



WOOD CHIPPER

WC-L8

USER MANUAL



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ENG | ENGLISH

TRANSLATION OF THE ORIGINAL MANUAL

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1. GENERAL SAFETY INSTRUCTIONS

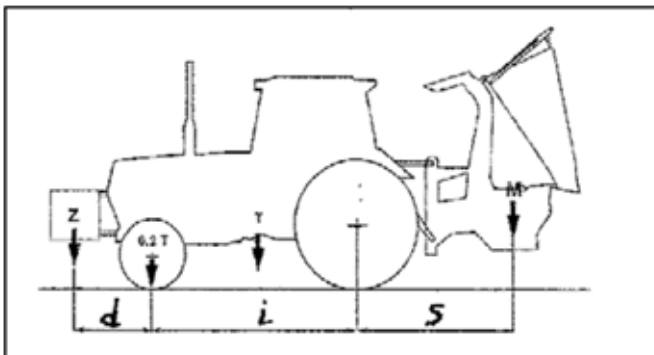
1.1 Commissioning the chipper

The machine has been designed and built in accordance with the Machinery Directives 89/392/EEC and 2006/42/EC that include the fundamental safety requirements. The chipper must have a sound and standardized safety and operating handle.

The CE mark and the Declaration of Conformity are based on the highest safety standards and on a Hazard Identification and Risk Assessment (HIRA) so that the residual risks are included in this manual.

The use of the wood chipper is based on a 540 rpm drive of the power take-off (PTO).

For conveying the wood chipper with a tractor, the tractor must be aligned with the chipper in accordance with the calculation below:



$$Z = ((M \times s) - (0.2 \times T \times i)) / (d + i)$$

Where $M \leq 0.3 T$

The machine manual must be kept with the chipper and operators must study this manual so that they know what is allowed and what is not allowed with the machine. The operator must also be aware of the safety instructions and be up-to-date regarding the maintenance instructions. If the machine manual is missing, the operator must report this to the employer. If there is a residual risk, a warning decal will have been stuck.

1.2 Correct use of the machine

The chipper complies with the generally recognized safety requirements in accordance with the Machinery Directive 2006/42/EC that includes UNI EN 1553, UNI EN 13525 and UNI EN ISO 11684 and is provided with the CE mark accordingly. Nevertheless, the use of the machine may lead to risks for the user or third parties or damage may occur to the machine, the material and/or people. The owner of the chipper must make sure that every operator is familiar with the operation of the machine because of safety reasons. The specifics should be in accordance with this User Manual.

- The chipper may only be used for activities that are described in this manual. Other uses are not permitted without having consulted the manufacturer first.. The manufacturer cannot be held liable for damage due to improper use.
- Only use the chipper if it is in perfect conditions technically and always observe all safety instructions. Keep the feed channel, the place where the control devices are, the operator location of the tractor, the foot pedals and the steps clean and in order.
- Do not leave material (such as tools) lying around.
- Check the chipper every day on bolts that have become loose, cracks, wear, leaks and other damage.

-
- Check twice a day (and certainly every 3 hours) whether the strings are sufficiently tight and, if required, adjust them. Make sure that faults that put safety at risk are resolved immediately!
 - Check the installation of all screens.
 - Check whether the power take-off shaft is connected properly and safely.
 - Check whether the machine has been properly lubricated.
 - Check the condition of the decals and replace them if required.
 - Check the operation of the safety handle.
 - Check the cleanliness of the feed channel.

Carefully follow the instructions in this manual and of the manufacturer, i.e. Boxer.

1.3 Organizational measures

1. The manual must always be within hand reach at the workplace.
2. As a supplement to the manual, the generally applicable legal provisions related to preventing accidents (especially the Dutch Working Conditions Act) and the legal provisions to prevent environmental contamination must be observed. The applicable traffic regulations must, of course, also be observed.
3. Personnel that works with or on the machine must carefully read the manual and, in particular, the chapter with the safety instructions. This also applies to personnel who works with the machine so now and again or who performs maintenance on the machine.
4. Personnel who works with the machine may not have loose hair, wear loose clothing or wear jewelry (in particular, rings). There is a risk that the jewelry will be caught on the machine or that hair and clothing is pulled into the machine. Remove tools such as pruning shears from clothing so that they cannot fall out during the work. Safety workwear, hearing protection, safety goggles, work gloves and safety shoes must be used by the operator and the people who work close to the machine.
5. All information on the machine with regard to danger and safety must be observed in relation to residual risks. This information can also be requested from the manufacturer or supplier if required.
6. All information on the machine with regard to danger and safety must be legible and must remain legible.
7. The machine must be switched off immediately in relation to changes and, in particular, damage or faults that mean that safe use is no longer possible and the damage/fault must be reported immediately to the person responsible for this.
8. Changes to the chipper that may put safety at risk may not be made without permission from the manufacturer. This also applies to the integration and setting of valves and the welds/joints to load-bearing parts. Needless to say, the owner/user of the machine has the right to add (or have added) additional facilities to the machine, but this is an individual decision where the results of a hazard identification and risk assessment (HIRA) are important.
9. Observe the prescribed checking intervals as specified in the manual (the regular maintenance and lubrication schedules)!
10. Parts that are replaced must comply with the technical requirements set by the manufacturer. This is always the case in relation to original parts.
11. If direct risks and hazards are not prevented, this may lead to serious physical injury or death.
12. Do not go near the power take-off shaft, feed roller or discharge spout and make sure that bystanders are not near to where the activities are taking place.
13. Only allow trained and instructed personnel to work with the chipper. Clearly define all competences with regard to operation, maintenance, management and repair! Make sure that only competent people work with and on the machine!
14. When performing activities with the chipper in a contaminated or not flat and/or in an unstable environment, sufficient personal protective equipment must be available where the safety and health of everybody is safeguarded.

