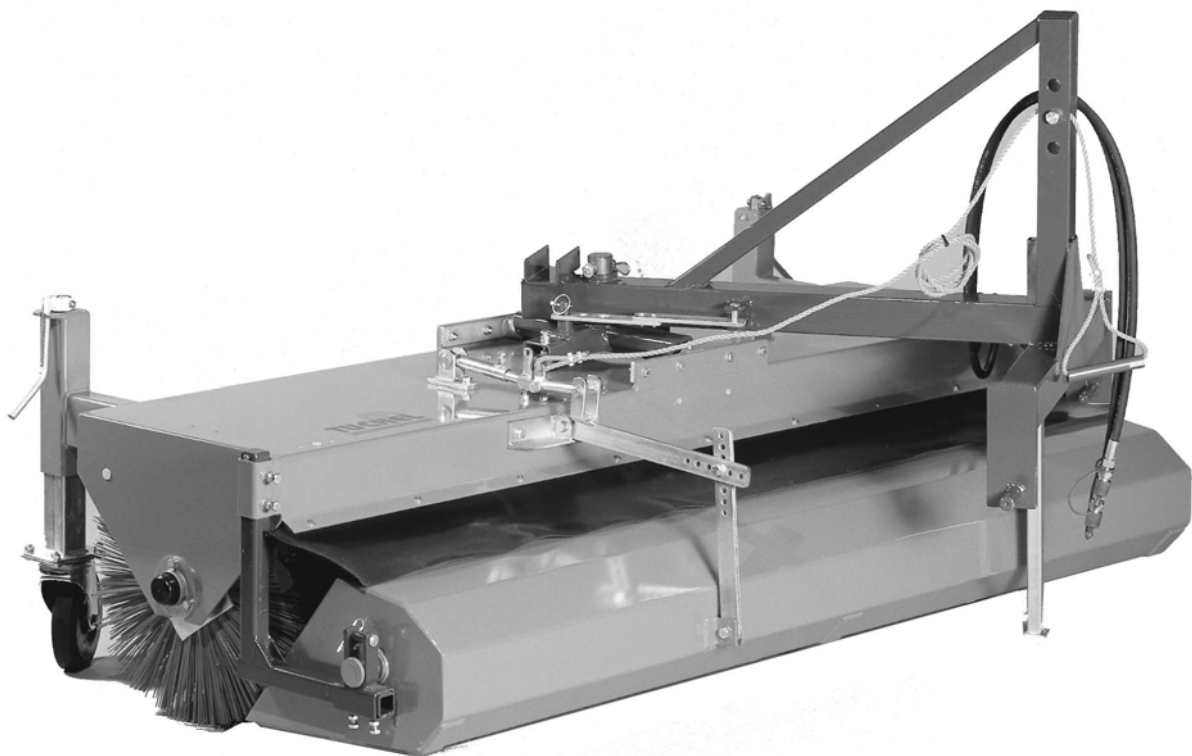


Operating Instructions and Spare Parts List

EKM - H / EKM - M



This technical documentation, especially the operating manual, must be precisely studied and followed, before start of operation.

The machine must only be used, maintained, verified and repaired by personnel, who are well experienced in handling the machine and who know the operating instructions, respectively the whole documentation and the prescriptions about working security and prevention against accidents.

We congratulate you to your choice!

You have purchased an EKM sweeper, which has been manufactured according to highest quality standard.

This operator's manual contains important information for your safety, the safe operating, reliability and maintenance of your EKM sweeper.

We wish you the best possible working results with this EKM machine.

Best regards

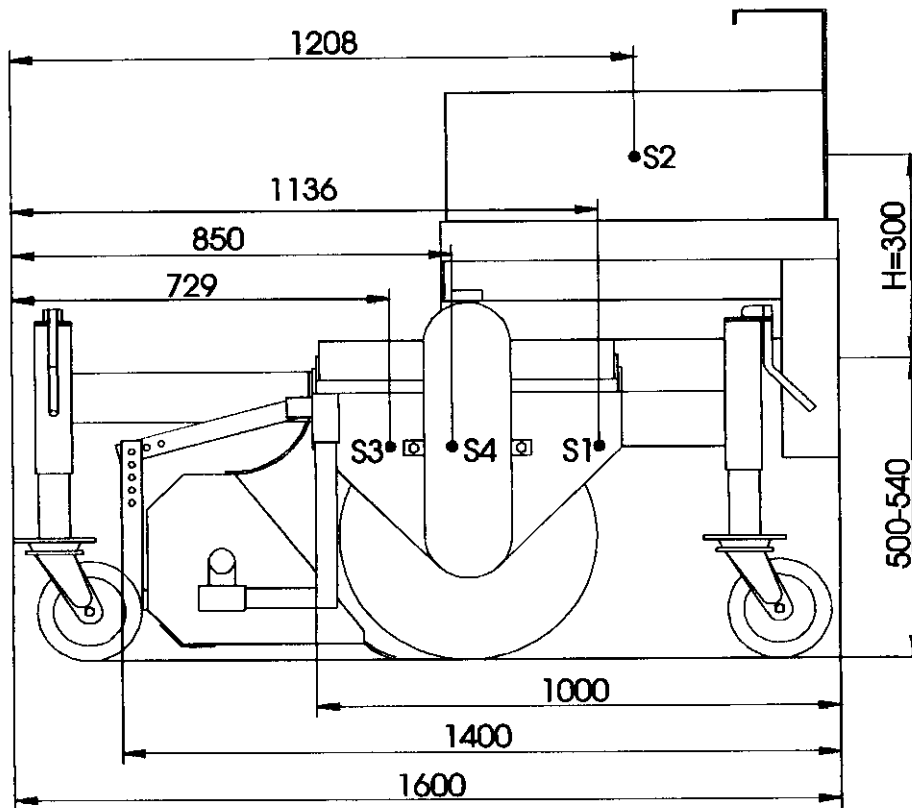
TUCHEL Maschinenbau GmbH

Tuchel Maschinenbau GmbH
Holsterfeld 15 · 48499 Salzbergen
Tel. (0 59 71) 96 75 - 0 · Fax 96 75 - 30

