LC600 Chipper
OPERATION, MAINTENANCE AND SPARE PARTS MANUAL

VALBY®

VALBY®

HD Belt Drive Trans 2:1

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Spencer, NY 14883
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It is very important to read this entire owners/operators manual before using this machine

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TABLE OF CONTENTS

1: TO THE OWNER-OPERATOR

Thank you for purchasing our product.

Before we begin this manual, the people at VALBY want you, the owner-operator, to know this piece of equipment can be very dangerous if safety procedures and warnings are ignored. Read this manual carefully page by page until you understand it completely. Failure to do so can and will result in personal injury and/or equipment damage.

All personnel including operators, maintenance crews, and bystanders, etc. should read this manual before start up.

This manual should be considered a permanent part of your machine and should remain with the machine if you sell it.

IMPORTER:

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Record Your Serial Number: Make: VALBY
Model: LC600

s/n: 6000_____

2: SAFETY INSTRUCTIONS

TERMS AND SYMBOLS USED IN INSTRUCTIONS

THINK

Safety is a combination of operator common sense and alertness at all times when the machine is being operated.

This message is used for general reminders of good safety practices or to direct attention to unsafe practices. The message will appear in your operators' manual and/or the sign will appear on the machine with a color combination of yellow and black

This Message denotes a specific potential hazard. The sign will be displayed on the machine in areas of potential hazard. The sign will have the color combination of yellow and black

This message denotes the most serious specific hazard. The sign will be displayed on the machine in areas of potential hazard.

Message labeled "Important" will appear in your operator's manual to provide specific instructions for performing adjustments, service, etc. If these instructions are not followed it could result in damage to the machine.

3: General Safety

Do not operate this machine until you have read the manual page by page and understand the manual. The owner of this machine is responsible for all operators and support personnel in the operation and safety precautions of this chipper. Proper training prior to operation of the chipper is obligatory.

- Inform everyone who works with the chipper about the risks and how they can avoid accidents.
- Before the chipper is running, ensure that the working place is clear of any bystanders and that you maintain a minimum safe zone of 50 feet.
- Do not let children or untrained persons operate the chipper.
- Always have the chipper mounted on the three point hitch of the tractor. Otherwise the chipper can tip over.
- There is a serious crushing hazard between the tractor and the chipper. Do not go between the tractor and chipper for any reason, for example when you are mounting the chipper to the tractor.
- Always check to make sure that the covers of the universal shaft is in place and functioning and that the safety chains are fastened.
- Safety goggles, ear protection, gloves and a hard hat in good working order are necessary when chipping. Use respirator mask if necessary.
- Do not wear loose clothing, loose sleeves, or scarves and do not allow long uncovered hair around any moving part of the machinery. Also avoid gloves of poor condition or loose fitting, because they can get caught in the branches of trees while feeding the chipper.
- Stay alert! Do not operate the machinery when fatigued or under the influence of alcohol or drugs of any kind.
- IMPORTANT! Never leave the chipper running and unattended.
- IMPORTANT! Failure to obey the warnings on the chipper or in the operators manual can and will result in personal injury and/or death and/or equipment damage.
- Check the material before you feed it. The material must be free of nails, stones and other materials that are not wood, paper or plastic. IMPORTANT! Feeding metal of any kind into the chipper is very dangerous and may pull the operator into the chipper.
- Make sure no one is in the way of flying chips. Point the discharge chute away from windows, doorways and other areas where people or animals may be.
- Keep work area clean and clear so there will be less likelihood of a tripping accident

- Disengage the PTO, shut off the engine and remove the keys before any maintenance is completed.
- Use only original replacement parts. IMPORTANT! Do not make any modification to your equipment. This will void any warranties.
- Check all moving parts. They should be fastened in place, in good working condition and all shields and guards must be in place.
- Point the discharge chute downwind to help prevent dust or chips from blowing toward the operator.
- If wood jams inside the chipper, shut off the engine and wait for all movements to stop before reaching into the chipper from any access.
- Do not use the chipper indoors when used with a tractor. It is possible to operate chippers inside when used with electric motors.
- You must be very careful when working indoors. Protect yourself against possible hazards like exhaust gas from insufficient ventilation and from dust that can catch fire by not cleaning your environment regularly.
- Always use a lock bolt before and during maintenance on the machine.

3.1 ROTATING KNIVES

There is a risk of a cutting injury or hits by flying debris. Do not reach into the feed chute for any reason. Failure to follow these instructions could result in serious injury or death.

3.2 SAFETY INSTRUCTIONS FOR FEED CHUTE

- IMPORTANT! Always read the general safety instructions.
- IMPORTANT! Do not ever put any part of your body inside the feed chute.
- Prior to operating the machine, become familiar with the function and controls of the machine. All functions must be in good and working condition.
- Test any stop functions
- Before starting up, check that there is no debris or foreign objects in the feed chute
- Do not work in front of the feed chute opening. Stand on the left side of the chute when feeding as the chipping process may jerk the wood up or to the right
- When checking malfunctions, all controls must be in “off” or “stop” positions
- Let go of the wood when the knives get hold of it. To feed short pieces, push them with longer ones.

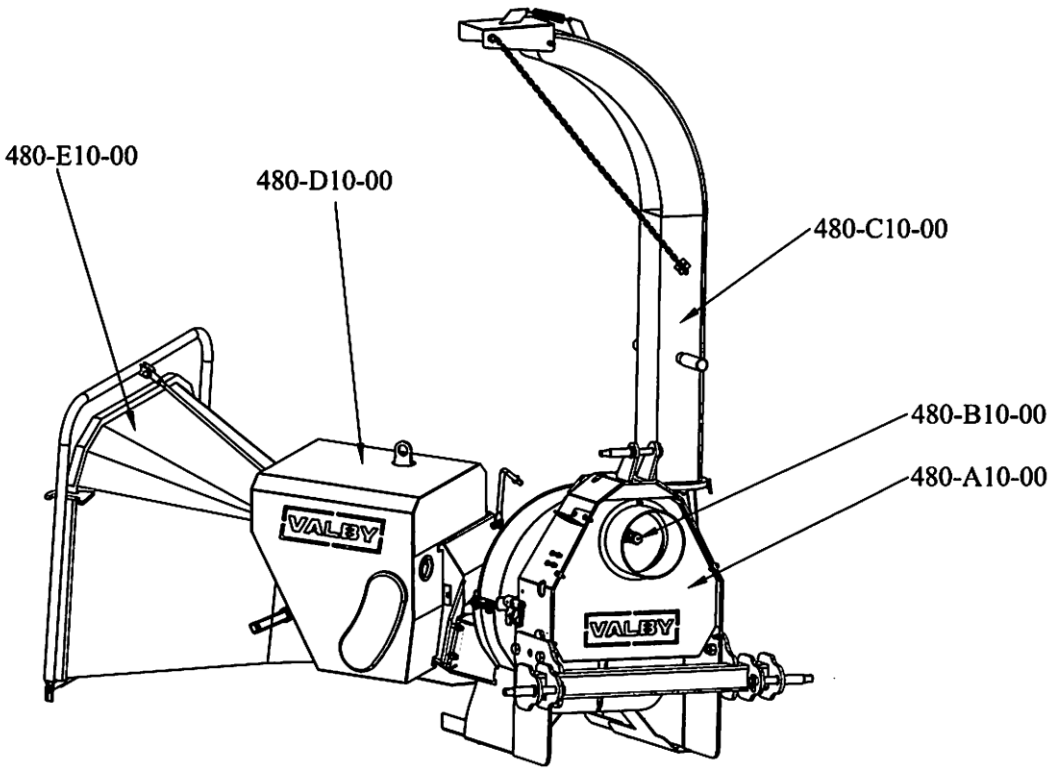
4: CHIPPER PRESENTATION

4.1 FIELD OF APPLICATION

The LC600 is a multipurpose chipper for small sized wood up to 6 inches. It will produce uniform chips to be used for a variety of applications. The LC600 is a heavy duty, mobile machine for handling all kinds of wood waste from parks, roadsides and other environmental cleanup.