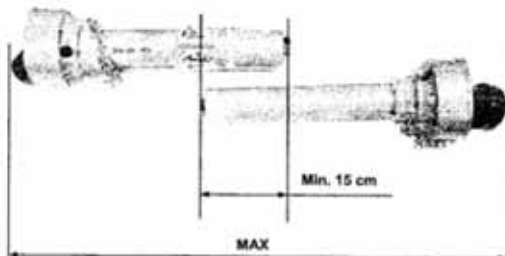
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15. Personnel who is still being trained or who must be further instructed may only work with the chipper under the supervision of an experienced employee!
 16. The chipper's sound level is higher than 80 dB (A). This means that hearing protection must be prescribed and made available.
 17. Locally ballasting the chipper except for what it has been equipped with is not permitted.
 18. Use the supplied 540 rpm power take-off. It has been aligned at the suitable length with the 3-point setting of the machine and tractors. Pay attention to the clearance in the shaft with universal joint.
 19. Set up the wood chipper in such a way that the power take-off shaft is positioned in a straight line. This boosts safety and the service life of the power take-off shaft.
 20. When the feed roller starts to regularly stagnate, the V-belt tension is insufficiently tight. It must be adjusted immediately.
 21. Do not leave the machine combination unattended when it is running.
 22. Check all lubrication points every 4 to 8 hours.
 23. Keep an eye on the fuel level of the tractor tank so that no venting activities are required after an empty tank.

1.4 Personnel selection

1. The machine may only be used and maintained by personnel that has been appointed for this by the owner. The persons must:
 - 16 or older.
 - Be healthy physically and mentally.
 - Be competent through nationally applicable provisions such as a tractor driving license, etc.
 - Have received instructions regarding the use or maintenance of the machine and to have proved to have relevant knowledge and skills.
 - Live up to the expectation that they can be entrusted with these tasks.
2. Only trained or instructed personnel may work on the electrical engineering systems, hydraulic systems and the cutting device of the machine under the supervision of a professional. They must, of course, keep to the technical instructions.

1.5 Safety Instructions

1. Standard use of personal equipment:



2 lubrication points



Hazard symbol

2. Slowly turn up the speed control by means of the rpm of the tractor to a higher level before starting to work. Next, crank up the speed to 540 rpm and lock this setting.
3. Before switching on the machine, check that the machine or a person is not being put in danger!
4. The tractor must be positioned on a flat surface and the handbrake must have been engaged during operation.
5. If working alongside the public road, make sure that the required warnings and diversion systems have been put in place for vehicles and pedestrians.
6. Make sure there is sufficient space around the chipper so that the operator can move freely to insert branches. Remove any branches or obstacles that are in the way.
7. Never insert materials in the chipper that may include metal wire, stones, nails or other metal objects and therefore could damage the blades and can become dangerous flying objects.
8. Never insert wood material with dimensions that are too large into the chipper so that the blades cannot be damaged or can become dangerous flying objects. We recommend inserting branches or logs up to a cross section of 80 mm.
9. Never insert too much material. The speed will then drop too much and this will lead to obstructions.
10. Always insert the bottom part (thick section) of a log or branch first into the chipper.
11. Wood chips may accumulate in the feed hopper. This is the only time that they must be pushed into the machine using a piece of wood.
12. Never try to push forward material using your hands or feet, a rake, spade or similar and therefore forcing it. Do not do this even when the material is too bent or it does not fit. Cut them into smaller pieces!
13. When the tractor stops, the chipper must be emptied before it is started. Follow the start procedure.
14. The chipper may not be used to convey people or goods!

15. Check the operation of the feed protection rod and the feed roller height rod before starting the activities.



16. Take the required measures so that the chipper can only be used in a safe manner and operates properly. The chipper may only be used in relation to safety and protection when the required facilities are present.
17. Prevent everything that may represent a risk while working!
18. Loading the chipper in combination with a trailer must, by preference, occur backward in connection with the possibility that it may tip over backward.
19. If there is a risk to people, the operator must issue a warning signal. If required, the work must be stopped!
20. If there are any faults, the machine must be switched off and protected immediately. Defects must be repaired immediately!
21. Check the chipper at least once every workday in relation to visible damage, defects or changes. Report defects or changes immediately to the person responsible for this.
22. If possible, park on a flat surface and engage the parking brake.
23. If visibility is poor and at dusk, always switch on the lights either of the machine or at the work site.
24. If the light system of the chipper does not provide sufficient light to work safely, the work site must be additionally lit.
25. If the visibility of the tractor driver is insufficient as a result of specific conditions, the driver must be supervised by a guide who has been instructed appropriately in advance.
26. When driving on the public road, paths and/or squares, the driver must observe the legal traffic regulations and the machine must be adjusted in advance in relation to the applicable standards for use of the public road such as lighting and warnings.
27. Avoid activities or machine movements that may impact the stability of the machine (at slopes and where the ground is insufficiently robust).
28. Make sure that the attachment is on the ground or is sufficiently supported and switch off the tractor engine in relation to maintenance activities. Remove the key from the ignition.
29. Keep the decals clean and clearly legible because they contain important and useful information to work safely with the machine.

1.6 Risk-limiting measures

1. Keep everybody at a safe distance from the end of the discharge spout when the chipper is running. Material that is discharged from the spout may cause injuries.
2. Position the discharge spout in such a way that it is not directed towards the working area or other people.
3. When using oils, greases and other chemical substances, always pay attention to the safety measures that apply in relation to the products!

2. WORKING METHOD

Study the manuals of the tractor and the chipper before starting to work with the machine. Especially the safety instructions and correctly safeguarded fastenings between the wood chipper and tractor are of essential importance for a proper and safe working method.