Index

	Side
1. Technical data	5
1.1. Data on ID-Plate	6
1.2. Data on performance and application	6
1.3. Performance	6
1.4. Load capacities	6
1.5. Correct application and working widths	6
1.6. Special equipment	7
3rd support wheel	7
Side brush	
Dirt collector	8
Indirect drive	9
Level compensation	10
Road traffic equipment	10
Control valve incl. pressure restriction	10
Water-spraying equipment	11
Water pump	12
Hydraulic side adjustment	12
Mechanical emptying	13
Hydraulic emptying	13
2. Environmental influences	14
3. Control	14
3.1. Connections	
3.2. Mounting onto carrier-vehicle	15
4. First time operation	16
4.1. Mechanical drive	16
4.2. Hydraulic drive	17
5. Maintenance	17
6. Dirt collector	18
7. Water-spraying equipment	18
8. Transport	19
9. Lighting and warning signals	19
10. Length of carrier-vehicle	19
11. Hydraulic diagram	20
12. Spare parts list	21/22
13. Replacement of brush segments	23
14. Memorandum	24

1. Technical data

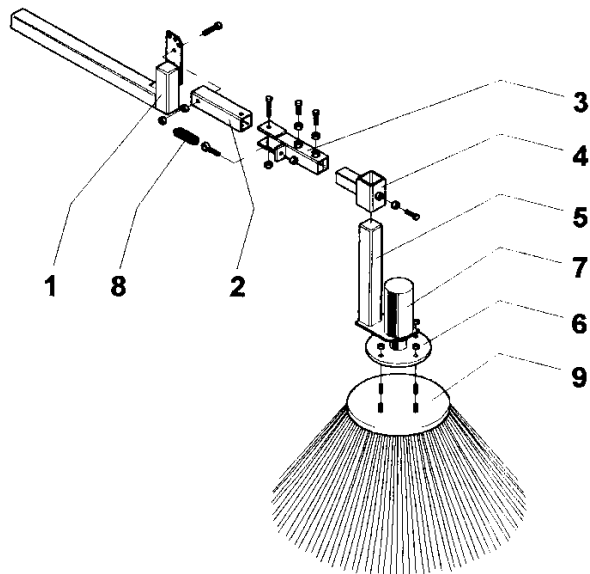
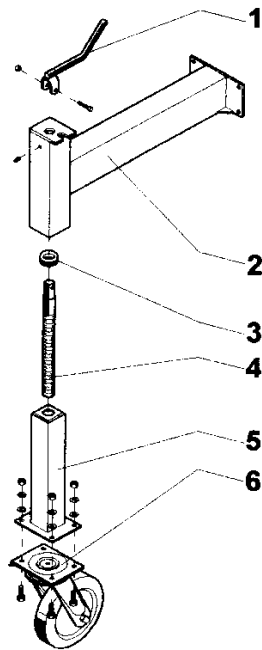


EKM	cm	120	135	150	165	180	200	230	260
working width	mm	1200	1350	1500	1650	1800	2000	2300	2600
total width	mm	1300	1450	1600	1750	1900	2100	2400	2700
width (at 20° inclination)	mm	1100	1250	1400	1550	1700	1900	2200	2500
S1 weight Sweeper assy.	kg	115	130	140	155	170	190	210	230
S2 weight sweeper + spraying equipment	kg	315	330	340	355	370	390	410	430
S3 weight sweeper + dirt collector + contents	kg	270	300	320	360	390	440	480	530
S4 weight sweeper + dirt collector + spraying equipment	kg	470	500	520	560	590	640	680	730

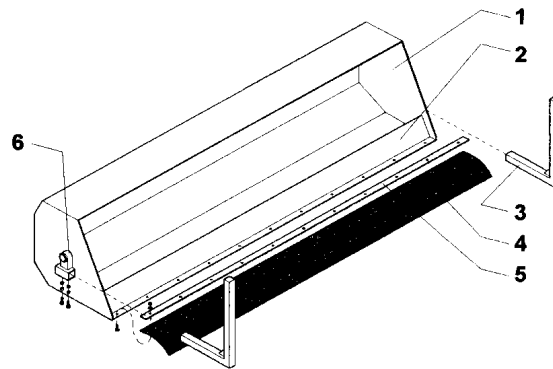
Attention: Please urgently observe the permitted axle load of the carrier-vehicle!!!

1.6. Special Equipment

No.	Working width								Part-No.	Description
	120	135	150	165	180	200	230	260		
1	1	1	1	1	1	1	1	1	92.24.D0000	crank
2	1	1	1	1	1	1	1	1	92.24.A0000	arm, support-wheel
3	1	1	1	1	1	1	1	1	00.DA.00004	axial-thrust bearing
4	1	1	1	1	1	1	1	1	92.24.C0000	spindle
5a	1	1	1	1	1	1	1	1	92.24.B0000	inner tube for guide pulley 200x50
5b	1	1	1	1	1	1	1	1	92.24.B1000	inner tube for guide pulley 200x80
6a	1	1	1	1	1	1	1	1	00.LA.00005	guide pulley 200x50
6b	1	1	1	1	1	1	1	1	00.LA.00007	strengthened guide pulley 200x80
6c	1	1	1	1	1	1	1	1	00.LA.00008	heavy-duty guide-pulley 200x80



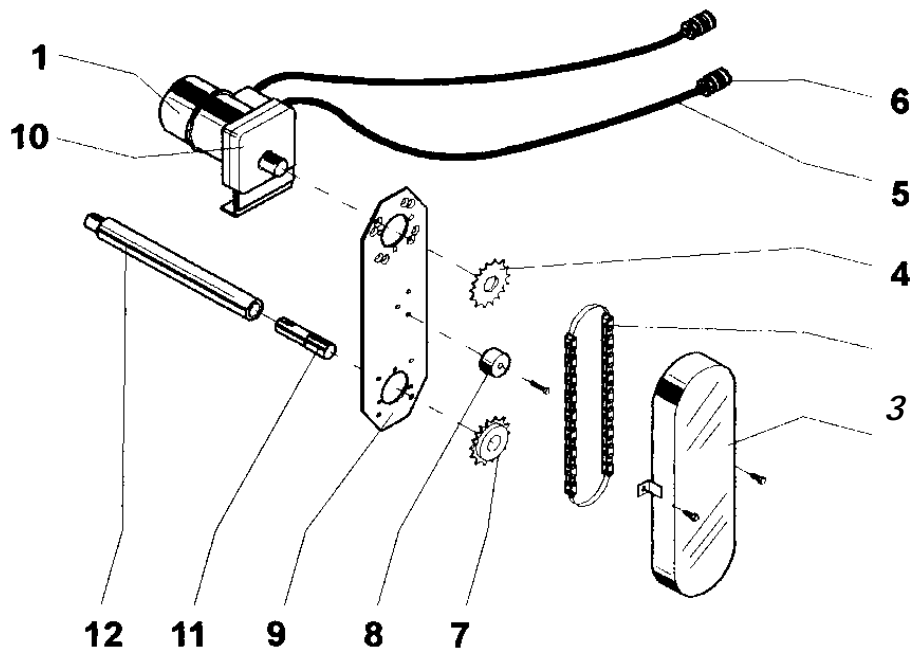
No.	Working width								Part-No.	Description
	120	135	150	165	180	200	230	260		
1	1	1	1	1	1	1	1	1	93.21.AB000	shifter adjusting device
2	1	1	1	1	1	1	1	1	93.21.AD000	rocking-lever
3	1	1	1	1	1	1	1	1	93.21.AE000	turning-lever
4	1	1	1	1	1	1	1	1	93.21.AF000	crossbar head
5	1	1	1	1	1	1	1	1	16.21.D0000	motor support
6	1	1	1	1	1	1	1	1	16.21.E0000	flange
7	1	1	1	1	1	1	1	1	00.EK.00001	hydraulic motor
8	1	1	1	1	1	1	1	1	93.21.00001	tension spring
9	1	1	1	1	1	1	1	1	00.MD.00001	round brush