4.2 MAIN COMPONENTS

480-A10-00	Main Body
480-B10-00	V-Belt & Pulley
C10-00-00	Discharge Chute
480-D10-00	Hydraulic Feed Unit
480-E10-00	Feed Hopper



5: TRAFFIC AND ROADS

Prior to every procedure always recall the general safety instructions given in chapter 3.

Follow these special instructions to avoid risk of accidents. Otherwise the manufacturer or retailer will not assume any liability for damage.

You should have full control of the unit in every situation when transporting.

Bumpy driving may damage the chipper/feeding device.

Always follow the traffic regulations established by law.

5.1 TRANSPORT POSITION

Place the feed chute in transport position.
Turn the discharge chute into transport position.
Before driving off, ensure the machine is stable and check that the chipper is firmly connected to the tractor and all fasteners are in place.

Make sure that the rear lights of the tractor are visible. Use a separate light panel if needed.

Always check before lifting that the lifting equipment is in order and use the marked lifting points whenever possible. Always use proper lifting equipment and check for its sufficient lifting capacity.

Know the weight of the load and check that the lifting capabilities are not exceeded.

Check the hoist cables and chains regularly. Mark any damages and discard it immediately.

6: PREPARATIONS FOR START-UP

Do not attempt to operate this chipper without proper training. Read and understand the owners' manual before operating the machine.

Failure to heed the warnings printed on the chipper or in the operators' manual may result in serious injury or death.

6.1 LIFTING

Prior to every procedure always recall the general safety instructions given in chapter 3.

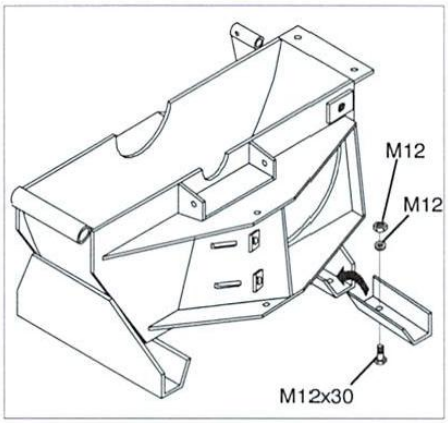
Make sure that nobody will enter the lifting zone.

6.2 MOUNTING THE CHIPPER

1. Mount the three point hitch bar to the chipper frame.
2. Tighten the nuts to 190 ft. lbs.
3. Mount the feeding devise to the chipper.
4. Connect the discharge chute to the chipper using the three bolts and nuts and adjust the lid using the chain.
5. A power take off shaft (PTO Shaft) transfers the power to the chipper. The chipper has a 1 ⅜" diameter six spline PTO hookup.
6. Check the correct length of the PTO shaft (refer to 6.3)

6.3 MOUNTING EXTENSION PLATE

If better stability is needed, Use extension plate. Also see spare parts.

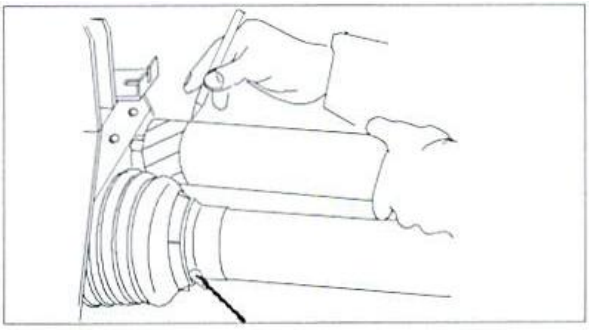


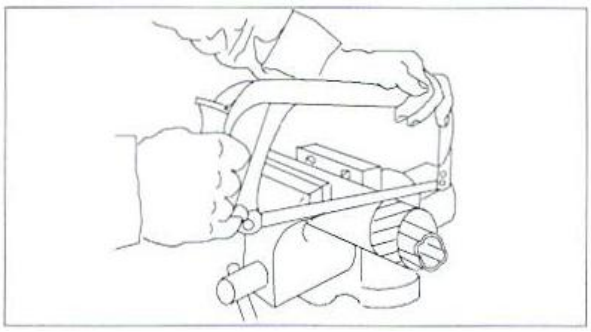
6.4 PTO SHAFT

If the tractor has a PTO brake, you have to use an overrunning clutch. Shaft recommendation is M4-31 (refer to Pg 35)

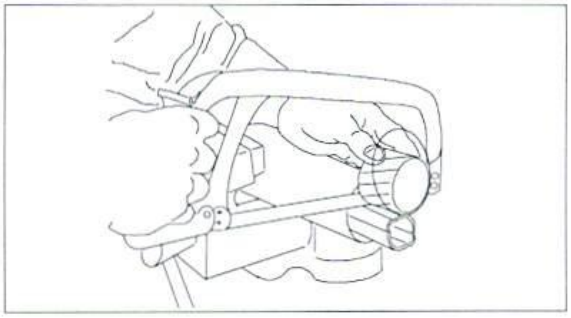
6.5 CUTTING PTO SHAFT TO LENGTH

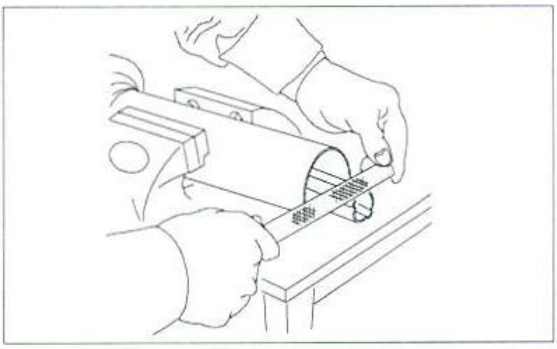
If the PTO shaft is too long it may bind when the three point hitch is lifted. Damage may be caused to the bearings of the chipper, PTO shaft or tractor. If the PTO shaft is too long, it must be shortened. Both PTO halves must be shortened by equal amounts.
Mount the chipper on the three point hitch of the tractor.
Make sure the chipper is in the lowered position on a firm and level surface.
Shut off the engine and remove the keys.
Connect one shaft half to the chipper PTO and the other half to the tractor PTO.
Place the shafts side by side so that one shaft end is 1" from the PTO end of the chipper. Mark the length required. The tubes must be short enough that they will not bottom out in any chipper position.
Cut the plastic tube.





Cut a profile tube piece of similar length as the plastic tube piece. Shorten the other PTO shaft in the same manor. Finish by filing the sharp edges.





7: OPERATING THE CHIPPER

7.1 SAFETY WHEN OPERATING

Prior to every procedure always recall the general safety instructions given in chapter 3.

Inform everyone who works with the chipper about the risks and how they can avoid accidents.

Never leave the chipper running and unattended. Do not ever stand between the tractor and chipper.

Before the chipper is running, ensure that the workplace is clear of any bystanders and that you maintain a minimum safe zone of 50 feet.

Do not let children or untrained persons operate the chipper.

Do not use the chipper if disconnected from the power source.

When using a tractor, always have the chipper connected to the three point hitch of the tractor. Failure to do this may result in the chipper tipping over.

Check that the covers of the PTO shaft are in place and in working order and that the safety chains are connected.

