementary instructions This supplementary instructions are to provide you with an overview over the features that are new with this machine.

You will find the descriptions, which did not change in the operating instructions and in the safety instructions on the documentation DVD.

Documentation DVD Included in the accessories you will find a DVD with documents about your machine.

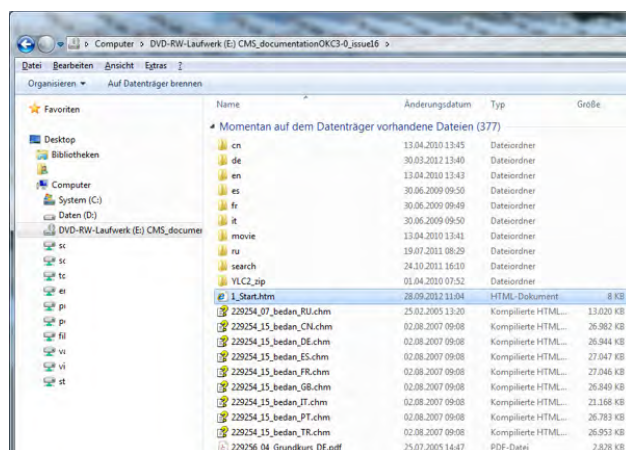


- ◆ Operating instructions
- ◆ Safety instructions
- ◆ Spare Parts Catalog
- ◆ Circuit diagram
- ◆ Brochure "Cleaning, maintenance, care"
- ◆ Pocket Card
- ◆ Training documents...

The documents are available in different languages.

For browsing the documentation DVD:

1. Insert the DVD in the computer.
2. Open the "1_Start.htm" file double clicking on it.



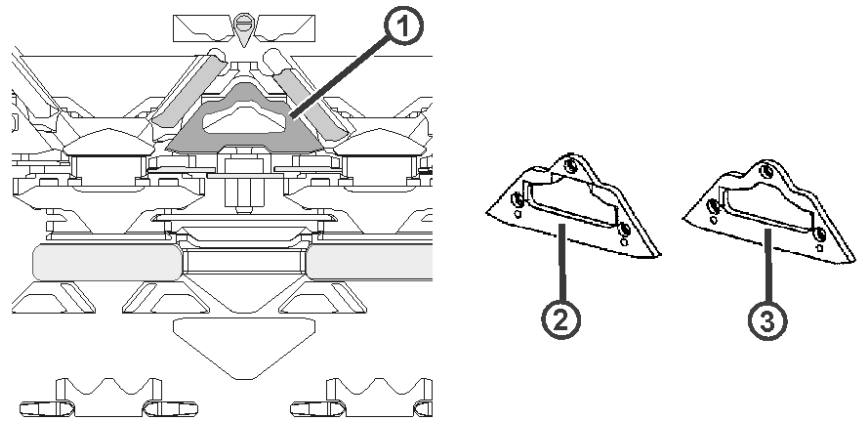
- Keep the DVD where it is accessible to all personnel who are responsible for working on the knitting machine.
- In case of resale deliver the machine with the DVD.

2 Overview

The CMS 520 C+ replaces the previous CMS 520 C.

		Advantages over CMS 520 C
Gauge range	E1,5.2, E2.2	
Working width	50" (127 cm)	
Knitting systems	2	
Needle (spring loaded latch needle)	The needle is shorter than with the CMS 520 C.	♦ Very coarse fabrics are possible
Needle bed gap	The needle bed gap was widened	♦ Very coarse fabrics are possible
Holding-down jacks	Spring-loaded holding-down jack In the home position, the holding-down jack is always closed, only in the knitting area, it is opened for the yarn insertion.	♦ High knitting reliability ♦ A very high yarn count is possible (final count Nm 0.7) ♦ Large areas without fabric take-down are possible (gore, pocket lining, open waves, floats)
Stitch tension area	Stitch tension area with the CMS 520 C+: E1,5.2: NP8.3 - NP17.6 E2.2: NP8.5 - NP17.8	♦ Very loose fabrics are possible
	Stitch tension area with the CMS 520 C: NP7.0 - NP16.7	
Cleaning apparatus (Special attachment)	The cleaning apparatus (ID 267 162) can be used for this machine.	

3 Raising cams (CMS 520 C+)



Raising cams

- 1 Position of raising cam
- 2 Raising cam for transfer
- 3 Raising cam for split-stitch

There are two different raising cams for transfer and split-stitch. When the knitting machine is shipped, the raising cams for transfer (2) are built-in. The raising cams for split-stitch (3) are contained in the accessories.