2.1 Start Procedure

1. Check whether the machine is positioned down and flat.
2. The chipper must be positioned on a flat and robust surface with the tractor's handbrake engaged.
3. Check whether the discharge spout is pointing in the right direction.
4. Check whether the power take-off handle is in neutral (stop).
5. Start the tractor and set the throttle in the low revolutions per minute range.



6. Switch on the chipper using the 540 rpm power take-off after having put on safety workwear, hearing protection, safety goggles, work gloves and safety shoes. This is mandatory for the operator as well as for people who are working close to the machine.
7. Check the operation of the feed roller handle.
8. First feed thin branches. Push shorter branches through by using longer branches or, even better, longer logs!
9. Only use wood without contaminants and without metal residue.
10. If there is any suspicious circumstance, use the stopping position of the feed handle.

2.2 Chipping

- Make sure you do not feed branch ends that are too thick..
- Feed the branches as much as possible straight from the front of the feed table into the machine.
- Do not force crooked branches into the machine, but place them to one side and cut them later into smaller pieces.
- If wood becomes stuck in the feed space, use a different piece of wood or a branch to wiggle it loose.
- Never feed materials in the chipper that include metal wire, stones, nails or other metal objects and therefore could damage the blades and can become dangerous flying objects.

2.3 Unblocking the wood chipper

- Switch off the chipper using the stop procedure and switch off the tractor.
- Wait until all moving parts have stopped.
- Sweep away the chips from the discharge spout and feed table. Open the inspection hatch on the bottom side and the side of the cutting cylinder if required. Loosen bolts for this.



- To get the cutting wheel moving, the power take-off shaft can be turned manually and/or the cutting wheel can be turned immediately. Tools must be used for this so as not to injure hands on the sharp blades.

2.4 Work Site

- Avoid activities or machine movements that may impact the stability of the machine (at slopes and where the ground is insufficiently robust).
- Do not park or work on a slope.
- Never position the chipper immediately under a tree that is being cut back or removed by your team.
- Make sure there is sufficient space around the chipper so that the operator can move freely when feeding branches.
- Remove any branches or obstacles that are in the way.

3. GENERAL AND REGULAR MAINTENANCE

3.1 Maintenance Instructions

- If damage occurs because timely maintenance has not been performed, the guarantee will be null and void.
- The tractor engine may no longer be running when maintenance of any kind is being performed.
- Never work on the machine when it is positioned on soft and/or loose soil.
- Always make sure that the wheels are blocked by means of the handbrake (and with engaged brake pedals!).
- Do not bypass the safety operations and consult your dealers if the safety operations do not work properly.
- Never position yourself under the machine that has been lifted by using the lifting device.
- Properly clean the lubrication nipples before you start to lubricate.
- Make sure that the machine combination is free from loose material.

Daily Check

- Check the operation of the feed stop, feed start and feed return and adjust the rod lengths if required.
- Check whether chips have accumulated. If required, remove them.
- Check for damage. Each occurrence of damage must be reported. In consultation, determine which measures are required.



Check after the first ten operational hours



- Check the belt tensions: 10 mm clearance.
- Check all lubrication nipples with the grease gun: 6x and universal joint 2x.

Check after 50 operational hours

- Checking the points above.
- Inspect the sharpness of the cutting blades and, if required, replace or grind them.
- Safety decals that are illegible must be replaced and must not be painted over in relation to safety specifications!

Check after 150 operational hours or annually

- Checking the points above.
- Replace the gearbox oil (SAE 90).

4. MARKS



5. DISPOSAL/THE ENVIRONMENT

If the chipper is no longer suitable for further use, the environmentally harmful parts such as strings, bearings, etc. must be disassembled.

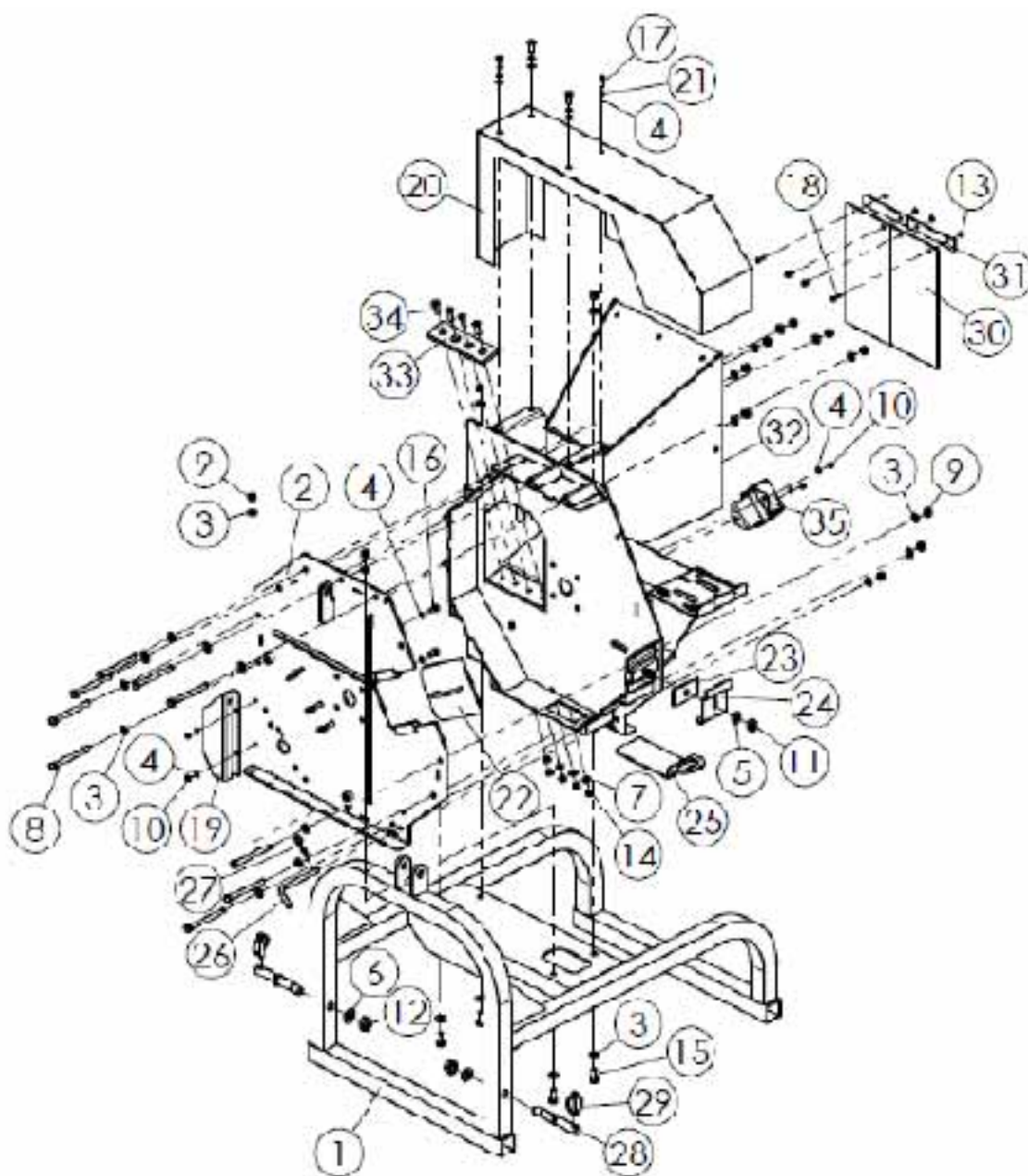
Each of the sorted materials must be offered separately to the relevant authorities/companies.