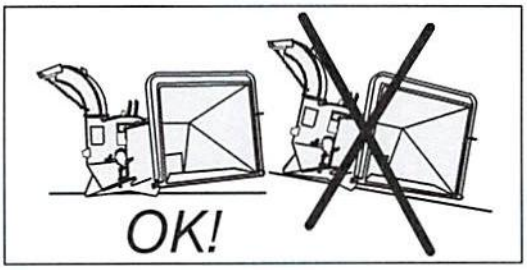
Safety goggles, ear protection, gloves and a hard hat in good working order are necessary
when chipping. Use respirator mask if necessary.

Do not wear loose clothing, loose sleeves, or scarves and do not allow long uncovered hair around any moving part of the machinery. Also avoid gloves of poor condition or loose fitting, because they can get caught in the branches of trees while feeding the chipper.

Stay alert! Do not operate the machinery when fatigued or under the influence of alcohol or drugs of any kind.

7.2 PRIOR TO OPERATING

1. Disengage the PTO, shut off the engine and remove keys.
2. Lower the chipper to the ground. Make sure the ground is solid and level so that is will not tip over. Please refer to the following graphic.



3. Check for free rotation of the disk by turning the chipper axel by hand. Also check for any foreign objects in the chipper and the feed chute.
4. Make sure all covers are in place and in working order. Do not remove any covers!
5. Direct the discharge chute into the desired position away from operator and any possible bystanders.

The PTO shaft of a new chipper needs to be lubricated prior to use.

When using a new chipper, always check the tightness of the bolts and fasteners after one operating hour.

7.3 STARTING THE CHIPPER

IMPORTANT! Whenever engaging the PTO on your tractor, you are turning a flywheel with a load of at least 150 lbs. and a geared up belt transmission. Engage the PTO slowly allowing the disk to rotate. Once you have the chipper running, you may completely engage the PTO and then bring up the rpm's to operating speed (540-1000 rpm). Always operate the tractor at full engine speed when chipping.

7.4 CHIPPING

Prior to every procedure always recall the general safety instructions given in chapter 3.

Beware of rotating knives and risk of cutting injury. Feeding wire of any kind into the chipper may drag in the operator. Do not reach inside the feed or discharge chute until all movements have stopped.

Always keep proper firefighting equipment on hand when chipping. Keep an eye on outside temperature of the chipper to prevent overheating of the knives. If there is any concern about heating of the chipper, stop chipping and let the chipper cool down.
Good maintenance and a clean work place are of the upmost importance for preventing a fire. Check for hot bearings.

Pour water down the feed chute if the chipper starts smoking.

Safety goggles, ear protection, gloves and a hard hat in good working order are necessary
when chipping. Use respirator mask if necessary.

Do not wear loose clothing, loose sleeves, or scarves and do not allow long uncovered hair around any moving part of the machinery. Also avoid gloves of poor condition or loose fitting, because they can get caught in the branches of trees while feeding the chipper.

If wood jams inside the chipper, shut off the engine, remove keys and wait for all movement to stop before reaching inside the chipper.

Watch out for flying debris

Before feeding, make sure that the material is free from stones, nails and other materials that are not wood, paper or plastic. Also avoid chipping wood that is frozen as it will not self feed well.

Do not stand in front of the feed chute when feeding. The feed rollers (when equipped) may jerk the wood up or to the right.

- Feed the wood standing on the left side of the chute.
- When chipping wood, push the trunk inside until the knives or feeding mechanism touches the wood. The chipper is self feeding, so let go of the wood as soon as the knives or feed rollers touch it.
- Point the discharge chute downwind to help prevent dust or chips from blowing toward the operator.
- Make sure no one is in the way of flying chips. Point the discharge chute away from windows, doorways and other areas where people or animals may be.
- Keep work area clean and clear so there will be less likelihood of a tripping accident.

Do not use the chipper in temperatures below -5° F (-20° C). Below these this temperature creates a risk of knife damage.

7.5 CLEARING THE CHIPPER

(With Hydraulic Feed)

- Prior to shutting down the chipper, run a large branch (3”-4”) into the knives and let it chip a few inches. Then reverse the feed and the knives will be cleared.

7.6 STOPPING THE CHIPPER

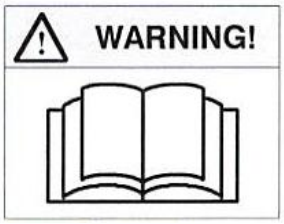
- Let the tractor return to idle with PTO engaged before turning PTO off. This is especially important on tractors with PTO brakes.

7.7 PARKING THE CHIPPER

- Ensure that the chipper is placed on a hard level surface.
- Ensure there is no material left in the chipper or in the feed chute.
- Clean the working area

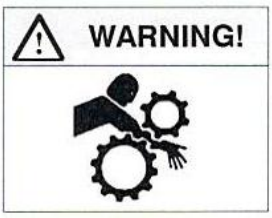
8: MAINTENANCE AND SAFETY

Prior to every procedure always recall the general safety instructions given in chapter 3.



Before performing lubrication work on any equipment, consult the manufacturers' instruction manual and follow the recommended procedures.

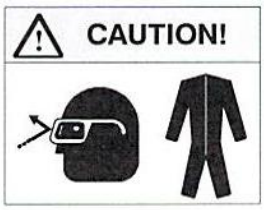
Ensure that the chipper is on a firm and level service



Before lubricating the machine, shut off the engine of the tractor and stop the machine.

When handling the knives use protective gloves. Never stand between the tractor and chipper. Modifications to the chipper are prohibited and will void warranty.

Pressurized oil can be hazardous. A pressurized oil jet can penetrate skin and cause serious injury or death.



Occasional skin exposure with oil is not dangerous. It is recommended to prevent long-time exposure use protective gloves and other protective clothing.

Keep flammable material away from heat, sparks and open flame.

8.1 BEFORE LUBRICATION & MAINTENANCE

Always disengage the PTO and turn the tractor **OFF** before you service or repair the chipper.

Wait for all movement to stop before reaching inside the feed or discharge chute.

Remove the keys so that the tractor cannot be started up accidentally.

Lock the disk for service or repair

Park the chipper on a hard and level surface for it will not tip over.

8.2 LUBRICATION

Hot oil and oil spray is hazardous.

Avoid skin contact with oil and grease. Always consult a physician in cases of oil in the eyes or prolonged skin contact.

Avoid mixing lubricants of different grade and quality. Use only recommended oils or oils with corresponding characteristics.

Follow the instructions and regulations of the manufacturers.

Always wear proper clothing and appropriate gloves.

Never use lubrication oils or grease to clean your hands. Metal particles and additives in the lubricants may damage the skin.

8.3 LUBRICATING THE BEARINGS

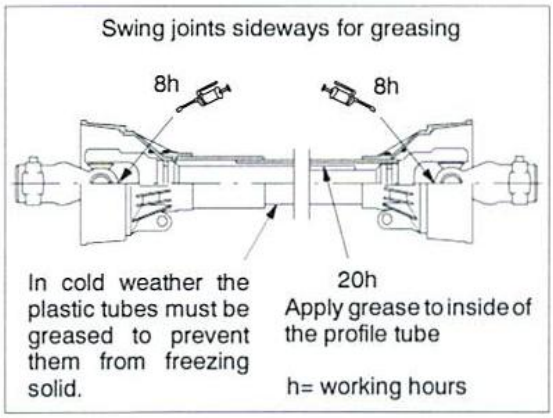
The bearings are factory greased, Use a similar lubricant such as Kendall L427. **IMPORTANT! Too much grease will cause heat, which reduces lubrication.**

- Lubricate the bearings prior to operating and every 200 working hours or once a year minimum.

1. Disengage the PTO, shut off the engine and remove the keys.
2. Open the upper housing and turn aside the upper housing.
3. Lock the disk with the lock bolt
4. Remove or turn aside the feed chute.
5. Remove the top of the bearing housing. Remove as much of the old grease as you can and replace it with new, but do not fill the housing all the way. Refer to Replacing The Bearings as advised in chapter XX
6. Replace the top of the bearing housing. Tighten to 38 ft. lbs.

