

INSTRUCTION MANUAL

WOOD CHIPPER

Model : CAEL BX-42

ATTENTION



**Wood Chipper BX-42 may present dangers during its use.
Read the instruction manual attentively before its use.**



SECURITY

Labels of safety and Plate of identification

ATTENTION

LIRE ATTENTIVEMENT LE MANUEL DE L'OPÉRATEUR AVANT LA MISE EN SERVICE DE L'APPAREIL.

AVANT CHAQUE UTILISATION :

- Contrôlez le serrage des boulons du boîtier et du système de coupe.
- Vérifiez le niveau d'huile du boîtier ainsi que le graissage de la transmission
- Assurez-vous que tous les protecteurs soient bien en place.

"POUR VOTRE SÉCURITÉ"

Read instruction manual before use or maintenance



Stop the tractor engine and remove the key before working on the machine..



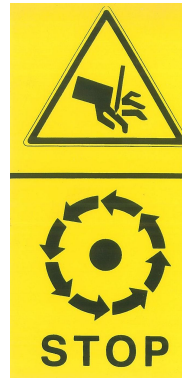
Risk of being caught by the transmission. Do not approach the machine and avoid wearing loose clothes which could become entangled in moving parts



PTO Speed max. : 540 tr/min MAX



Risk of projections. To be held apart from the operating range of the machine. Make sure that all the guards are in their place during the use.. 540 tr/min



Danger of cutting. To be held apart from the operating range of the machine. Make sure that all the guards are in their place during the use.

It is strictly prohibited to remove protections of safety, labels of safety and the plate of identification manufacturer.

Safety rules: :

In order to avoid accidents during work, it is necessary to observe the most elementary rules of prudence:

1. Operator

- The operator should not start the machine if they don't have all their mental and physical faculties during assembly, installation, operation, adjustment, maintenance, repairing, removal, or moving the implement:
 - Good eyesight and good hearing
 - Read and study the manual
 - Be attentive to its and others' security
 - Be familiar with the use and maintenance of the machine
 - It is strictly forbidden to drink alcohol, ingest drugs and other substances that might affect the use of the machine
- Do not wear loose floating clothing that could be caught by moving parts.
- Wear the appropriate security equipment :
 - Standardized working gloves
 - Safety shoes
 - Helmet
 - Hearing protection device
 - Protective glasses



2. Machine

- The coupling must be done only on the points provided for this purpose in accordance with safety standards.
- Prohibit using the machine as means of transport of people, animals or objects.
- Ensure wood chipper is properly mounted, adjusted and in good operation condition
- Operate only in daylight or good artificial light
- The machine should be in perfect working condition, maintained with original parts.
- Use the cardan shaft recommended by the manufacturer.
- The transmission protectors must be in good condition.
- Check the direction of rotation of the tractor power take-off.
- It is strictly prohibited to make modifications on the machine without authorization of the manufacturer.