6. TECHNICAL FILE

The technical file, detailed drawings, structural calculations and relevant standard sheets may be available for inspection at the office of the supplier or manufacturer.

7. PARTS LISTS

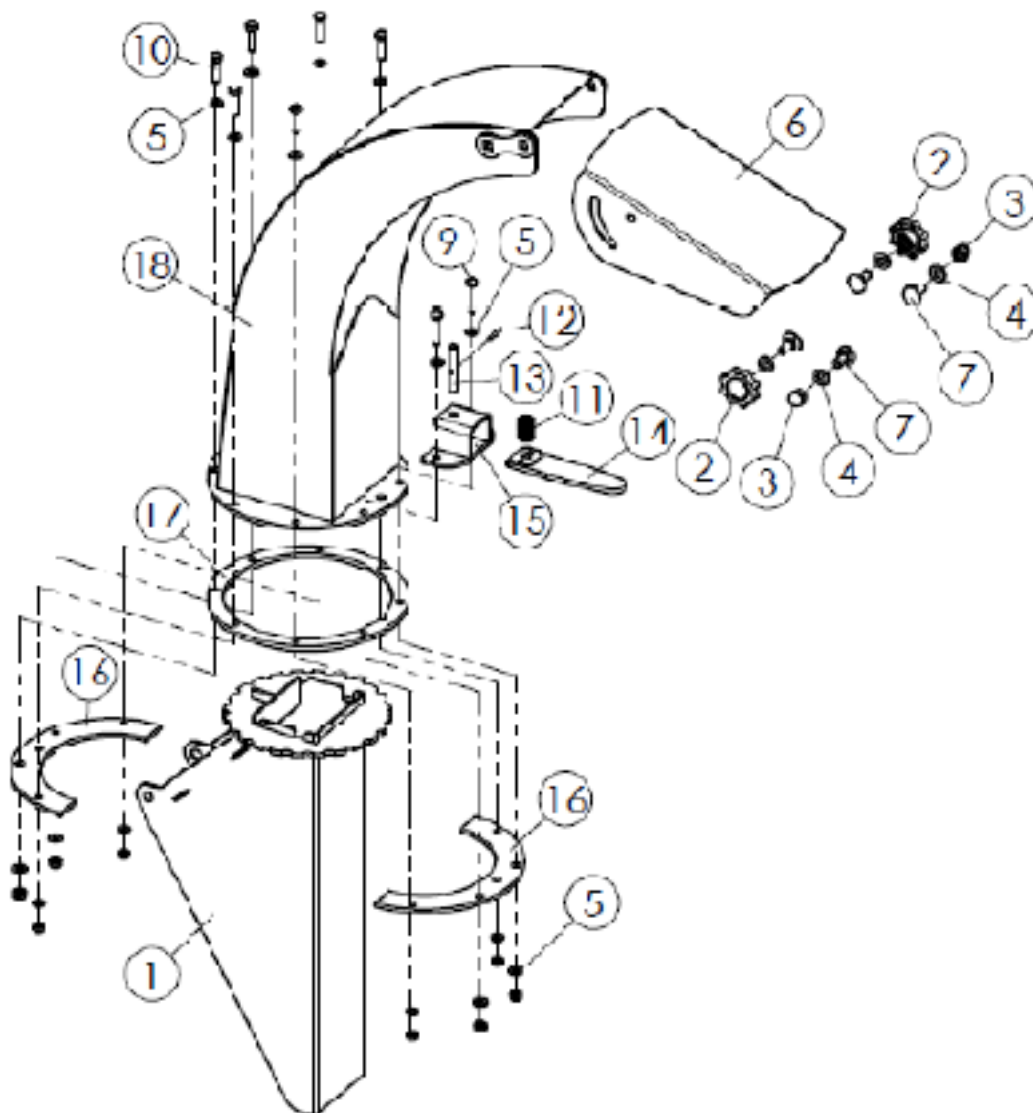
7.1 Parts list 1



No.	Part no.	Description	Quantity
1	WCM8-00011	WELDED WOOD CHIPPER UNDERFRAME	1
2	WCM8-00017	REAR COVER	1
3	GB97.1-85	M12 WASHER	26
4	GB97.1-85	M8 WASHER	10
5	GB97.1-85	M16 WASHER	1
6	GB97.1-85	M20 WASHER	2
7	GB97.1-85	M10 WASHER	4