Working width in cm

Dirt collector

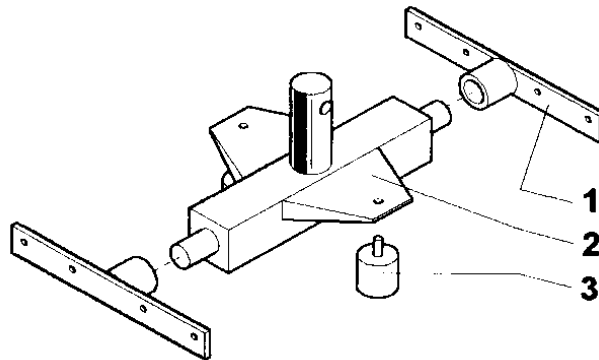
No.	120	135	150	165	180	200	230	260	Part-No.	Description
1	1								92.32.A0000	dirt collector, 120 cm
1		1							92.33.A0000	dirt collector, 135 cm
1			1						92.34.A0000	dirt collector, 150 cm
1				1					92.37.A0000	dirt collector, 165 cm
1					1				92.35.A0000	dirt collector, 180 cm
1						1			92.36.A0000	dirt collector, 200 cm
1							1		92.38.A0000	dirt collector, 230 cm
1								1	92.39.A0000	dirt collector, 260 cm
2	1								92.32.01000	high-filling-device, 120 cm
2		1							92.33.01000	high-filling-device, 135 cm
2			1						92.34.01000	high-filling-device, 150 cm
2				1					92.37.01000	high-filling-device, 165 cm
2					1				92.35.01000	high-filling-device, 180 cm
2						1			92.36.01000	high-filling-device, 200 cm
2							1		92.38.01000	high-filling-device, 230 cm
2								1	92.39.01000	high-filling-device, 260 cm
3	2	2	2	2	2	2	2	2	92.32.E0000	adjusting lever
4	1								00.MF.00013	buffer edge, 120 cm
4		1							00.MF.00015	buffer edge, 135 cm
4			1						00.MF.00018	buffer edge, 150 cm
4				1					00.MF.00019	buffer edge, 165 cm
4					1				00.MF.00021	buffer edge, 180 cm
4						1			00.MF.00023	buffer edge, 200 cm
4							1		00.MF.00025	buffer edge, 230 cm
4								1	00.MF.00027	buffer edge, 260 cm
5	1								92.32.00002	buffer edge, 120 cm
5		1							92.33.00002	buffer edge, 135 cm
5			1						92.34.00002	buffer edge, 150 cm
5				1					92.35.00002	buffer edge, 165 cm
5					1				92.36.00002	buffer edge, 180 cm
5						1			92.37.00002	buffer edge, 200 cm
5							1		92.38.00002	buffer edge, 230 cm
5								1	92.39.00002	buffer edge, 260 cm
6	2	2	2	2	2	2	2	2	92.32.W0000	pendulum tube



Working width in cm

Indirect drive

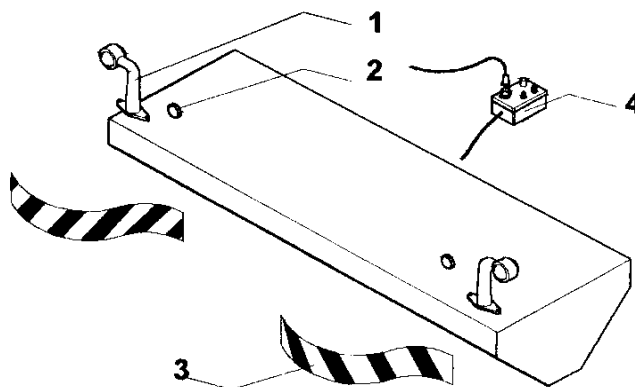
No.	120	135	150	165	180	200	230	260	Part-No.	Description
1	1	1	1	1	1				00.EK.00041	hydraulic motor
1						1	1	1	00.EK.00040	hydraulic motor
2	1	1	1	1	1	1	1	1	92.04.F0001	guard-plate
3a	1	1	1	1	1	1	1	1	00.HG.00004	chain
3b	1	1	1	1	1	1	1	1	00.HG.00005	chain-lock, straight
3c	1	1	1	1	1	1	1	1	00.HG.00006	chain-lock, cranked
4	1	1	1	1	1	1	1	1	00.CD.00007	sprocket
5	2	2	2	2	2	2	2	2	00.EP.00020	hydraulic hose
6	2	2	2	2	2	2	2	2	00.ES.00002	quick-coupler
7	1	1	1	1	1	1	1	1	00.CD.00012	sprocketl
8	1	1	1	1	1	1	1	1	92.04.00001	chain adjuster
9	1	1	1	1	1	1	1	1	92.04.00002	bearing plate
10	1	1	1	1	1	1	1	1	92.04.H0000	motor distance frame
11	1	1	1	1	1	1	1	1	92.04.00003	shaft lengthening
12	1								92.02.E1000	cylinder shaft, 120 cm
12		1							92.03.E1000	cylinder shaft, 135 cm
12			1						92.04.E1000	cylinder shaft, 150 cm
12				1					92.07.E1000	cylinder shaft, 165 cm
12					1				92.05.E1000	cylinder shaft, 180 cm
12						1			92.06.E1000	cylinder shaft, 200 cm
12							1		92.08.E1000	cylinder shaft, 230 cm
12								1	92.09.E1000	cylinder shaft, 260 cm



Working width in cm

Level compensation

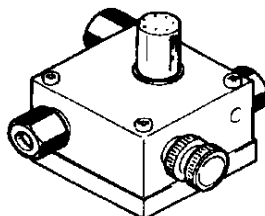
No.	120	135	150	165	180	200	230	260	Part-No.	Description
1	2	2	2	2	2	2	2	2	92.57.A0000	side part
2	1	1	1	1	1	1	1	1	92.57.B0000	bottom plate
3	2	2	2	2	2	2	2	2	00.HP.00005	rubber-buffer