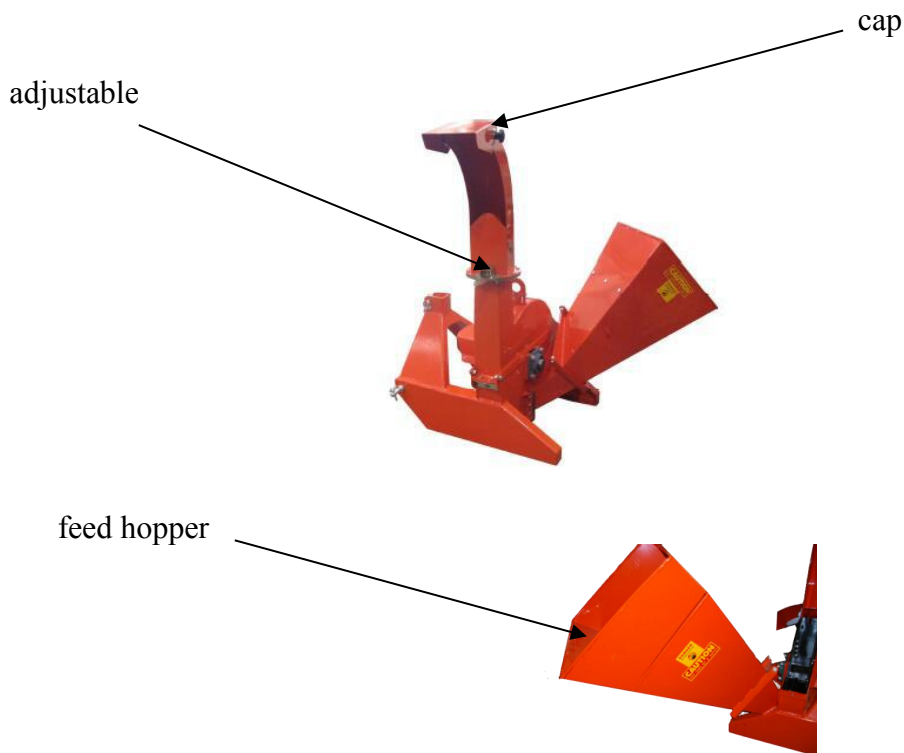
3. Utilization

- Prudence is required during the attachment of the machine to the tractor and during its uncoupling.
- Make sure that the tractor's PTO is not engaged or that the tractor's hydraulic distributor is in the neutral position.
- The maintenance, the cleaning as well as the adjustments must be made only if the engine of the tractor is turned off and the ignition key is removed.
- Make sure that no one is in the operating area of the machine.

Specifications:

Model	BX-42	BR-16
Power Required	18-35hp	18-35hp
No. of blades	4+1pcs	
Rotor Size	600mm(25")	
Weight	195kgs	235kgs
PTO speed	540/1000 tr/min	
Working Efficiency	6-7 m ³ /h	

OPERATION



INSTRUCTIONS

Before assembling and using the machine, it is important to read the instructions supplied and to observe the safety instructions.

The machine should only be used to cut wood and branches into small pieces.
The diameter shouldn't exceed 100 mm.

The foreign objects, such as the soils, stones, irons, plastics, etc.. shouldn't be inserted into the machine.

Always stop the tractor, disengage PTO, set brake, shut off the tractor engine, remove the ignition key, lower implement to the ground and allow rotating pieces to come to a complete stop before dismounting the tractor running.

Never place hands or feet under wood chipper with tractor engine running or before you are sure all motion has stopped. Stay clear of all moving parts.

TRANSPORT

Comply with state and local laws governing highway safety and movement of farm machinery on public roads.

The wood chipper is assembled on some support feet to assure a stable position.

Keep alert for uneven terrain, holes, rocks, roots and other hidden hazards. Keep away from drop-offs and hazards that could cause roll over. Use extreme care and maintain minimum ground speed when transporting or operating on hillsides, over rough ground and when operating close to ditches or fences.

Be careful and slow and slow down when turning sharp corners and changing direction on slopes. Don't start or stop suddenly on slopes. Avoid operation on steep slopes.

OPTIONS :



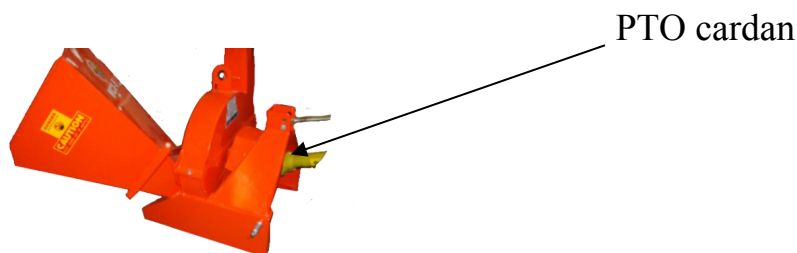
Support feet

ASSEMBLY OF THE MACHINE

The machine is designed to be mounted on the tractor's three-point hitch or dragged. The length of the PTO shaft must be adapted to the tractor.

Use a cardan with safety screw

3 POINT LINKAGE



When the pieces of wood are thrown out of hopper, it causes some dust, so it is recommended to use a guard to protect.