8.4 LUBRICATING THE PTO SHAFT

- Lubricate the PTO shaft prior to operating and with the intervals shown below.



8.5 REPLACING THE BEARINGS

1. Remove the fastening bolts and upper housings
2. Mark the location of the tightening cone on the shaft.
3. Lift the disk
4. Bend the claw of the securing ring out from the notch on the axle nut and open the axel nut.
5. Remove the axle nut, securing ring, spacer ring, bearing, spacer ring, and tightening cone.
6. Install the tightening cone, spacer ring, and the bearing on the disk shaft. Note the thickness of the spacer ring.
7. Install the securing ring with the claws facing outward and the inside claw in the groove of the tightening cone, and install the axle nut.
8. The inner ring of the bearing should press tightly against the tightening cone.
9. Tighten the axel nut with a hook spanner until the bearing is tightly on the cone. However, the outer ring of the bearing should turn freely. Note the location of the tightening cone on the shaft.
10. Bend one claw of the securing ring onto a notch on the axle nut.
11. Install the other half of the dust cover and end plate on the bearing housing. Install the spacer ring on the shaft.
12. Lower the disk to the bearing housing.
13. Attach the other half of the dust cover to the upper bearing housing; install the upper bearing housing fastening bolts and tighten
14. Lubricate the bearing housing. An excessive amount of grease causes overheating and impairs lubrication.

8.6 ADJUSTING THE BEARING CLEARANCE

1. Remove the fastening bolts and the upper bearing housings.
2. Remove the grease from the bearing housing.
3. Lift the disk.
4. Bend the claw of the securing ring out from the notch on the axle nut and open the axel nut.
5. Remove the spacer ring if the bearing is at the feeder side.
6. Measure the radial clearance on top of the bearing between the rollers and outer ring with a feeler gauge. The clearance should be 0.02 to 0.03 mm. Measure the clearance by pushing the feeler gauge between the rollers(point A, Fig 1) through the bearing and then moving the gauge back and forth between the rollers and outer ring(Fig. 2). Do not force the feeler gauge through the clearance.
7. If the clearance exceeds 0.03 mm, bend the claw of the securing ring out from the notch on the axel nut.
8. The bearing is tightened by turning the axel nut clockwise with a 70 mm or 2 ¾" hook spanner until the right clearance is achieved. Do not tighten by hammering the axel nut.
9. Turn the axel nut clockwise until the notch is aligned with the nearest claw of the securing ring. Bend the claw into the notch. Do not bend the claw that was bent earlier.
10. Lower the disk to the bearing housing.
11. Install the upper bearing housing and tighten the bolts.
12. Lubricate the bearing housing. An excessive amount of grease causes overheating and impairs lubrication.

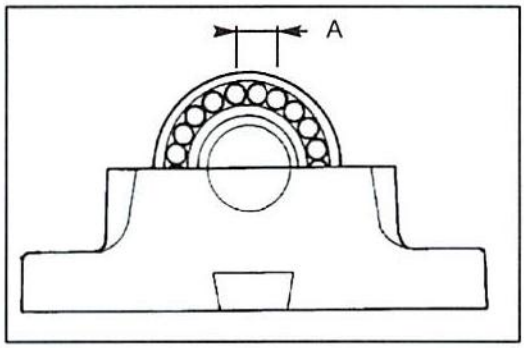


Fig 1

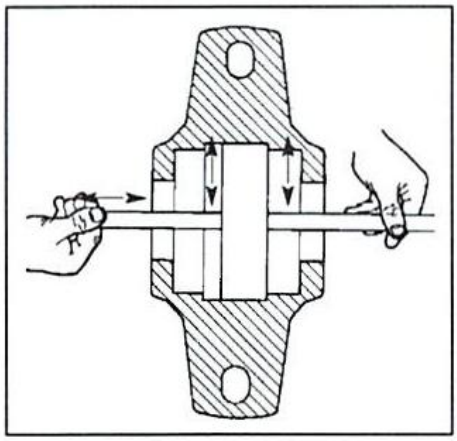
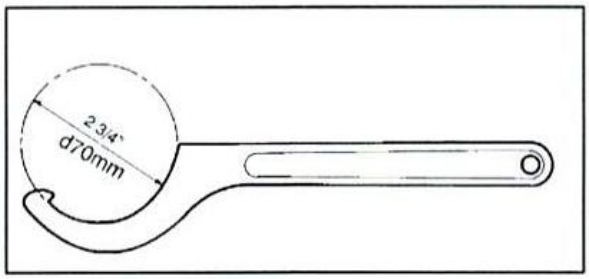


Fig 2



8.7 KNIVES AND ANVILS

ROTATONG KNIVES! Wait for all movement to stop before reaching into the feed or discharge chute.

The disk continues rotating by flywheel momentum after the PTO has been disengaged.

Use protective gloves when handling the knives

Failure to follow safety precautions could result in serious personal injury or death.

8.8 SHARPENING THE KNIVES

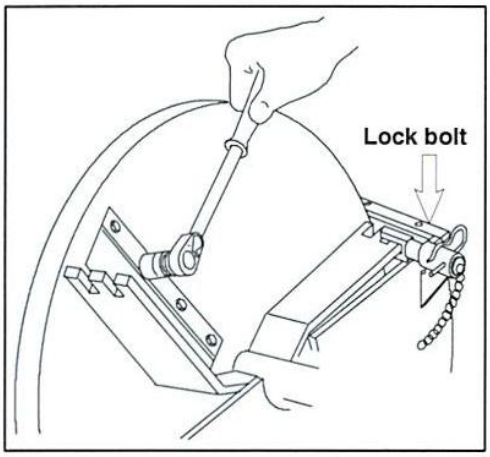
The knives need sharpening when:

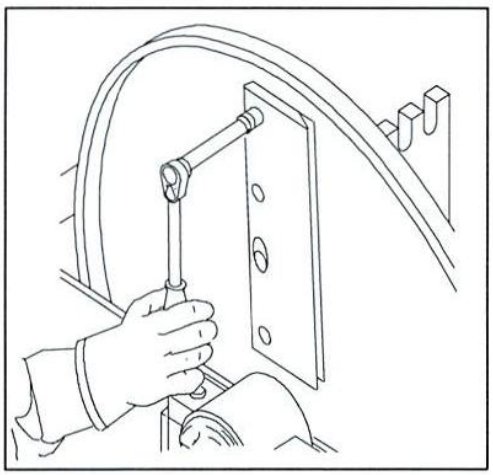
- The wood does not self feed well.
- The power demand increases.
- The chip surface is rough

By keeping the knives as original pairs they will wear equally and the disk will stay in balance.

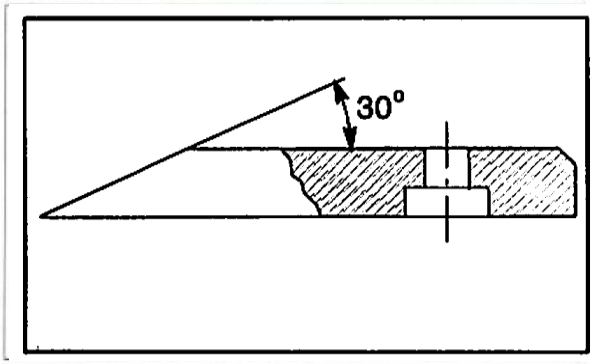
Avoid getting the knives hot when sharpening. Sharpen both knives the same amount.

1. Disengage the PTO, shut off the engine and remove the keys.
2. Open the upper housing. Turn the upper housing to the side.
3. Lock the disk with the lock bolt.
4. Remove or turn the feed chute to the side.
5. Remove the four locknuts behind the knife frame.
6. Remove the fastening bolts of the knives which are threaded through the disk. Beware of knuckle injury if the wrench should slip when turning.