Working width in cm

Traffic equipment

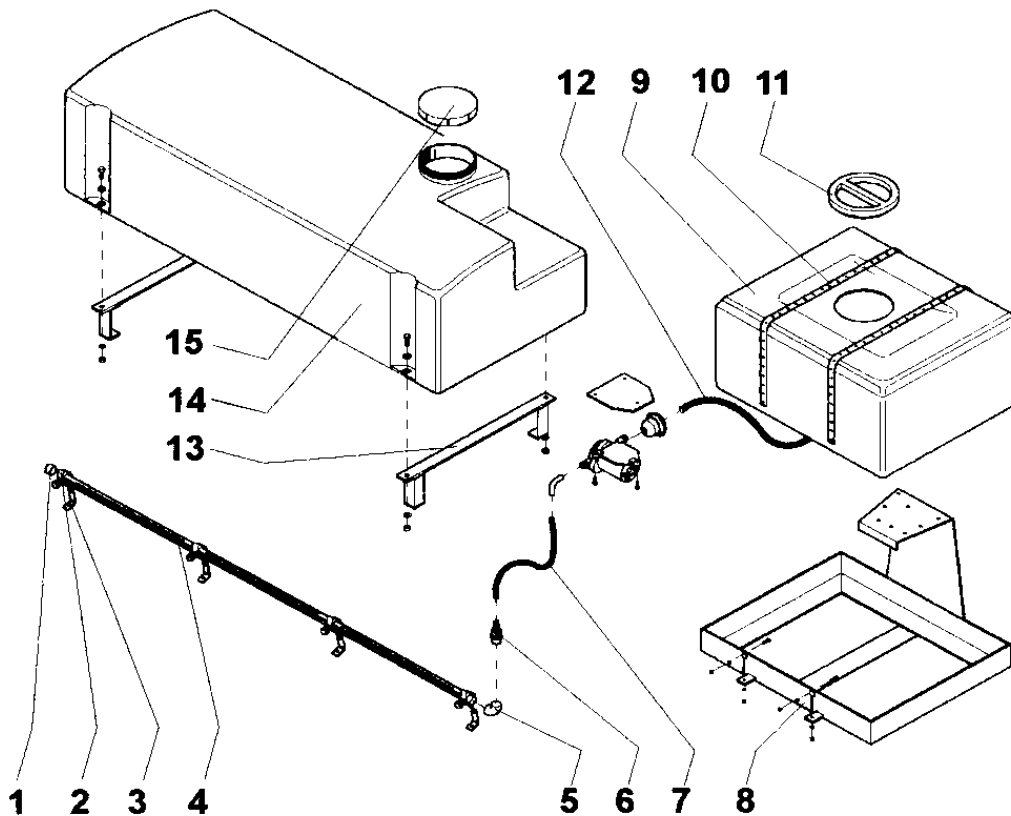
No.	120	135	150	165	180	200	230	260	Part-No.	Description
1	2	2	2	2	2	2	2	2	00.GE.00001	side lamp
3	2	2	2	2	2	2	2	2	00.KG.00001	reflection-foil
4	1	1	1	1	1	1	1	1	00.GS.00001	switch board



Working width in cm

Current control valve

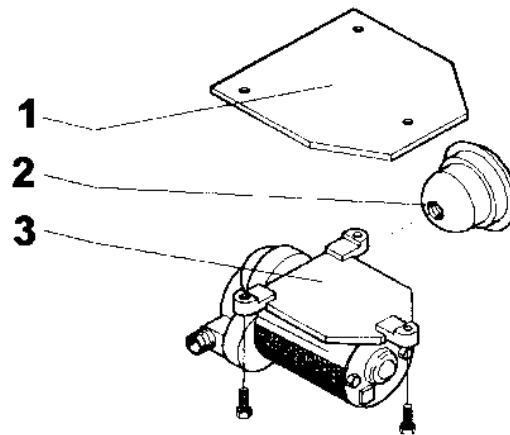
No.	120	135	150	165	180	200	230	260	Part-No.	Description
1	1	1	1	1	1	1	1	1	00.EN.00014	current control valve 1/2"
2	1	1	1	1	1	1	1	1	00.EN.00017	current control valve 3/4"