It is dangerous to wear loose clothing that can get into the machine.

Never put your hands, arms or feet into the hopper when the machine is running.

CHECKING BEFORE STARTING THE MACHINE

Check that the machine is placed horizontally and stably

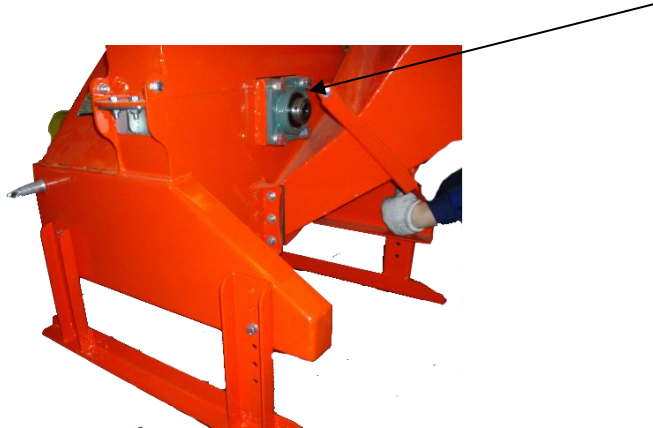
Check that there are no strange objects in the entrance of hopper

Check that all the protections of the PTO shaft are fixed

Check that all protective devices marked with a yellow warning plate have been correctly fixed.

LUBRICATION:

Bearing A



- Lubricate every 8 hours of operation on both bearing A on each side.

- Use EP2 Graisse

OPERATE THE MACHINE WITH THE REMOVED HOPPER OR FEED NEVER CHUTE

VERIFICATIONS AND REPAIRS



ALWAYS STOP THE MACHINE AND ENSURE THAT THE PTO SHAFT ARE IMMOBILIZED. THEN DISASSEMBLE THE PTO SHAFT.



To ensure a homogeneous insertion, it is important that the insertion cylinder is in perfect situation and that the cutting knives are set correctly.

We recommend that you sharpen the knives regularly.

This operation must be done by a professional person, in a specialized workshop.

REPLACEMENT OF KNIVES



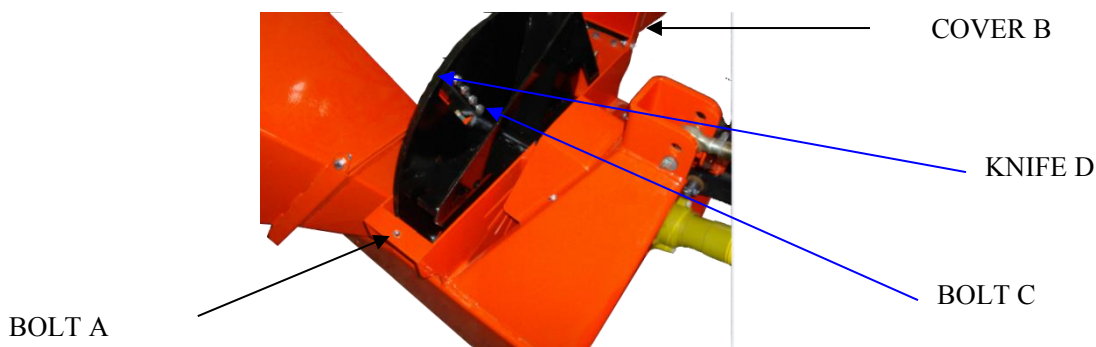
ALWAYS STOP THE TRACTOR AND WITHDRAW THE KEYS BEFORE REPLACING OR SHARPENING THE KNIVES



DON'T TOUCH THE EDGE OF KNIVES WITH YOUR FINGERS AND HANDS. ALWAYS USE THE GLOVES

DISASSEMBLING and RE-ASSEMBLING KNIVES :

ATTENTION : Before the start, always stop the tractor, take off the ignition key, wait for the transmission to stop and unplug it.