The raising cam for split-stitch (3) can also be used for normal transfer patterns. In the case of particularly delicate yarns, the raising cam for transfer (2) should be used so that the yarn does not tear while transferring the stitches and no drop stitches result.

Transferring of stitches if the production takes place with very reduced take-down



Cardigan front with knit on sleeve

- 4 Gore (the complete sleeve is knitted with gore technique)
- 5 Armhole ribs (1x1 rib)

If the production takes place with very reduced fabric take-down, e.g. in case of a gore, sometimes there is the problem that the transfer process cannot be performed without errors.

Reason: The stitch to be transferred is not retained securely by the needle

hook, the stitch can jump out of the needle hook.

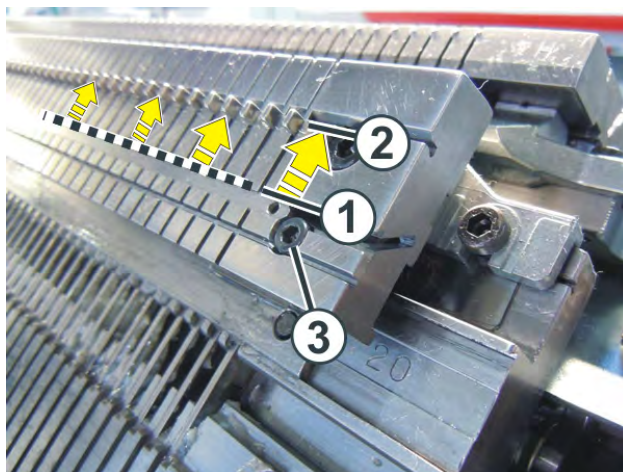
We recommend using the raising cams for splitting. This way, the receiving needle is taken-down deeper so the the stitch cannot jump out of the needle hook.

4 Replacing needle and coupling part (CMS 520 C+)

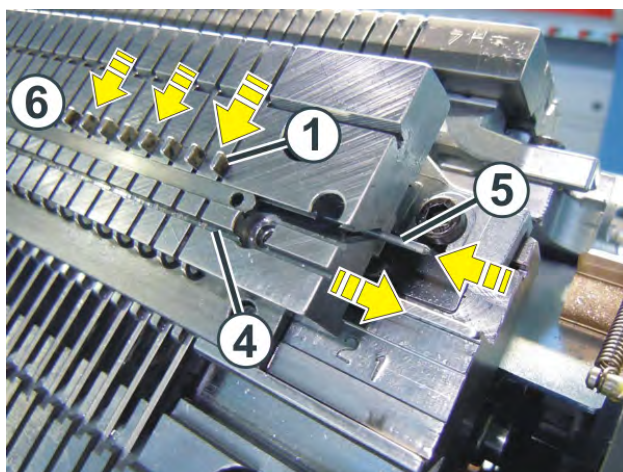
Before being able to pull out the needle rail, the screws of the holding-down jack bed must be loosened first.

The reason: The jack bed puts pressure on the needle rail. This pressure avoids the needle rail to be pulled out easily (without the use of force).

1. Stop the carriage outside the needle bed.
2. All the springs (1) of the holding-down jacks must be in the position (2) ("Position closed").



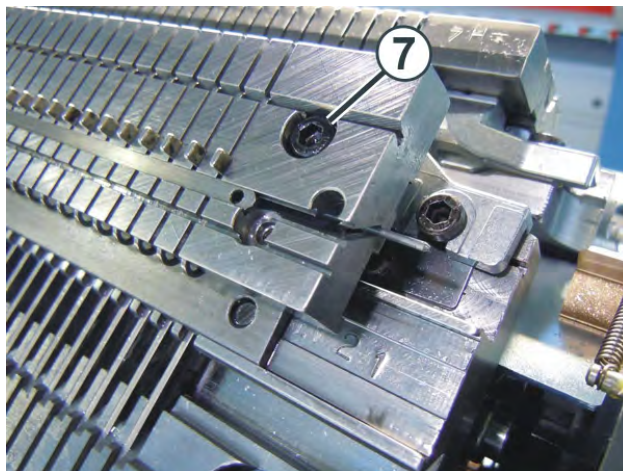
3. Remove screw (3) on left and right-hand sides of jack bed.
4. Pull out the wire (4) and insert in the groove (5), below the springs.