7. Sharpen the knives at an angle of 30 degrees.

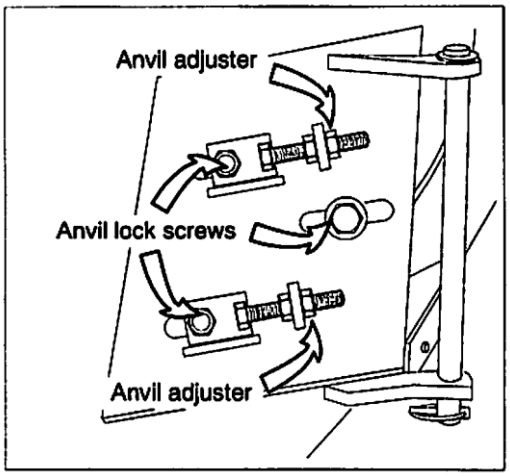


8. Check the condition of the fastening bolts and nuts. Clean the knife pockets before reinstalling the knives.
9. Fasten the knife and tighten the bolts to 38 ft. lbs.
10. If needed, adjust the anvil clearance as advised in the next chapter. The anvil clearance has to be adjusted after every 5 to 10 sharpenings, when the clearance between the knives and anvil exceeds 1.5 mm or 1/16".
11. Reassemble
12.

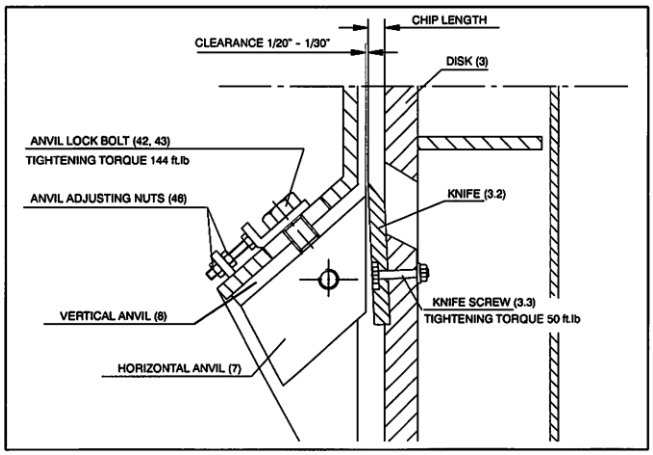
8.9 ADJUSTING ANVIL CLEARANCE

Normally you can sharpen the knives 10 times before the anvil needs to be adjusted. Adjust the anvil if the clearance to the edge of the knives exceeds 1.5 mm or 1/16" of an inch.

1. Disengage the PTO, shut off the engine and remove the keys.
2. Open the upper housing. Turn the upper housing to the side.
3. Lock the disk with the lock bolt.
4. Remove or turn the feed chute to the side.



5. Loosen the three fastening bolts of the anvil.



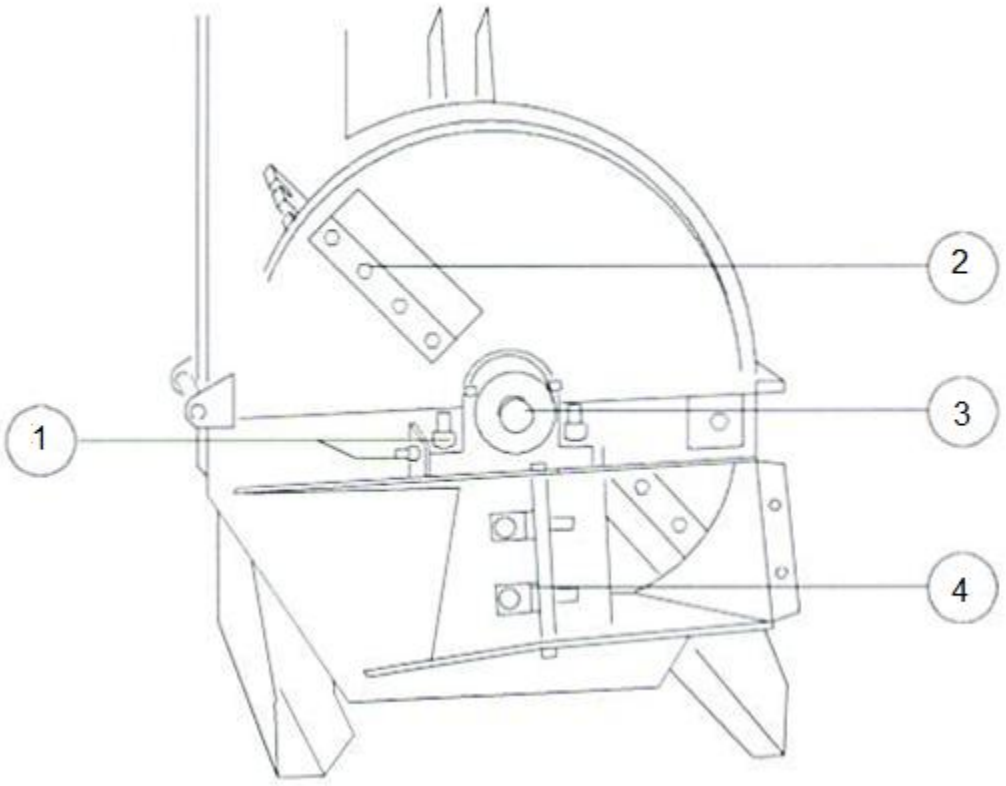
6. Turn the disk so that the knife and the anvil are opposite each other. Adjust the anvil to a clearance of 1/20 to 1/30 of an inch. If you do not have a gauge, use the thickness of a match book cover.
7. Retighten the anvil bolts to 155 ft. lbs.

8.10 SHARPENING THE ANVIL

If you notice wear or rounding of the inner edge of the anvil, sharpen the anvil so that the original angles are achieved.

8.11 TIGHTENING THE BOLTS

- The tightness of the fasteners and the bolts in the chipper must be checked once a week. **IMPORTANT! On a new machine check the bolts and nuts after one hour of use.**
- Refer to the lubrication schedule chapter 10(pg. 22). Tighten as indicated in the chart below



8.12 TORQUES AND CLEARANCES

Item	Description	Socket Size	Torque (Ft. Lbs.)
1	Check bearing housing bolt tightness	19 mm (¾")	50
2	Check knife bolt tightness	17 mm (11/16")	45
4	Check anvil bolt tightness	24 mm (15/16")	200
Item	Description	Measurement	
3	Check bearing radial clearance	0.02 – 0.03 mm	

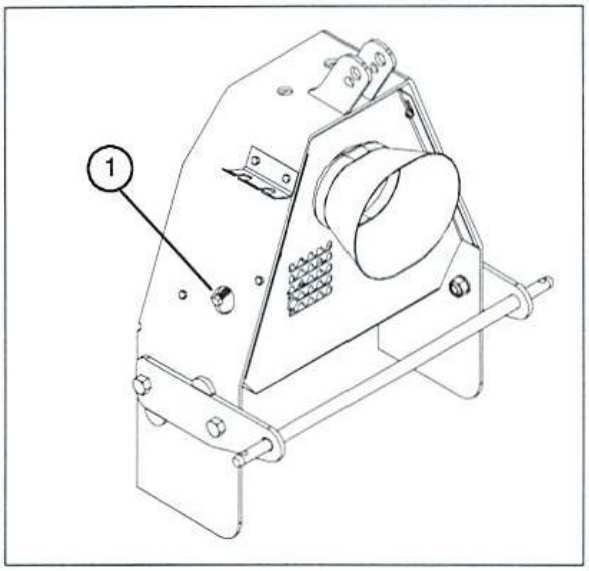
9: ADJUSTING BELTS

Adjust the belt tensioner so that the roller touches the belts lightly, then tighten the adjusting screw (1) two or three turns.