DISASSEMBLY :

- 1 Unscrew Bolt A and remove it
- 2 Turn the Cover B and ensure there is nobody in front
- 3 Unscrew the Bolts and remove them
- 4 Take off the Knife D(Always use some protection gloves to avoid the injury)

ASSEMBLY:

- 1 Put the Knife D in place.(Always use protective gloves to avoid the injury)
- 2 Put the Bolts C and tighten them
- 3 Return the Cover B and ensure that there is nobody in front
- 4 Put the Bolts A and tightened them

IT'S RECOMMENDED TO MAKE THESE OPERATIONS BY A PROFESSIONAL PERSON, IN A SPECIALIZED WORKSHOP.

CONNECT THE MACHINE TO TRACTOR:

The machine must be connected to the tractor by the PTO operated at 540 t/rpm, with required weight and power.



During the process of using, adjustment, maintenance, repair or displacement, the operator must use the appropriate Personal Protection Equipment (PPE).

ATTENTION:

AVOID STATIONING IN FRONT OF THE MACHINE.

AVOID THE PRESENCE OF PEOPLE.

DURING THE ASSEMBLY, THE PTO MUST ALWAYS BE DISENGAGED.

Before assembling the machine, check whether it is laying on the land and paralleled , whether the lubricants are at the correct level and whether all parts are in perfect condition. Also check whether the tractor is suitable for carrying the machine. Make sure that the rotations of P.T.O. are the same as the machine. After these checks, proceed as follows: - brake and switch off the tractor, remove the ignition key and go down; - adjust the arms of tie rods to prevent any oscillation to the right and to the left of the machine; - Assemble the cardan shaft and ensure that the bolts are inserted into the slots after checking the length. - apply the three point linkage. - lift the machine slightly off the ground and raise the support feet.

SPECIFICATIONS OF PTO CARDAN :

Insert the cardan shaft onto the spline shaft of the machine until the dowel locks into place.

Don't use the cardan without protections.

Never extend the cardan

If the machine is connected to tractor for first time, please ensure that:

- Under maximum steering conditions, the cardan is not fully closed to avoid damage to the speed increaser or tractor.
- In the case where the cardan is too long, it would be necessary to shorten it by cutting it.

The cardan shaft is the transmission part which drives the machine; it must be adapted to the machine: the size and length.

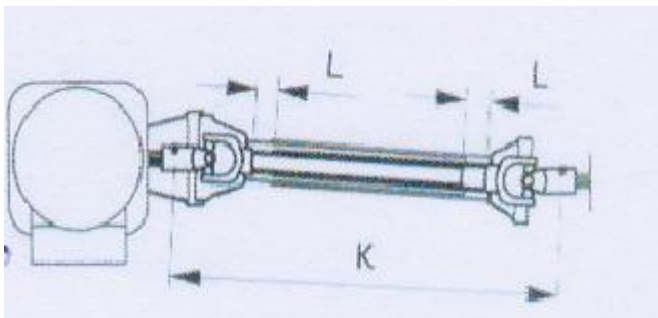
ATTENTION:

The cardan shaft can cause some situations of risk and danger. Therefore It's necessary:

- to read and keep the instructions for use.
- use only the cardan shaft supplied with the machine;
- replace worn, broken or missing guards;
- switch off the tractor engine before acting on the cardan shaft.
- do not allow the children or strangers to approach to the machine during the maintenance;
- When the cardan shaft is not used, put it on a support.
- wear adequate clothes (ex: work blues with protections.)

First assembly of the cardan shaft:

Measure the distance K between the PTO grooves, the machine placed on the ground, paralleled and the speed increaser aligned on the PTO of the tractor: adapt the length of the cardan shaft, the telescopic tubes allow the ends an interval L between 30 and 40 mm.



IMPORTANT:

THIS OPERATION MUST BE MADE DURING THE FIRST ASSEMBLY AND EVERY TIME THE MACHINE IS ADAPTED TO OTHER TRACTOR. ATTENTION: AFTER ASSEMBLING THE CARDAN, FIX THE CHAINS ON BOTH END.

IMPORTANT:

Lubricate the cardan shaft as shown in the instruction manual.