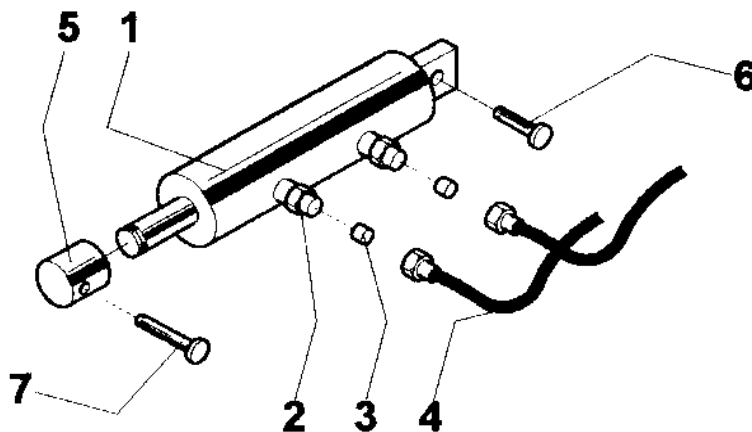
Working width in cm

Water-spraying equipment

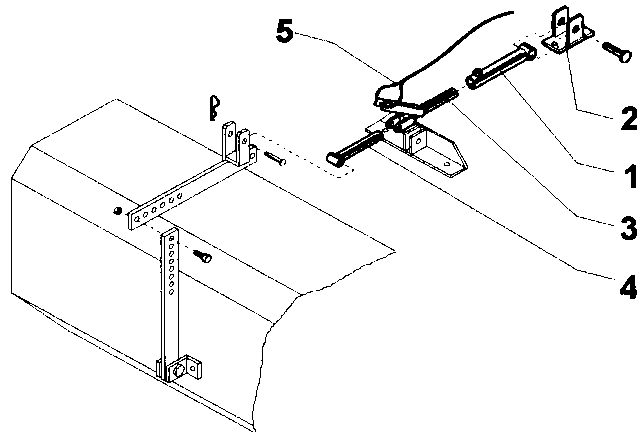
No.	120	135	150	165	180	200	230	260	Part-No.	Description
1	1	1	1	1	1	1	1	1	00.FW.00020	terminal cap
2	3	3	4	4	4	5	5	6	00.FY.00001	nozzle assy.
3	3	3	4	4	4	5	5	6	05.20.00002	angle sheet of metal
4		1							00.BX.00002	PVC-pressure pipe
4	1								00.BX.00003	PVC-pressure pipe
4			1						00.BX.00004	PVC-pressure pipe
4						1			00.BX.00005	PVC-pressure pipe
4				1					00.BX.00006	PVC-pressure pipe
4							1		00.BX.00007	PVC-pressure pipe
4					1				00.BX.00008	PVC-pressure pipe
4								1	00.BX.00009	PVC-pressure pipe
5	1	1	1	1	1	1	1	1	00.FQ.00001	angle/bow/hose nozzle
7	1	1	1	1	1	1	1	1	00.FO.00003	pressure hose
8	1	1	1	1	1	1	1	1	92.20.B0000	water tank frame, 100 l
9	1	1	1	1	1	1	1	1	00.CD.00037	water tank, 100 l
10	2	2	2	2	2	2	2	2	00.FM.00002	punched tape
11	1	1	1	1	1	1	1	1	00.CD.00042	tank lid, 100 l
12	1	1	1	1	1	1	1	1	00.FO.00002	suction hose
13	2	2	2	2	2	2	2	2	92.20.B2000	water tank frame, 200 l
14	1	1	1	1	1	1	1	1	00.CD.00038	water tank, 200 l
15	1	1	1	1	1	1	1	1	00.CD.00502	tank lid, 200 l



Working width in cm									Water pump	
No.	120	135	150	165	180	200	230	260	Part-No.	Description
1	1	1	1	1	1	1	1	1	00.EM.00006	bottom plate
2	1	1	1	1	1	1	1	1	00.ER.00006	water filter
3a	1	1	1	1	1	1	1	1	00.EM.00004	water pump 12V
3b	1	1	1	1	1	1	1	1	00.EM.00005	water pump 24V



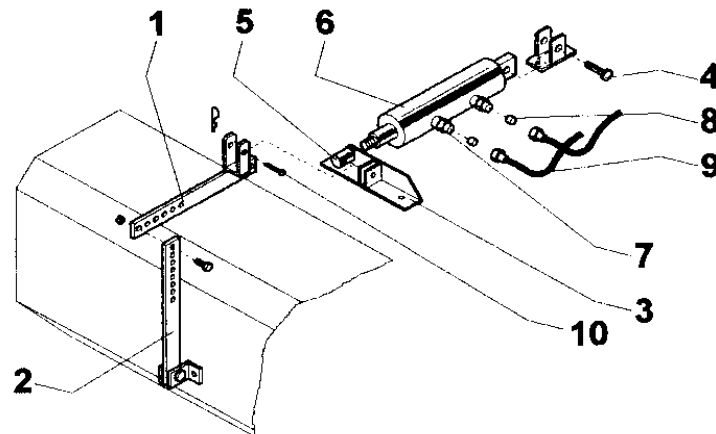
Working width in cm									Hydraulic side adjustment	
No.	120	135	150	165	180	200	230	260	Part-No.	Description
1	1	1	1	1	1	1	1	1	00.EL.00001	hydraulic cylinder
2	2	2	2	2	2	2	2	2	92.22.A0001	screw coupling
3	2	2	2	2	2	2	2	2	00.AE.10108	throttle screw
4	2	2	2	2	2	2	2	2	00.EP.00027	hydraulic hose
5	1	1	1	1	1	1	1	1	01.04.D0301	threaded joint
6	1	1	1	1	1	1	1	1	00.AH.00026	split pin



Working width in cm

Mechanical emptying

No.	120	135	150	165	180	200	230	260	Part-No.	Description
1	1	1	1	1	1	1	1	1	11.34.E0000	pressure pipe
2	1	1	1	1	1	1	1	1	92.34.C0000	holder for bin stop
3	1	1	1	1	1	1	1	1	11.34.F0000	pressure rod
4	1	1	1	1	1	1	1	1	92.34.J0001	pressure arm
5	1	1	1	1	1	1	1	1	00.UB.00002	cable-pull



Working width in cm

Hydraulic emptying

No.	120	135	150	165	180	200	230	260	Part-No.	Description
1	1	1	1	1	1	1	1	1	92.34.H0000	upper collector adjustment
2	1	1	1	1	1	1	1	1	92.34.I0000	lower collector adjustment
3	1	1	1	1	1	1	1	1	92.34.D0001	holder for collector stop
4	1	1	1	1	1	1	1	1	00.AH.00014	split pin
5	1	1	1	1	1	1	1	1	01.04.D0301	threaded joint
6	1	1	1	1	1	1	1	1	00.EL.00001	hydraulic cylinder
7	2	2	2	2	2	2	2	2	92.22.A0001	screw coupling
8	2	2	2	2	2	2	2	2	92.22.A0002	choke screw
9	2	2	2	2	2	2	2	2	00.EP.00027	hydraulic hose
10	1	1	1	1	1	1	1	1	00.AA.00129	hexagonal screw

2. Environmental influences

The EKM machine shall be operated, if possible, at times where there is a very low dust development. When there is dust development, the dust share must be binded by water. (Water-spraying-system).

The sweeper must only be used for the removal of dust, category "U" (MAK-values>1mg/m³) as e.g. street dust.

The sweeper has been constructed for the operation in the surface and gardening care and is not allowed to be used to collect unwholesome material.

3. Control

The sweeper must be thoroughly checked and verified

1. before operation
2. regularly (at least once a year)
3. for safety, after any kind of modification or repair has been made, by authorized staff, to make sure that all the bolts are tightened and all connections and screwings are closed.
4. The water-spraying system must be checked for closeness, correct fixing and precise functioning.

Due to the safety rules (ZH 1/74) the owner of the company must ensure that all hose connections are getting changed in regular intervals, eventhough no technical damage is visible. All hoses should not be older than six years. The date of manufacturing and the allowed dynamic operating pressure is shown on the ID-Plate. The water-spraying-system must be checked for correct fixing, closeness and functioning.

3.1.Connecting

In order to obtain the best working results with the EKM, the following points must be strictly observed or have to be made available.

For the EKM with hydraulic connector, the carrier-vehicle must be equipped with an additional double-acting control valve. The cross-cut of the feed- and return pipes shall at least be NW13, in order to guarantee a perfect functioning of the sweeper.

For the hydraulic side adjustment, an additional double-acting control valve is required.

For the operation of a water-spraying-or lighting syste, the carrier-vehicle must have a 12V/24V electric supply.

3.2. Connections on the carrier-vehicle

The EKM is equipped with a variety of parts, which are required for the quick-hitch of the carrier-vehicle. Mounting is very easy.