Be careful not to over tighten, as this could damage the belts.

The belts must be run in, first without load for about ½ hour and then with the chipper loaded lightly for the first 8 hours of actual use.

Observe the tightness of the belts and adjust with the adjusting screw (1), if necessary.



10: MAINTENANCE & LUBRICATION SCHEDULE

GENERAL	EVERY 8 HOURS	EVERY 20 HOURS	EVERY 40 HOURS	EVERY 200 Hrs	PROCEDURE	SEE PAGE
KNIVES & ANVILS	Or When Needed				Check for sharpness and clearance	20
			Or After One Week		Check for the bolt tightness	22
PTO SHAFT	X				Lubricate as Advised (Sec 8.4)	17
BOLTS & NUTS			X		Check knives & anvils and when necessary sharpen or correct clearance.	21,22
BEARINGS				X	Grease bearings	17
BELTS & PULLEYS			X		Check for tightness and alignment.	23

11: TROUBLE SHOOTING

PROBLEM	PROBABLE CAUSE	SOLUTION
Pulverized Chips	Too high rpm	Reduce rpm
Poor Quality Chips	Incorrect clearance of anvils	Adjust clearance
	Dull knives	Sharpen knives
Poor Chipping of Branches	Too low rpm	Increase rpm
Strange Chipper Noise	Bearings not ok	Grease bearings
		Replace bearings
	Loose bolts or fasteners	Tighten bolts or fasteners
	Incorrect clearance between knives and anvils	Adjust clearance
Insufficient Chipping Power	Incorrect clearance of anvils	Adjust clearance
	Dull knives	Sharpen knives
Tractor Stalling When Chipping	Insufficient power	Reduce power demand by chipping smaller material,
		Use more horsepower

12: STORING & DISCARDING

12.1 STORING THE CHIPPER

- If the chipper is to be stored for a longer period, cover the knives with grease and make sure that water can't collect in the chipper.

12.2 DISCARDING THE CHIPPER

- When the machine comes to the end of its working life, it should be duly discarded. Contact local authorities for more information.

13: CRIME PREVENTION

- Contact local authorities and/or your retailer.
- If a theft occurs, notify law enforcement agency having jurisdiction and your insurance carrier immediately.
- Give a full description and a complete set of serial and identification numbers to the investigation officer and insurance carrier.
- If available, provide the investigating officer with photographs of the actual machine, manufacturer literature and knowledge of any identifiable marks that would assist in identifying the machine.
- Regularly check the identification plates on all machines and report any missing or destroyed plates.

14: TECHNICAL DADA

Output	17-26 cu. yd/hr
Mean Chip Size	½" (13 mm)
Max Wood Diameter	6" (150 mm)
Power Demand	30-60 hp
Tractor PTO Speed	540-1000 rpm
Number of Knives	2 stationary
Secondary Cutter	Standard
Power Source	Tractor PTO
Mounting	Three Point Hitch
Disk Diameter	26 inches
Disk Weight	220 lbs
Disk Speed	1080- 2200 rpm
Bearings	Spherical Roller Bearings
Discharge Chute	Unlimited Rotation
Opening of Upper Housing	Single Hinge
Chipper Weight Self Feed	800 lbs
Chipper Wt, Hydraulic Feed	1200 lbs
Feed Options	Self-Feed/Hydraulic Feed
Sound Pressure Level	102 dB
Sound Power Level	120 dB