IMPORTANT:

Read the instructions carefully. After having assembled the cardan shaft, make some operation slowly, hinge the machine to check if the cardan shaft slide freely without brake.

CIRCULATION ON THE PUBLIC ROAD

In the event that we should drive on a public road, it should be necessary to respect the Road Rules.

THE TRANSPORT MUST BE EXECUTED WITH MAXIMUM ATTENTION TO AVOID DANGER TO PERSONS AND VEHICLES WITH PASSENGERS.

Before the transport, check that all parts of the machine are intact and in good condition.

STORAGE :

If the machine is immobilized for long periods of time, store it in a place protected from atmospheric zones and cover it to prevent damage.

Before the storage, we recommend cleaning thoroughly the entire machine and lubricating all mechanical parts adequately to prevent rust. Check that the storage temperature is between 0 ° C and 50 ° C.

Before shutting down the machine for long periods of time, it's best to proceed as follows:

- remove all possible chippers residues left in the rotor and equipment;
- clean the machine thoroughly;
- carry out a general visual inspection of the machine to detect any possible damage to the structure, identify any possible deep abrasion of the paint, check that the original safety pictograms are in their positions, and that they are complete and legible
- Inspect all rotating parts for entangled material. Remove all entangled material.
- Run the machine a few minutes to dry the moisture from inside the machine
- lubricate all the mechanical parts and the tightened pivots;
- Move the feed hopper up and lock
- Touch up all paint nicks and scratches to prevent rusting
- store the machine, if possible, in a covered place on a flat and consistent surface;
- Don't allow children to play around the stored place

RE-USAGE AFTER A LONG PERIOD OF INACTIVITY:

Before using the machine for the first time, or after a long period of inactivity, it should proceed as follows:

- check that the machine is not damaged;
- check the mechanical parts, which must be in good condition and not rusted;
- check the status of damage of the equipment; carefully lubricate all moving parts;
- check that all guards are correctly positioned, in good condition and intact.

MANUEL UPDATE :

The manufacturer reserves the rights to make any modifications to the machine at any time for technical or commercial reasons. These modifications do not oblige the manufacturer to have to intervene on the machines already commercial until then, not to consider this publication inappropriate.

Any possible integrations that the manufacturer deems necessary to be supplied in sequence must be kept with the manual and considered as an integral part of it.

Spare parts

Repairs and replacements must be done at your Concessionaire.

MAINTENANCE :

Check the tightened bolts:

1st time1 hour
2nd time.....10 hours
After all times.....25 hours
Lubrication8 hours
Check the damage, knives and fixation10 hours

Make sure there is plenty of ventilation.

A fire extinguisher and first-aid kit should be kept readily accessible while performing maintenance on this equipment

Periodically tighten all bolts , nuts and screws and check that all electrical and fuel connections are properly secured to ensure unit is in a safe condition