Please ensure that the hydraulic pipes (1 x feed and 1 x return) are properly connected, i.e. untwisted and uncracked and that they are protected against damage, such as pulling and contusion.

The coupling systems are not allowed to be modified or exchanged. Original TUCHEL or attachment systems, which have been modified by Tuchel, only, are allowed to be taken.

4. First time operation

The rollers must be adjusted in a way that the main brush overlaps 10 mm downwards or that a 6-10 mm wide marking on the road is left when the machine is at a standstill with the brush running.

For bumpy roads or surfaces the rollers can be turned upwards. The working speed depends on type and quantity of the material to be swept.

When larger quantities of sand must be swept e.g., it is recommended to drive the machine at a lower speed (about 4-5 km/h) and to let the main brush rotate quicker. If only dust must be swept, the driving speed can be increased (about 8-10 km/h) and the brush should run slower.

4.1. Mechanical drive

The joint shaft must be connected to the drag-vehicle and the friction-gear. Make sure that the length of the joint shaft is in accordance with the various working positions and that it fits properly, when the machine gets lifted. The profile should not cover more than 300 mm. The squaring off must be kept as low as possible and on both joints equal (don't square off more than 35°C). The joint-shaft protection is to be secured when the chain is mounted. The designated intervals, as stated on the greasing plan, have to be followed!

4.2. Hydraulic drive

For the EKM sweeper with hydraulic drive, the permitted maximum operation pressure (160 bar) is not allowed to be modified. The main brush begins to rotate upon start of oil flow; this happens by handling the corresponding hydraulic-valve on the carrier-vehicle. In case the sweeper turns false, the hydraulic hoses on the quick-couplers are to be changed.

Please ensure that all hydraulic hoses are uncracked and untwisted and that they have been connected properly. Protect them against damage, such as pulling and contusion.

5. Maintenance

When the sweeper stands still over a longer period of time, release the main brush by turning out the roller spindle and by unpinning the parking-stands. It is strictly forbidden to stand or stay below the sweeper when it is in a raised position.. View control has to be made, to ensure that the pendulum oscillating is straight. Corresponding to the individual degree of soilage, the rollers must be cleaned and re-greased.

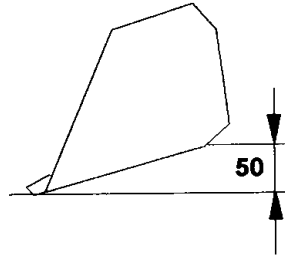
Prescriptions for Work Protection, such as Accident Prevention Prescriptions, „General Prescriptions“ (VGB1), „Force-Operated Means of Working“ (VGB5) and „Vehicles“ (VGB12) are to be followed.

6. Dirt collector

When the sweeper has been ordered incl. the dirt collector, the machine will be delivered with the collector mounted and ready for immediate operation. Before using the collector, the right adjustment should be verified.

Collector adjustment is done by adjusting the height- and length of the retainer handles (support handles), so that the collector lip slightly touches the ground.

Ensure that a rift of about 50 mm is kept between the leading edge of the collector and the bottom (see drawing).



The hydraulic cylinder for emptying the collector is handled from the carrier-vehicle via the switch-on of the double-acting control unit, which must be available on the carrier-vehicle. If not, use the cable-pull from the carrier-vehicle.

Attention: Please ensure that the collector is closed before the machine is set down on the ground; if not, this can cause damage!!!

7. Water-spraying system

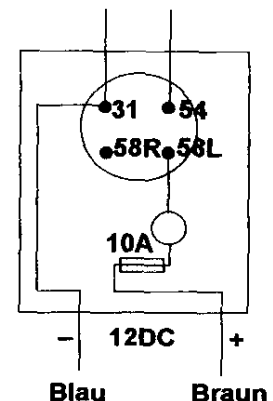
For starting the water-spraying-system, the water-tank must be connected. When the machine is equipped with nozzle-spraying-heads, the tanks must be filled with clean water; if not, the filter might continuously get dirty and sweeping might be interrupted.

Pressure of the water pump must be 2,8-3,1 bar maximum.

When there is a water distributor pipe, ensure that the water-feeding pipe is uncracked and mounted underneath the pump.

After the power-point has got fitted in an appropriate place in the carrier-vehicle, close to the driver's hand reach, not removable and with a tightly mounted holder and after it has been connected, 12 V, DC (direct current), the water-spraying system can be plugged. Thereafter, pull the switch to "ON".

The unit of energy is secured in the power-point by a fuse (10 ampere).



8. Transport

For transport, the EKM sweeper must always be raised and the support-wheels must be free.

9. Electric lighting system and notice board

Attachments must be equipped with a lighting system, if visibility is bad or if the lights of the carrier-vehicle are hidden.

1. Paragraph 53b line1: Attachments, which side-leaf overlap the outskirts of the side lamps or rear lights of the carrier-vehicle, must be equipped with side lamps (paragraph 51 line 1), rear lights (paragraph 53 line 1) and rear reflectors (paragraph 53 line 4)
2. Paragraph 53b line 2: Attachments whose utmost end overlap the rear lights of the vehicle more than 1.000mm, must be equipped with a rear light (paragraph 53 line 1) and a rear reflector (paragraph 53 line 4). Distance of the lights and rear reflectors from the outside edge 400 mm max., mounting height of the lights 1.500 mm max. , for the rear-reflectors 800 mm max.
3. Paragraph 53b line. 3: Attachments (see line 1) must be marked in direction to the front and to the rear, by a parking-danger board (see paragraph 51 c) or by red/white striped retro-reflecting danger boards, DIN 11030, size 423 mm x 423 mm.

10. Length of the vehicle (see paragraph 32 StVZO)

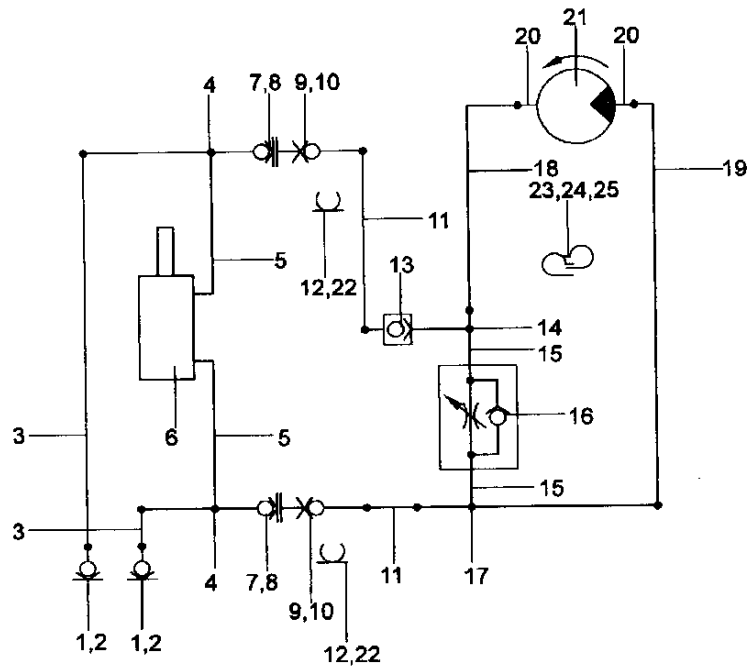
The length of the vehicle including attachment is not allowed to be more than 12 m.