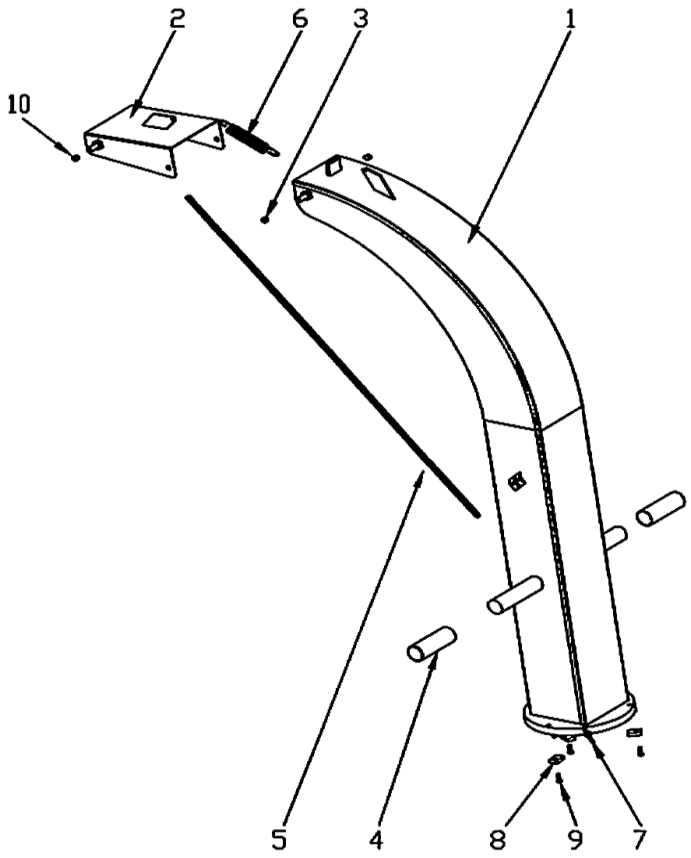
14.1 UNIFIED STANDARDS

- EN292-2
- EN294
- EN60204-1

14.2 NATIONAL STANDARDS

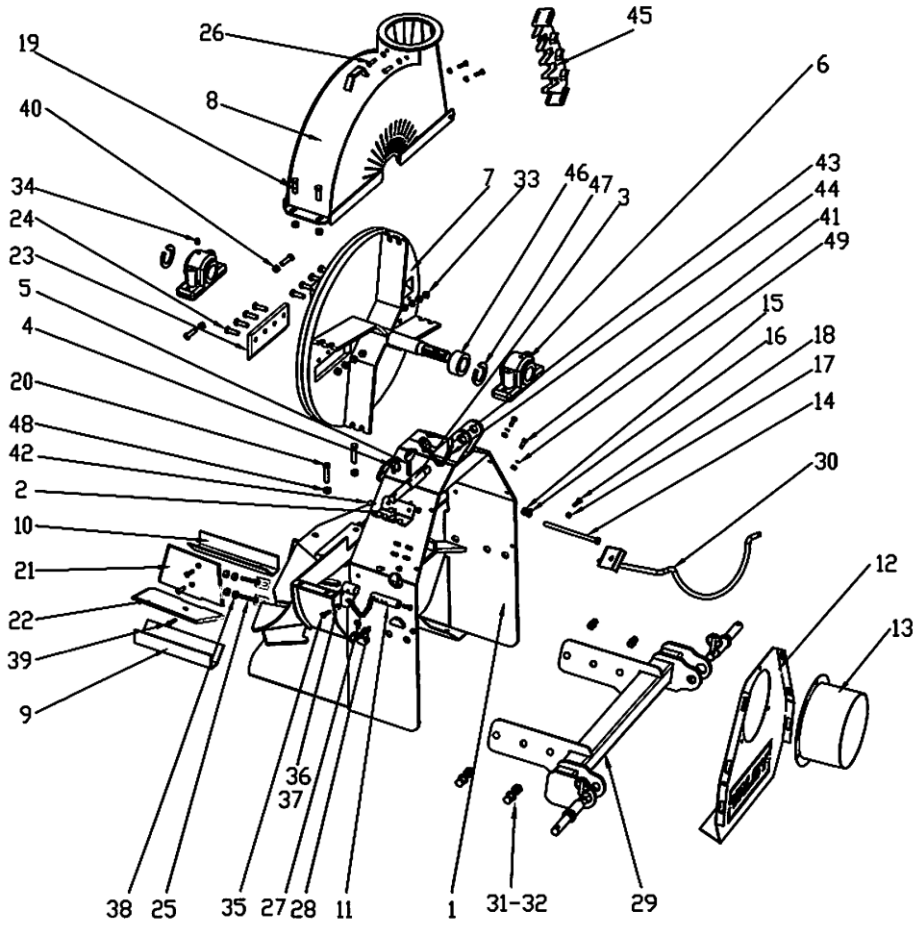
- PrEN13252
- prEN1553-1

15: DISCHARGE PIPE



Part	Order#	Mfg#	Description	Remarks	Qty
1	48010030	480-C10-01	Discharge Pipe		1
2	48010144	C10-02	Lid		1
3	48010072	A10-17	Nut	10mm	2
4	48010145	C10-04	Rubber Handle		2
5	48010146	C10-05	Chain		1
6	48010147	C10-06	Spring		1
7	48010148	C10-07	Locking Screw		1
8	48010149	C10-08	Flange		3
9	48010140	B14-08	Bolt	8x30mm	3
10	48010075	A10-20	Nut	8mm	1

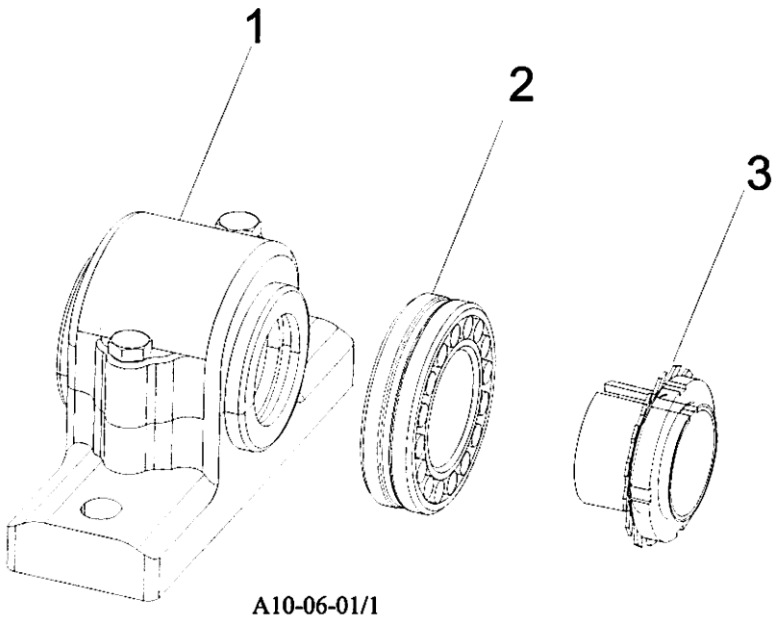
16: CHIPPER



Part	Order#	Mfg#	Description	Remarks	Qty
1	48010002	480-A10-01	Main Body		1
2	48010003	480-A10-02	Hose Holder Plate		1
3	48010004	480-A10-03	Upper Pin		1
4	48010005	480-A10-04	Detent Pin		2
5	48010006	480-A10-05	Pin		1
6		480-A10-06	Bearing & Case		2
7	48010007	480-A10-07	Disk		1
8	48010008	480-A10-08	Upper Housing		1
9	48010009	480-A10-09	Rear Support Plate - Right		1
10	48010010	480-A10-10	Rear Support Plate – Left		1
11	48010011	480-A10-11	Fixing Pin		1
12	48010012	480-A10-12	Front Cover		1

Part	Order#	Mfg#	Description	Remarks	Qty
13	48010013	480-A10-13	Shield for Shaft		1
14	48010014	480-A10-14	Bolt	12x200mm	1
15	48010015	480-A10-15	Nut	12mm	3
16	48010016	480-A10-16	Washer	12mm	7
17	48010073	A10-18	Bolt	8x25mm	1
18	48010075	A10-20	Nut	8mm	17
19	48010081	A10-26	Bolt	12x30 mm	6
20	48010079	A10-24	Bolt	16x60mm	4
21	48010015	480-A10-21	Vertical Anvil		1
22	48010016	480-A10-22	Horizontal Anvil		1
23	48010017	480-A10-23	Blade		2
24	48010071	A10-16	Bolt	10x45mm	8
25	48010018	480-A10-25	Steel Plate for Anvil Adjust		2
26	48010055	A10-03	Bolt	8x15mm	4
27	48010019	480-A10-27	Linkage		1
28	48010020	480-A10-28	Pin		1
29	48010021	480-A10-29	Hitch		1
30	48010022	480-A10-30	Shaft Holder		1
31	48010023	480-A10-31	Bolt	20x50mm	4
32	48010086	480-A10-32	Nut	20mm	4
33	48010072	A10-17	Nut	10mm	8
34	48010132	B13-07	Greaser	8mm	2
35	48010087	480-A10-35	Bolt	6x15mm	2
36	48010091	A10-36	Nut	6mm	1
37	48010092	A10-37	Washer	6mm	2
38	48010082	A10-27	Nut	12mm	4
39	48010024	480-A10-39	Bolt	16x20mm	3
40	48010082	A10-27	Nut	12mm	4
41	48010073	A10-18	Bolt	8x25mm	6
42	48010140	B14-08	Bolt	8x30mm	6
43	48010025	480-A10-43	Linkage Holder		1
44	48010026	480-A10-44	Linkage		1
45	48010027	480-A10-45	Breaker		1
46	48010028	480-A10-46	Washer		1
47	48010069	A10-14	Aluminum Ring		2
48	48010080	A10-25	Nut	16mm	4
49	48010074	A10-19	Washer	8mm	6