No.	Part no.	Description	Quantity
8	GB5782-86	M12 X 130 BOLT	9
9	DIN985-87	M12 NUT	13
10	DIN985-87	M8 NUT	4
11	DIN985-87	M16 NUT	1
12	DIN985-87	M20 NUT	2
13	DIN985-87	M6 NUT	4
14	DIN985-87	M10 NUT	4
15	GB8783-86	M10 X 30 BOLTS	4
16	GB8783-86	M8 X 20 BOLTS	2
17	GB8783-86	M8 X 25 BOLTS	4
18	GB8783-86	M6 X 20 BOLT	4
19	WCM8-00163	BAFFLE	1
20	WCM8-00013	WORM WHEEL GEARBOX COVER	1
21	GB93-87	SPRING WASHER	4
22	WCM8-00033	INSPECTION HATCH	1
23	WCL5-00105	RUBBER WASHER	1
24	WCM8-00104	PRESSURE PLATE	1
25	WCM8-00188	REMOVAL PLATE	1
26	WCL5-00133	LOCKING PIN	1
27	-	SMALL R-PIN	1
28	WCL5-00101Ke	FASTENING PIN	2
29	200.56.011.	COMBINATION PIN	2
30	WCL8-00110	PLASTIC COVER	2
31	WCL8-00111	PRESSURE PLATE	2
32	WCM8 -02011	WELDED WOOD CHIPPER HOUSING	1
33	WCL8-02101	BOTTOM BLADE	1
34	GB70.3-2000	M10 X 35 BOLT	4
35	WCM8-00166	BOTTOM PLATE HOLDER	1

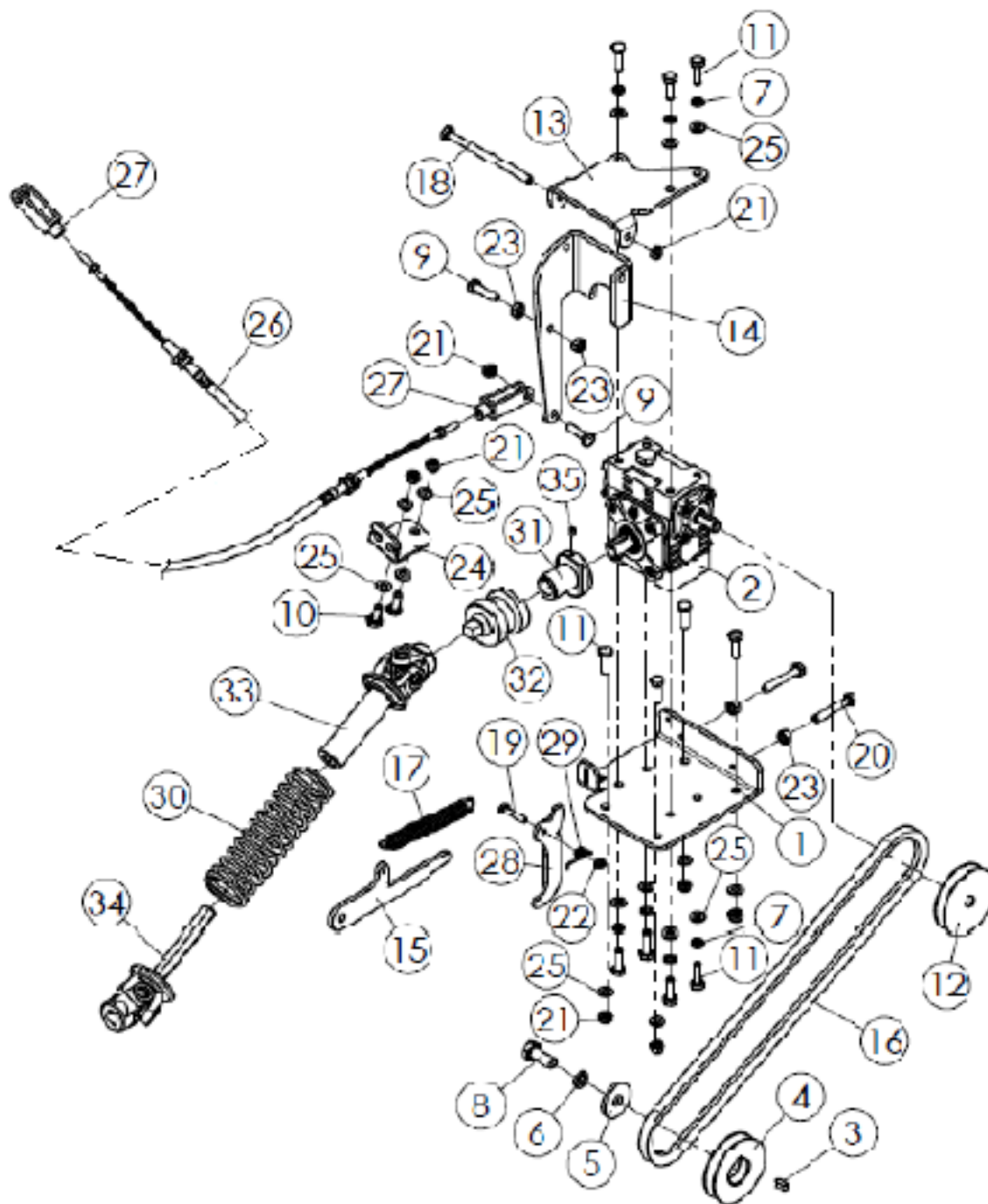
7.2 Parts list 2



No.	Part no.	Description	Quantity
1	WCM8-00015A	DISCHARGE SPOUT	1
2	WCM8-00042	TIGHTENING NUT	2
3	GB923-88	M10 NUT	2
4	GB97.1-85	M10 WASHER	4
5	GB97.1-85	M8 WASHER	16
6	WCM8-10103	DISCHARGE COVER	1
7	GB12-88	M10 X 25 BOLTS	4
8	DIN985-87	M8 NUT	8
9	GB5783-86	M8 X 35 BOLT	2
10	GB5783-86	M8 X 30 BOLTS	6
11	AM60.01.110	VEER	1