The size of the front attachment towards the front, from the middle of the steering, is not allowed to be more than 3,5 m.

If this size is passed over, the management must compensate the visual range restrictions by remedial measures, such as marshalls at gateways, junctions and crossings.

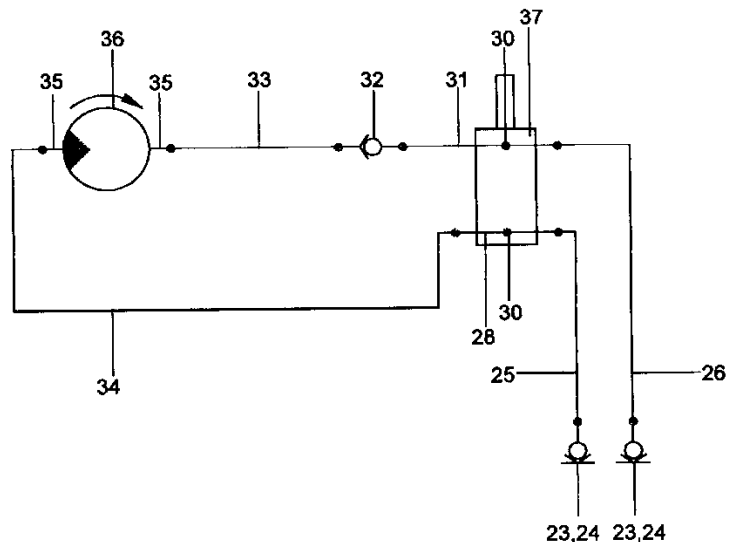
11. Hydraulic diagram

1. SVK plug
2. dust cap
3. hydr. hose 1SN DN10
4. adjustable L-joint
5. straight screw connection with socket
6. hydraulic cylinder
7. SVK plug
8. dust cap
9. dust cap
10. SVK coupling
11. hydr. hose 1SN DN10
12. Stauff-clamp
13. back-stroke valve
14. adjustable T-screw connection
15. adjustable straight screw conn.
16. throttle back-stroke valve
17. T-screw connection
18. hydr. hose 1SN DN10
19. hydr. hose 1SN DN10
20. straight screw connection
21. hydr. motor
22. sheet metal-screw
23. Norma-clamp
24. hexagonal screw
25. spring ring

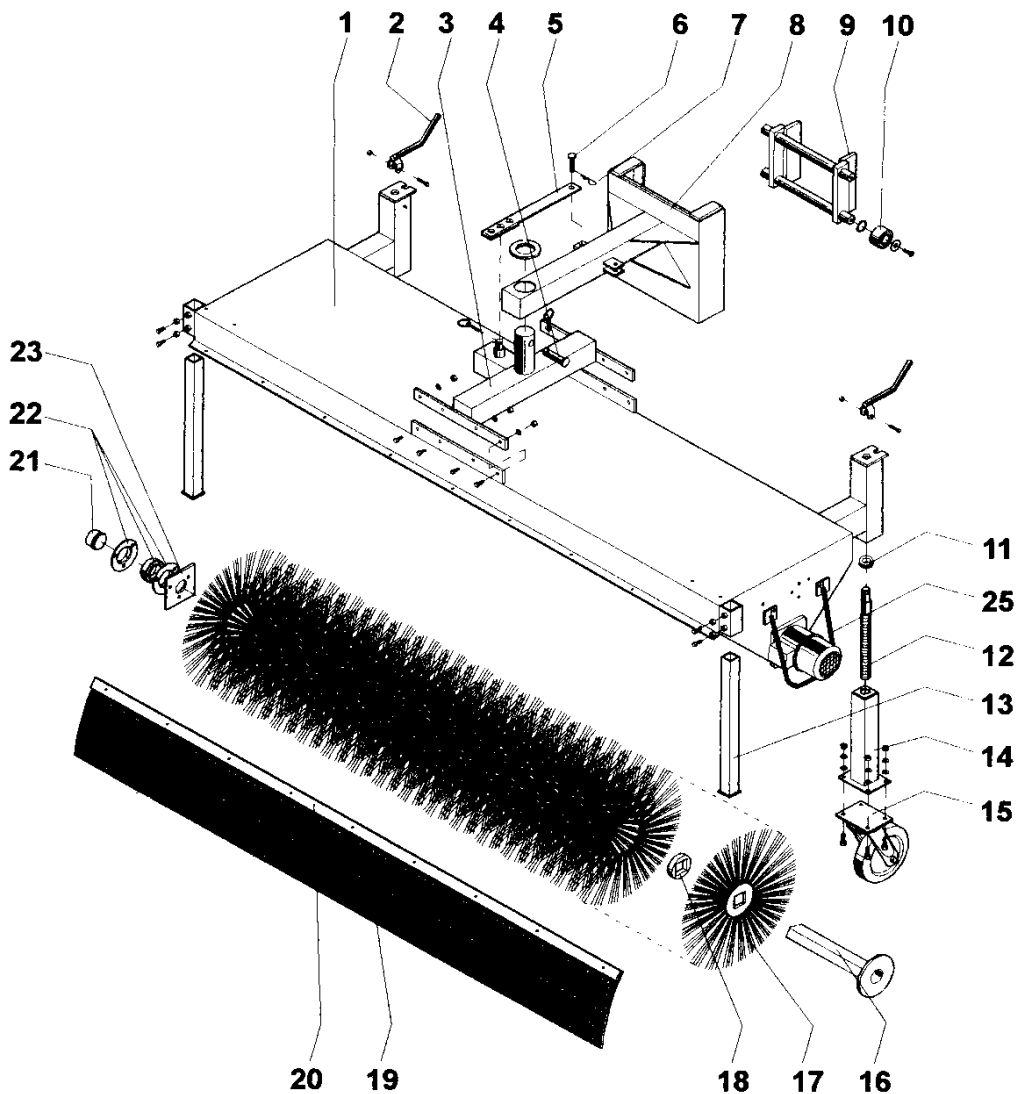


11. Hydraulic diagram

23. SVK plug
24. dust cap
25. hydr. hose 1SN DN10
26. hydr. hose 1SN DN10
- 27.
28. T screw connection
- 29.
30. adjustable straight screw connect.
31. adjustable L-connection
32. back-stroke valve
33. hydr. hose 1SN DN10
34. hydr. hose 1SN DN10
35. straight screw connection
36. hydr. motor
37. hydr. cylinder