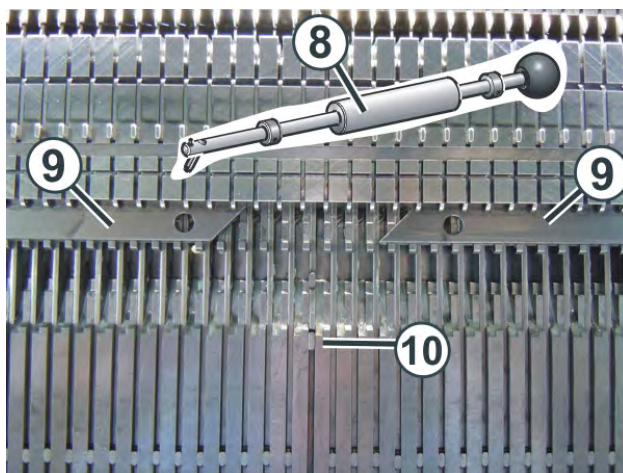
5. Push all springs (1) of the holding-down jacks into the position (6) ("Position open").
- ▷ The holding-down jacks are relieved.

6. Loosen the screw (7) on the left and right-hand sides of the jack bed.

▷ The needle rail is relieved.

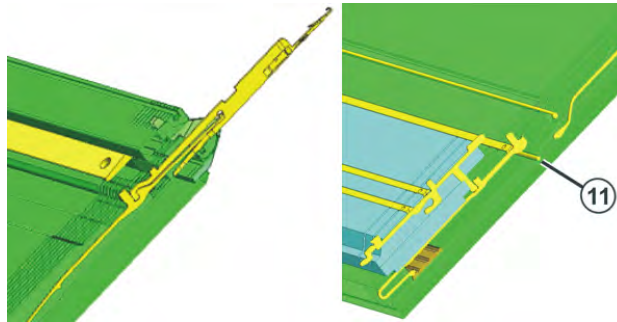


7. With the extraction hook (8) push the needle rail (9) to the side.



8. Pull the needle upwards, the coupling part will be pulled upwards with it as well.
9. When the foot of the coupling part is in position (10), press the coupling part somewhat into the needle bed (small knitter's hook, pliers). Pull out needle upward.

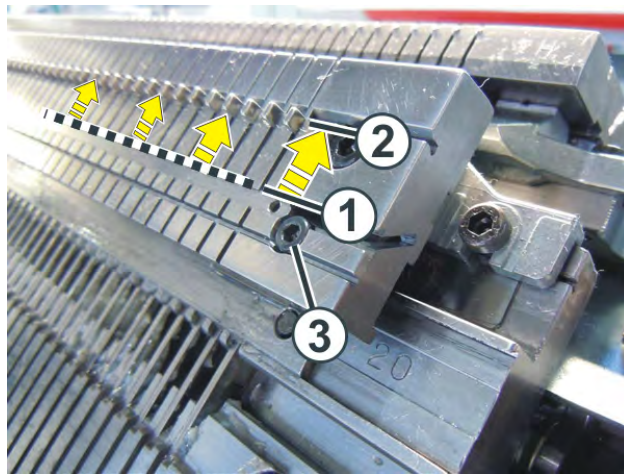
10. Reassemble the needle and coupling part.



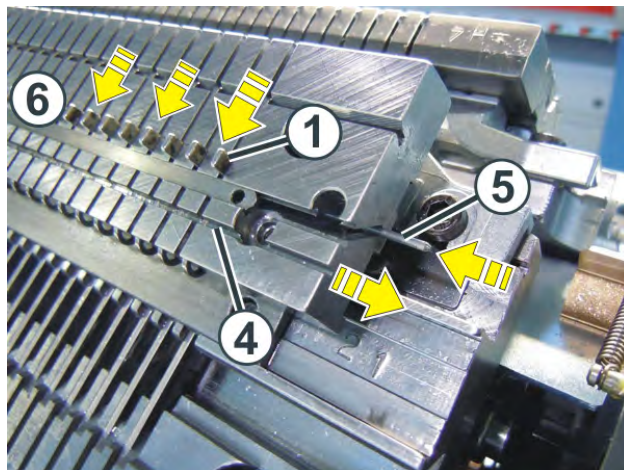
11. The end of the coupling part bumps into the wire (11), and must therefore be pushed harder.
Tip: This is easier, if the needle is pressed into the needle bed.
12. Reassemble the holding-down jack bed in the reverse order.
13. Retighten the screws (7) on the jack bed.
Control: The holding-down jacks should be easily moved to the "Position closed".
If this is not the case, the jack bed is no in the correct position. Loosen the screws again and shift the jack bed somewhat to the side. Retighten the screws and check it again.