No.	Part no.	Description	Quantity
12	GB119-86	B4 X 28 PIN	1
13	WCM8-10104	LOCKING PIN	1
14	WCM8-00038A	HANDLE LOCKING PIN	1
15	WCM8-00041	BRACKET LOCKING PIN	1
16	WCM8-10101	PRESSURE PLATE	2
17	WCM8 -10102	SPACER	1
18	WCM8-00036A	DISCHARGE SPOUT WELDED PIECE	1

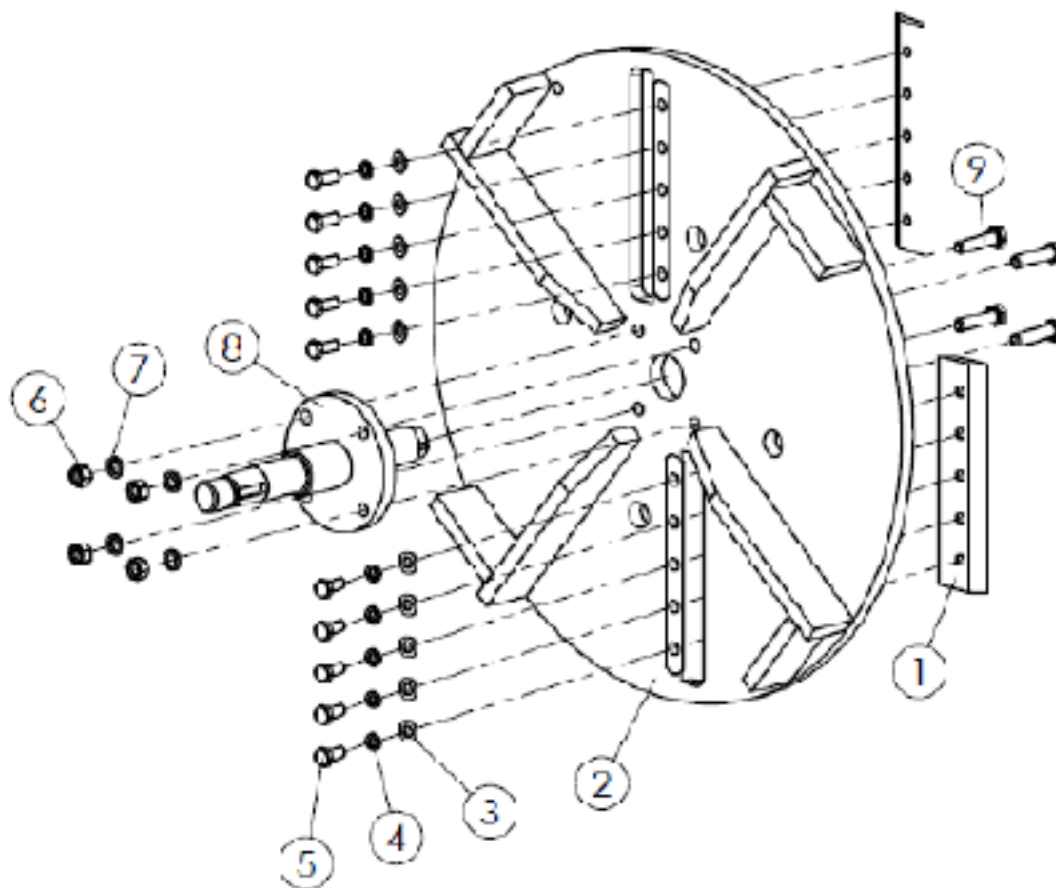
7.3 Parts list 3



No.	Part no.	Description	Quantity
1	WCM8-00187	WORM WHEEL GEARBOX SUPPORT PLATE	1
2	QIAKY01-91	WORM WHEEL GEARBOX	1
3	GB1096-2003	6 X 14 FLAT PIN	1
4	WCL8-00130	BELT PULLEY	1
5	MZ105.115	WASHER	1
6	GB93-87	M12 SPRING WASHER	1
7	GB93-87	M8 SPRING WASHER	7