12. Spare parts list



Working width in cm

Sweeper (without special equipment)

No.	120	135	150	165	180	200	230	260	Part-No.	Description
1	1								92.02.A0000	basic frame, 120 cm
1		1							92.03.A0000	basic frame, 135 cm
1			1						92.04.A0000	basic frame, 150 cm
1				1					92.07.A0000	basic frame, 165 cm
1					1				92.05.A0000	basic frame, 180 cm
1						1			92.06.A0000	basic frame, 200 cm
1							1		92.08.A0000	basic frame, 230 cm
1								1	92.09.A0000	basic frame, 260 cm
2	2	2	2	2	2	2	2	2	92.04.D0000	Crank
3	1	1	1	1	1	1	1	1	92.58.B0000	bottom-plate
4	1	1	1	1	1	1	1	1	00.AH.00013	split pin
5	1	1	1	1	1	1	1	1	92.58.C0000	mechanical side adjustment lever

Working width in cm

Sweeper (without special equipment)

No.	120	135	150	165	180	200	230	260	Part-No.	Description
6	1	1	1	1	1	1	1	1	00.AH.00026	split pin
7	1	1	1	1	1	1	1	1	00.JH.00001	spring adaptor
8	1	1	1	1	1	1	1	1	92.58.D0000	movable/swingable part
9	1	1	1	1	1	1	1	1	81.00.00007	roller support
10	4	4	4	4	4	4	4	4	00.DA.00006	support wheel incl. axial guide
11	2	2	2	2	2	2	2	2	00.DA.00004	axial thrust-bearing
12	2	2	2	2	2	2	2	2	92.24.C0000	spindle
13	2	2	2	2	2	2	2	2	92.24.G0001	parking-stand
14a	2	2	2	2	2	2	2	2	92.24.B0000	inner tube for guide pulley 200x50
14b	2	2	2	2	2	2	2	2	92.24.B1000	inner tube for guide pulley 200x80
15a	2	2	2	2	2	2	2	2	00.LA.00020	guide pulley 200x50
15b	2	2	2	2	2	2	2	2	00.LA.00007	strengthened guide pulley 200x50
15c	2	2	2	2	2	2	2	2	00.LA.00008	heavy-duty guide-pulley, 200x80
16	1								92.02.E10000	cylinder shaft, 120 cm
16		1							92.03.E10000	cylinder shaft, 135 cm
16			1						92.04.E10000	cylinder shaft, 150 cm
16				1					92.07.E10000	cylinder shaft, 165 cm
16					1				92.05.E10000	cylinder shaft, 180 cm
16						1			92.06.E10000	cylinder shaft, 200 cm
16							1		92.08.E10000	cylinder shaft, 230 cm
16								1	92.09.E10000	cylinder shaft, 260 cm
										100% Beeline (with brackets)
17a	25	28	31	35	38	42	48	54	00.MA.00033	brush segment, Beeline 520 mm
										PPN/wire mixed material
17b	14	16	17	19	21	23	26	30	00.MA.00010	brush segment wire 600 mm
17b	14	16	18	20	21	24	27	30	00.MA.00011	brush segment PP/wire
										100% PP
17c	28	32	35	39	42	47	53	60	00.MA.00011	brush segment PP
18	27	31	34	38	41	46	52	59	00.ME.00001	distance ring, 7 "
19	1								00.FI.00035	rubber apron, 120 cm
19		1							00.FI.00037	rubber apron, 135 cm
19			1						00.FI.00020	rubber apron, 150 cm
19				1					00.FI.00059	rubber apron, 165 cm
19					1				00.FI.00021	rubber apron, 180 cm
19						1			00.FI.00022	rubber apron, 200 cm
19							1		00.FI.00023	rubber apron, 230 cm
19								1	00.FI.00041	rubber apron, 260 cm
20	1								00.CE.00008	clamping lip, 120 cm
20		1							00.CE.00012	clamping lip, 135 cm
20			1						00.CE.00019	clamping lip, 150 cm
20				1					00.CE.00023	clamping lip, 165 cm
20					1				00.CE.00028	clamping lip, 180 cm
20						1			00.CE.00034	clamping lip, 200 cm
20							1		00.CE.00037	clamping lip, 230 cm

Tuchel Maschinenbau GmbH

Holsterfeld 15 · 48499 Salzbergen

Tel. (0 59 71) 96 75 - 0 · Fax 96 75 - 30

20								1	00.CE.00041	clamping lip, 260 cm
21	1	1	1	1	1	1	1	1	00.FV.00002	bearing protection
	1	1	1	1	1	1	1	1	00.DF.00009	half bearing
22	1	1	1	1	1	1	1	1	00.DA.00005	flange bearing
	1	1	1	1	1	1	1	1	00.DF.00002	half bearing
23	1	1	1	1	1	1	1	1	92.02.R0000	support plate
24	1	1	1	1	1	1	1	1	93.04.K0000	motor guard bar

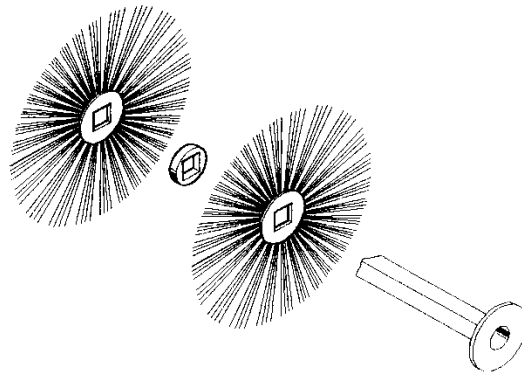
13. Brush segments

13.1. Replacement of brush segments

Loosen the motor and the bearing from the side sheet of metal. The main brush is free now. To exchange the brush rings, the support plate must be loosened.

13.2. Replacement of the brush segments (indirect / mechanical drive)

Loosen the chain housing from the side part. Release the chain and remove. Take off the sprocket wheel and then proceed as described, see point 17.1.



While assembling, please ensure that a space ring is put in between each of the brush segments. Thereafter, the support plate has to be re-screwed. Before installing the new brush, the bearing pivot and the drive shaft of the hydraulic motor must be greased.