5 Replacing holding-down jack (CMS 520 C+)

1. Transfer all stitches of the corresponding needle bed to the other needle bed,
2. Stop the carriage outside the needle bed.
3. All the springs (1) of the holding-down jacks must be in the position (2) ("Position closed").

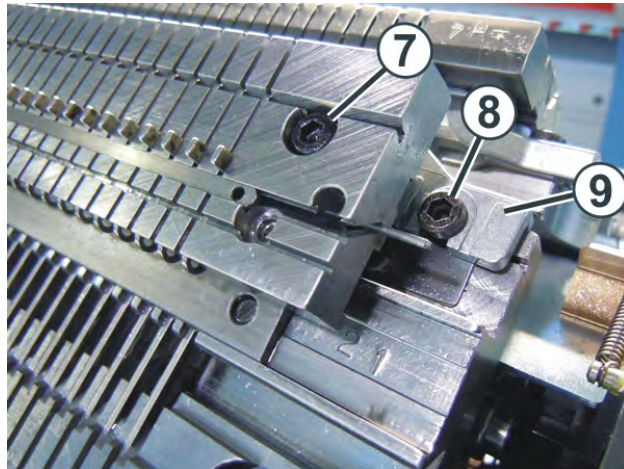


4. Remove screw (3) on left and right-hand sides of jack bed.
5. Pull out the wire (4) and insert in the groove (5), below the springs.

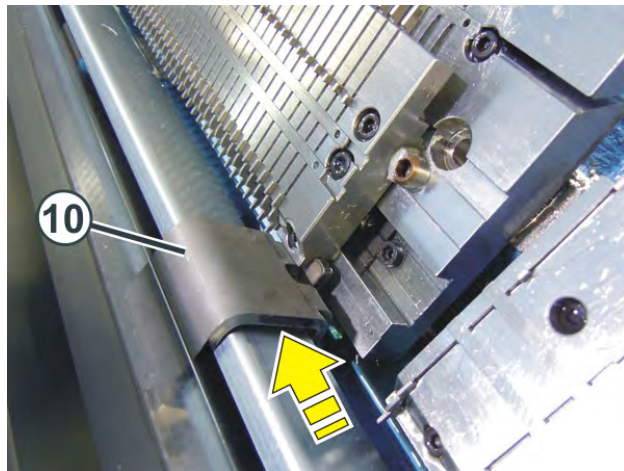


6. Push all springs (1) of the holding-down jacks into the position (6) ("Position open").
▷ The holding-down jacks are relieved.

7. Loosen screws (7) and (8) on the left and right sides of the jack bed.

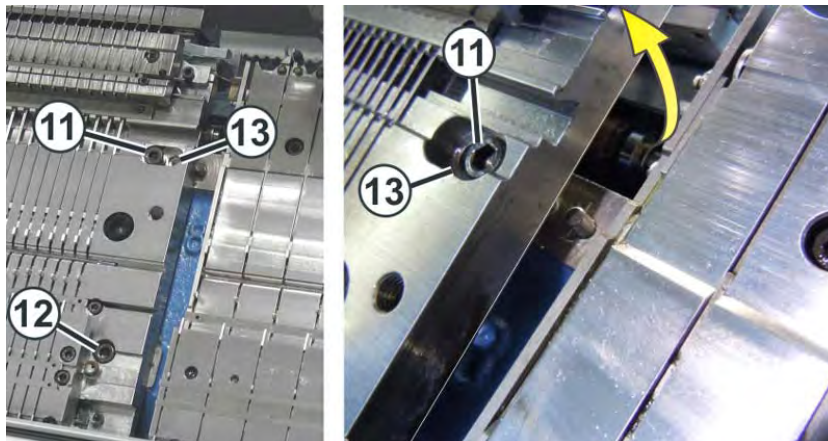


8. Remove the limiter (9) on both sides.
9. Position the needle bed at an angle to be able to pull out the wires more easily.
Use the needle bed swivel support (10) (special attachment). It prevents the selection jacks from getting damaged when the needle bed is positioned at an angle.



10. On the left and right side of the needle bed, position a needle bed rotary support (10) on the cover of the carriage guide bar and push it inward up to the selection jack bed.

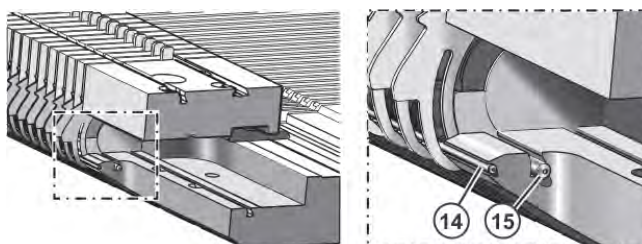
11. Remove the screws (11) and (12) on the left and right-hand sides of needle bed.