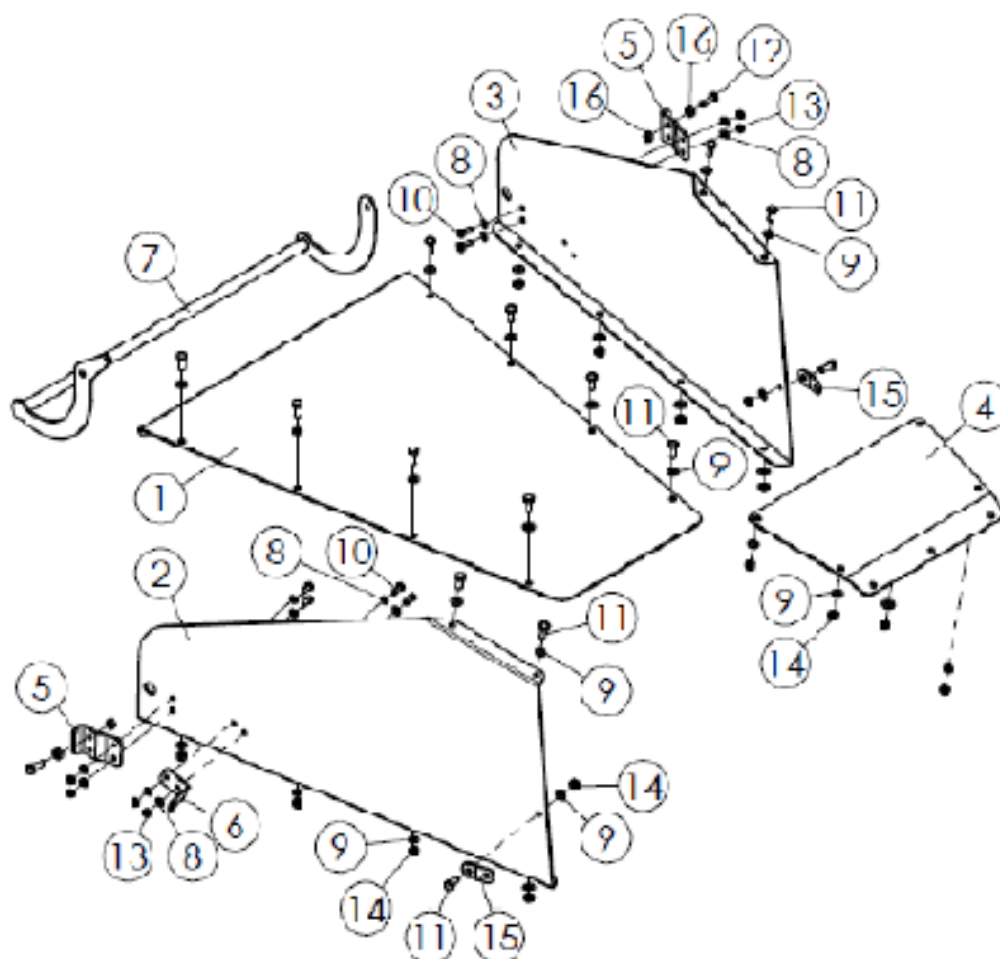
No.	Part no.	Description	Quantity
8	GB5783-86	M10 X 30 BOLTS	1
9	GB5783-86	M8 X 30 BOLTS	2
10	GB5783-86	M8 X 20 BOLTS	2
11	GB5783-86	M8 X 25 BOLTS	11
12	24PMF.03.105	BELT PULLEY	1
13	WCM8-00183	SUPPORT PLATE	1
14	WCM8-00182	DRAW PLATE	1
15	WCM8-00122	LOCKING PLATE	1
16	GB11544-97	A991 BELT	1
17	WCM8-00121	VEER	1
18	GB5782-86	M8 X 120 BOLT	1
19	GB5782-86	M6 X 30 BOLT	1
20	GB5782-86	M8 X 50 BOLT	2
21	DIN985-87	M8 NUT	8
22	DIN985-87	M6 NUT	1
23	GB6170-86	M8 NUT	4
24	WCM8-00181	LOCKING BASE	1
25	GB97.1-85	M8 WASHER	15
26	WCM8-00022	LOCKING CABLE	1
27	24PMF.03.112	CONNECTION	2
28	WCM8-00189	LOCK CANCEL PLATE	1
29	WCM8-00190	VEER	1
30	24PMF.03.109-1	VEER	1
31	24PMF.03.107	INNER COUPLING CENTER BOSS	1
32	24PMF.03.108	OUTER COUPLING CENTER BOSS	1
33	24PMF.03.017	OUTER SHAFT	1
34	24PMF.03.018	INNER SHAFT	1
35	GB78-2000	M5 X 8 BOLT	1

7.4 Parts list 4



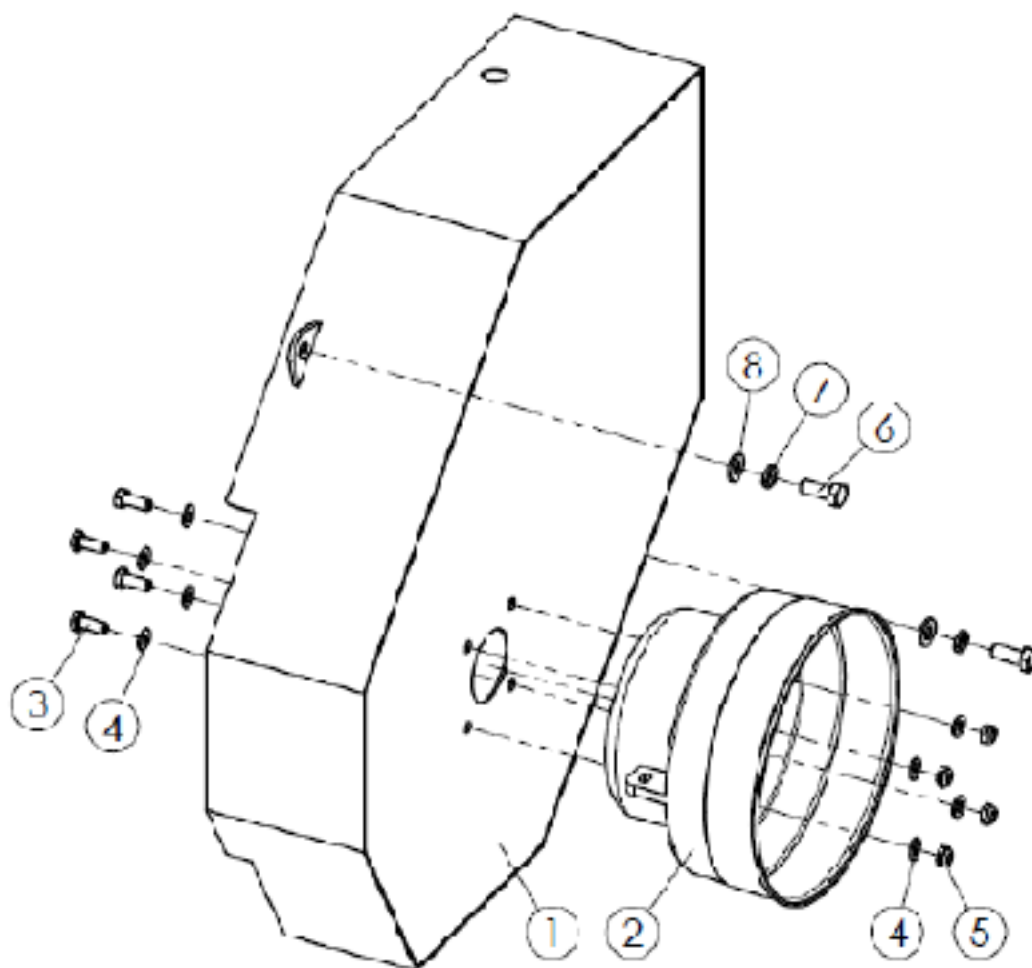
No.	Part no.	Description	Quantity
1	WCM8-01101A	CHIPPER BLADE	2
2	WCM8-01010A	FLYWHEEL	1
3	GB97.1-85	M10 WASHER	10
4	GB93-87	M10 WASHER	10
5	GB5783-86	M10 X 25 BOLTS	10
6	GB6170-86	M12 NUT	4
7	GB93-87	M12 WASHER	4
8	WCL8-01011A	FLYWHEEL SHAFT	1
9	GB5782-86	M12 X 50 BOLT	4