When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service

TROUBLE SHOOTING

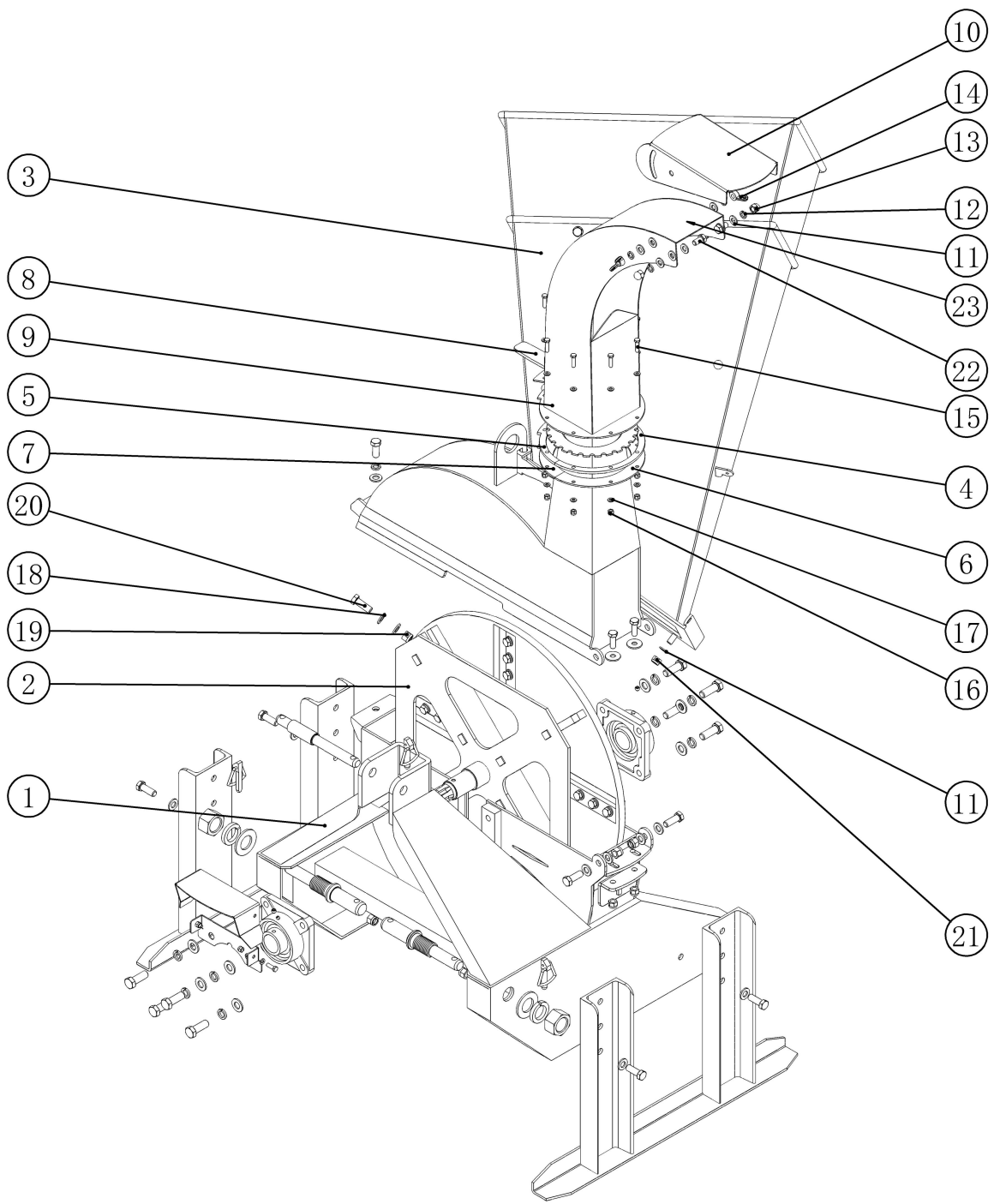
In the following section, we have listed many of the problems, causes and solutions that you may encounter.

If you encounter a problem that is difficult to solve, even after having read through these trouble shooting section, please call your local distributor and dealer. Before you call, please have the Operator's Manual from your unit and serial number ready.

PROBLEM	CAUSE	SOLUTION
Rotor doesn't turn	Obstructed discharge	Shut down and clear debris
	Rotor plugged	Clear rotor
	Broken shear pin	Replace the shear pin
Slow feeding	Knives are dull	Sharpen knives
	Blade angle wrong; improper angle	Re-sharpen knives to specified angle
	Discharge hood clogged	Clear discharge hood
Chipper requires excessive power or stalls	Obstructed discharge	Clear discharge hood
	Rotor plugged	Clean rotor
	Green material will not discharge	Allow material to dry or alternately feed in dry material
	Dull knives	Sharpen the knives
High power requires	Plugged rotor	Clean rotor
	Dull knives	Sharpen the knives
Vibration while running	PTO shaft vibration	Check PTO shaft
		Yokes must be aligned
		Check rotor to see if it wobbles
		Check to see if rotor is assembled correctly