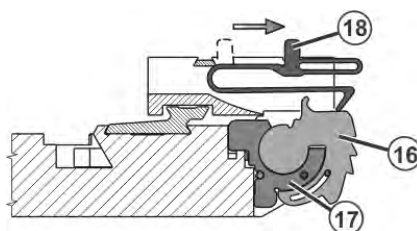
12. On the left and right-hand sides of needle bed, uniformly screw-in the screw (11) into the screw thread (13).

▷ The needle bed is lifted by approx. 2 cm.

13. Pull out the wire (14) and (15) up to the point of repair.



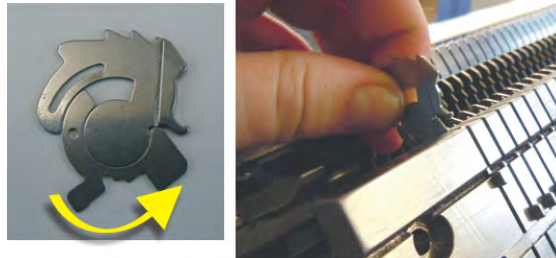
14. Remove the holding-down jack (16) using pliers. This also pulls out the support (17).



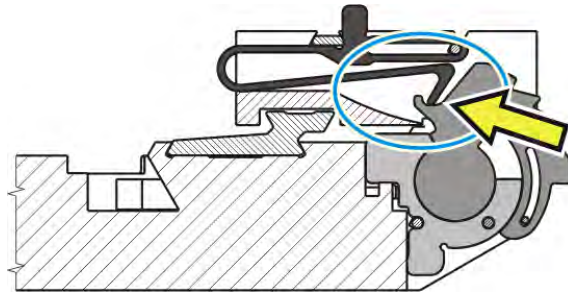
15. Push the spring (18) of the defective holding-down jack into the "Position closed".

Screwing on needle bed tight

16. Combine the new holding-down jack and the support and screw into "Position open".



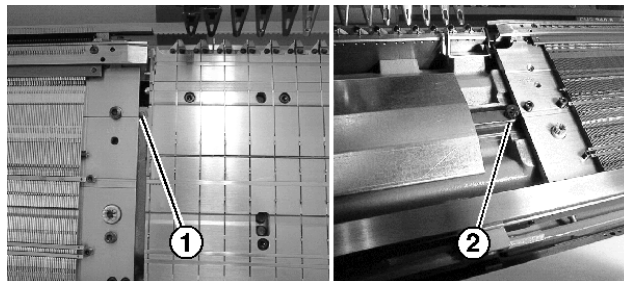
17. Insert the holding-down jack and the support with slight rotary movements in the jack bed.



18. Ensure that the spring engages in the holding-down jack.

19. Reassemble the needle bed in the reverse order.

Screwing on needle bed tight



Installing front and rear needle beds

- Reassemble the needle bed in the reverse order. When doing so, make sure that the needle bed contacts the pin (1) and the roller (2).

6 Stitch Tension Range (CMS 520 C+)

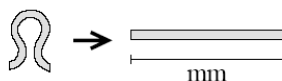
The tension ranges for knitting and splitting differ. The reason for this is the shape of the split-stitch piece. The information in the table show the minimum and maximum NP values.

	min. NP	max. NP	min. NP (Split)	max. NP (Split)
E 1,5.2	8.3	18.0	9.6	16.9
E 2.2	8.5	18.2	9.8	17.1

Stitch Tension Range

7 Stitch Length (CMS 520 C+)

The specified values serve as a guideline. Depending on the yarn, these values may differ, as the quality and the specific weight of the material influence the stitch length.



NP	E 1,5.2	E 2.2
8.3	13.41	
8.5	13.96	11.38
9.0	15.32	12.83
9.5	16.68	14.28
10.0	18.05	15.73
10.5	19.41	17.18
11.0	20.77	18.63
11.5	22.14	20.08
12.0	23.50	21.53
12.5	24.86	22.98
13.0	26.23	24.43
13.5	27.59	25.88
14.0	28.95	27.33
14.5	30.32	28.78
15.0	31.68	30.23
15.5	33.04	31.68
16.0	34.41	33.13
16.5	35.77	34.58
17.0	37.13	36.03
17.5	38.50	37.48
18.0	39.86	38.93
18.2		39.51

Stitch length - yarn consumption per stitch (mm) with R/L fabric