7.5 Parts list 5



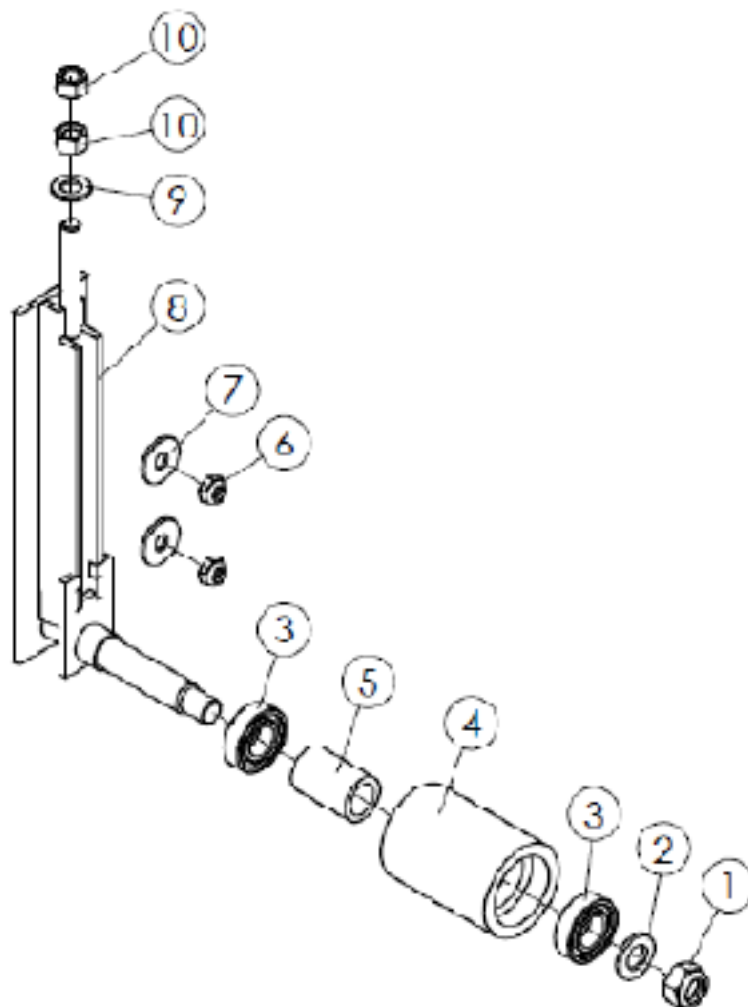
No.	Part no.	Description	Quantity
1	WCM8-00116	BOTTOM PLATE	1
2	WCM8-00117	RIGHT COVER	1
3	WCM8-00118	LEFT COVER	1
4	WCM8-00119	TOP PLATE	1
5	WCM8 -00193	CONNECTING PLATE	2
6	WCM8-00194	BRACKET FOR LOCKING CABLE	1
7	WCM8-00023	LOCKING HANDLE	1
8	GB97.1-85	M8 WASHER	12
9	GB97.1-85	M10 WASHER	26
10	GB5783-86	M8 X 20 BOLTS	6
11	GB5783-86	M10 X 25 BOLTS	14
12	GB5783-86	M10 X 30 BOLT	2
13	DIN985-87	M8 BOLT	6
14	DIN985-87	M10 NUT	14
15	WCL8-00120	FASTENING PLATE	2
16	GB6170-86	M10 NUT	4

7.6 Parts list 6



No.	Part no.	Description	Quantity
1	WCM8-03011	DRIVE BELT COVER	1
2	FM120.00.401	POWER TAKE-OFF SHAFT COVER	1
3	GB5783-86	M8 X 20 BOLTS	4
4	GB97.1-85	M8 WASHER	8
5	DIN985-87	M8 NUT	4
6	GB5783-86	M10 X 25 BOLTS	2
7	GB93-87	M10 SPRING WASHER	2
8	GB97.1-85	M10 WASHER	2

7.7 Parts list 7



No.	Part no.	Description	Quantity
1	GB6184-2000	M16 NUT	1
2	GB9701-85	M16 WASHER	1
3	GB276-1994	BEARING 104	2
4	WCL8-00106	CENTER BOSS	1
5	WCL5-00107	SPACER	1
6	DIN985-87	M10 NUT	2
7	GB96.2-2002	WASHER10	2
8	WCL5-00016	SUPPORT FOR CENTER BOSS	1
9	GB97.1-85	M12 WASHER	1
10	GB6170-86	M12 NUT	2