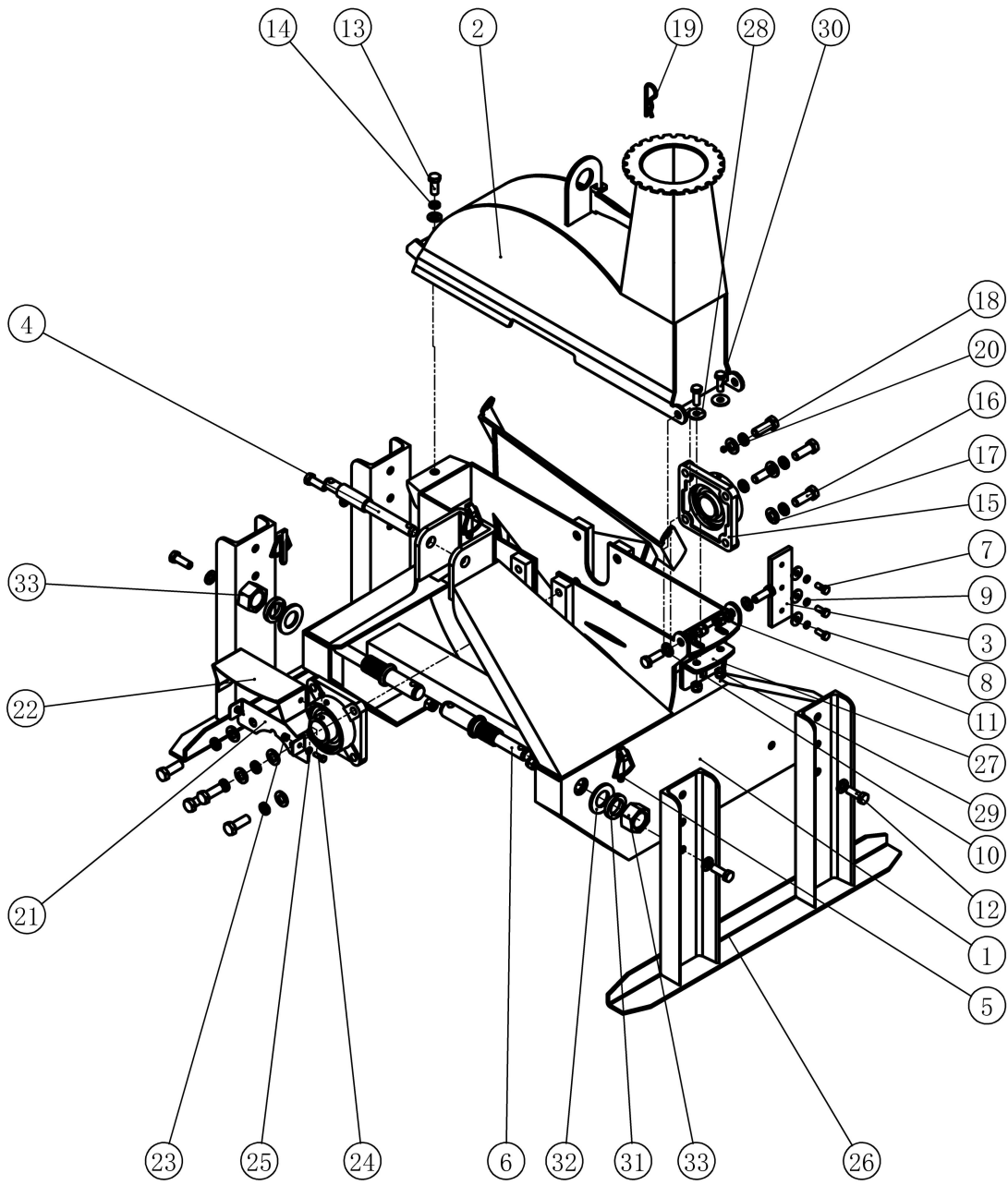
BR16-00-001 General machine assembly

Ser. No	Reference	Name	Qty.
1	BR16-01-001	Main welding assembly	1
2	BR16-02-001	Transmission assembly	1
3	BR16-03-001	Hopper assembly	1
4	BR16-00-103	Spacer 1	1
5	BR16-00-104	Spacer 2	1
6	BR16-00-101	Pressing plate 1	1
7	BR16-00-102	Pressing plate 2	1
8	BR16-00-011	Hand shank	1
9	BR16-00-012	Discharge pipe	1
10	BR16-00-106	Baffle	1
11	GB/T 97.1-2002	Plain washer 10	14
12	GB/T 93-1987	Spring washer 10	4
13	GB 923-88	Cap nut M10	2
14	GB/T 62.1-2004	Nut M10	2
15	GB/T 5783-2000	Bolts M6×25	8
16	GB/T 889.1-2000	Locknut M6	8
17	GB/T 97.1-2002	Plain washer 6	16
18	GB/T 97.1-2002	Plain washer 12	4
19	GB/T 889.1-2000	Locknut M12	2
20	GB/T 5783-2000	Bolts M12×35	2
21	GB/T 889.1-2000	Locknut M10	2
22	GB/T 5783-2000	Bolts M10×20	2
23	GB/T 5783-2000	Bolts M10×25	2



BR16-01-001 Main welding assembly

Ser. No	Reference	Name	Qty.
1	BR16-01-011	Main welding assembly	1
2	BR16-01-012	Cover welding assembly	1
3	BR16-01-101	Fixed blades	1
4	BR16-01-102	Sup. suspension pin	1
5	DIN11023	Lock pin 10	3
6	BR16-01-103	Inf. suspension pin	2
7	GB/T 5783-2000	Bolts M8×20	3
8	GB/T 96.1-2002	Big plain washer 10	3
9	GB/T 93-1987	Spring washer 8	3
10	GB/T 97.1-2002	Plain washer 12	9
11	GB/T 889.1-2000	Locknut M12	6
12	GB/T 5783-2000	Bolts M12×35	6
13	GB/T 5783-2000	Bolts M12×30	1
14	GB/T 93-1987	Spring washer 12	1
15	GB/T 7810-1995	Bearing seat F208	2
16	GB/T 5786-2000	Bolts M14×1.5×40	8
17	GB/T 97.1-2002	Plain washer 14	8
18	GB/T 93-1987	Spring washer 14	8
19		R pin 4	1
20	GB/T 78-2000	Set screw M8×8	2
21	BR16-01-139	Fixed plate	1
22	BR16-01-140	Protective cover	1
23	GB/T 889.1-2000	Locknut M6	2
24	GB/T 5783-2000	Bolts M6×20	2
25	GB/T 97.1-2002	Plain washer 6	2
26	BR16-01-013	Pedestal welding assembly	2
27	BR16-01-015	Plugged impression	1
28	GB/T 96.1-2002	Big plain washer 10	2
29	GB/T 889.1-2000	Locknut M10	2
30	GB/T 5783-2000	Bolts M10×30	2
31	GB/T 93-1987	Spring washer 30	2
32	GB/T 97.1-2002	Plain washer 30	2
33	GB/T 889.1-2000	Locknut M30	2



BR16-02-001 Transmission assembly

Ser. No	Reference	Name	Qty.
1	BR16-02-011	Cutter Seaming	1
2	BR16-02-101	Running blades	4
3	GB/T 5783-2000	Bolts M10×25	16
4	GB/T 97.1-2002	Plain washer 10	16
5	GB/T 93-1987	Spring washer 10	16

BR16-03-001 Hopper

Ser. No	Reference	Name	Qty.
1	BR16-03-011	Hopper Seaming	1
2	BR16-03-101	Mound Layer	1
3	BR16-03-102	Rubber Flap	1
4	GB/T 12-1988	Step bolt M8×20	3
5	GB/T 97.1-2002	Plain washer 8	3
6	GB/T 889.1-2000	Locknut M8	3
7	BR16-03-012	Extend Hopper Seaming	1
8	GB/T 5783-2000	Bolts M10×25	2
9	GB/T 97.1-2002	Plain washer 10	2
10	GB/T 93-1987	Spring washer 10	2