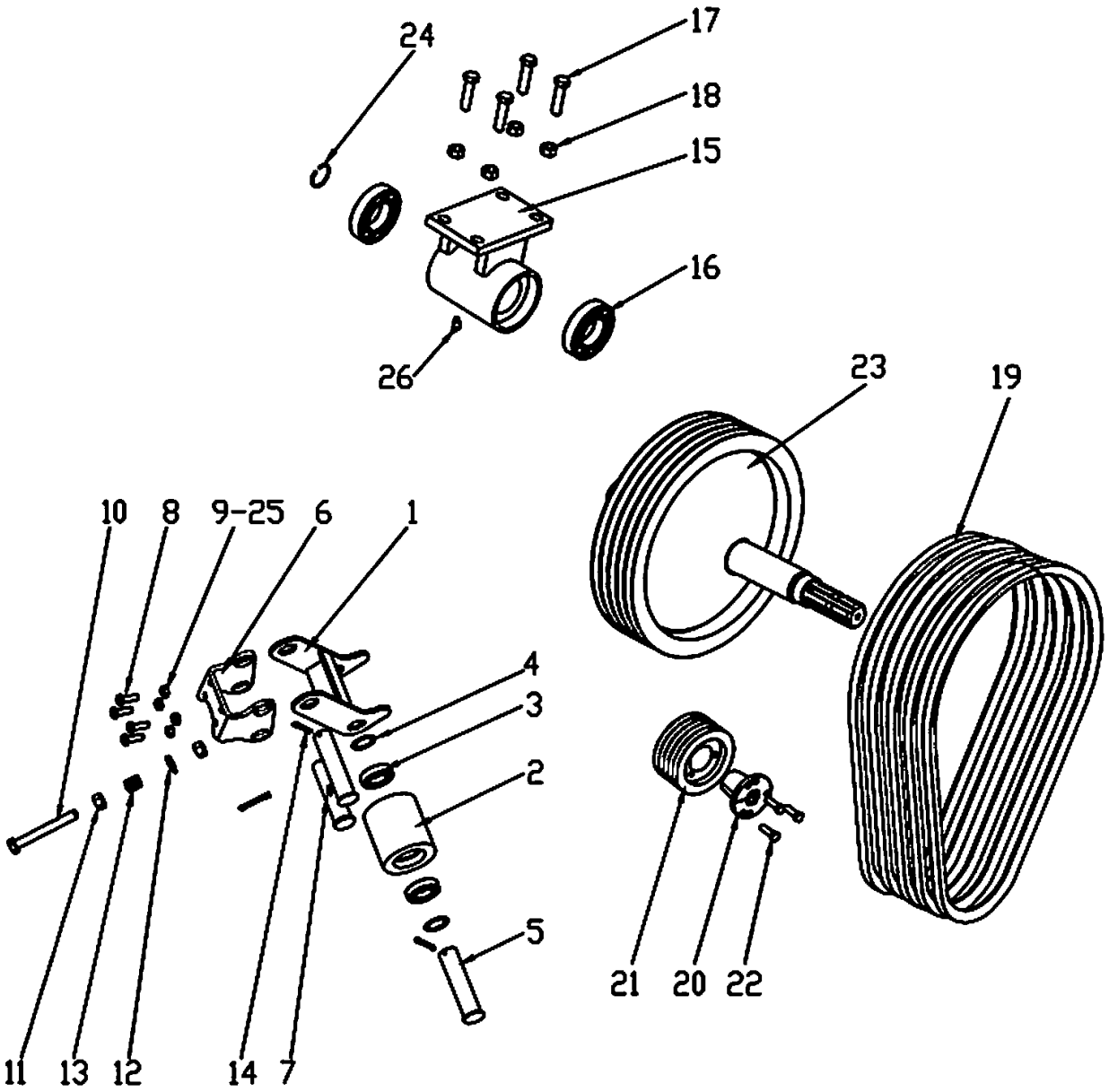
17: BEARINGS



A10-06-01/1

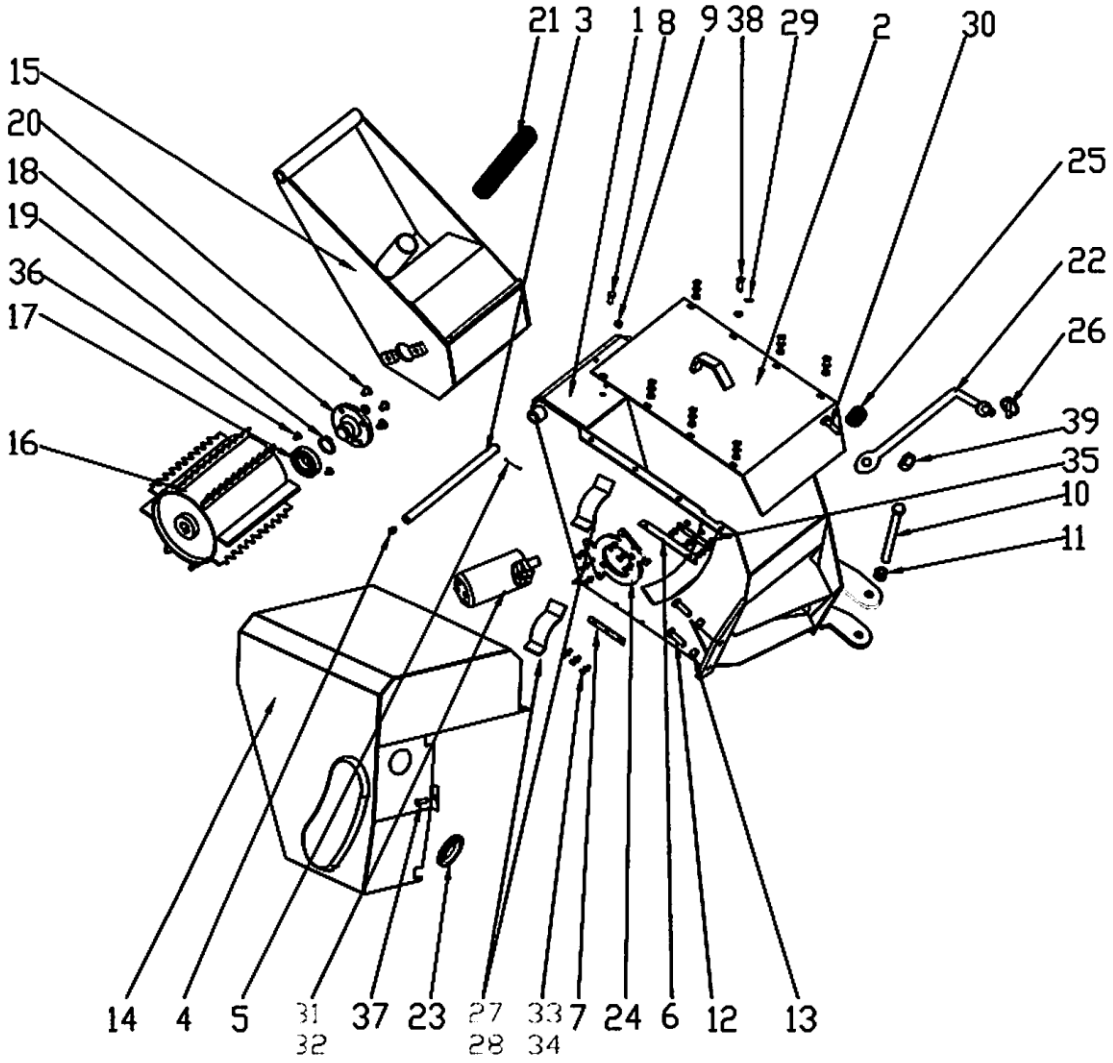
Part	Order#	Mfg#	Description	Remarks	Qty
1	48010059	A10-06-01	Case Milled (Front)		1
	48010060		Case Non-Milled (Rear)		1
2	48010236	A10-06-02	Bearing	CK22210	2
3	48010237	A10-06-03	Bearing Stretch		2
	48010238		Bolt	10x50mm	2
	48010072	A10-17	Nut	10mm	2
47	48010069	A10-14	Aluminum Ring	Not Shown	

18: TRANSMISSION



Part	Order#	Mfg#	Description	Remarks	Qty
1	48010133	B14-01	Belt Stretching Plate		1
2	48010134	B14-02	Stretching Coil		1
3	48010135	B14-03	Bearing	6005	2
4	48010136	B14-04	Washer		2
5	48010137	B14-05	Fixing Pin		2
6	48010138	B14-06	Connection Plate		1
7	48010139	B14-07	Connection Pin		1
8	48010140	B14-08	Bolt	8x30mm	4
9	48010075	A10-20	Nut	8mm	4
10	48010119	B10-01	Adjustment Bolt	12x100mm	1
11	48010082	A10-27	Nut	12mm	2
12	48010083	A10-28	Washer	12mm	1
13	48010141	B14-09	Spring		1
14	48010142	B14-10	Detent Pin		3
15	48010122	B11-01	Pulley Main Body Conn.		1
16	48010123	B11-02	Bearing	6209	2
17	48010108	B10-02	Bolt	12x40mm	4
18	48010082	A10-29	Nut	12mm	4
19	54822382	54822382	Belt	Heavy Duty A48	5
	48010253	48010253	Banded Belt	A48 Banded Belt	1
20	48010128	B13-01	Small Pulley Connection		1
21	48010257	480-B13-02	Small Pulley	6”	1
22	48010108	B10-02	Bolt	12x40mm	3
23	48010256	480-B13-04	Pulley	12 ½”	1
24	48010131	B13-05	471-45 Ring		1
25	48010074	A10-19	Washer	8mm	4
26	48010132	B13-07	Greaser	8mm	1

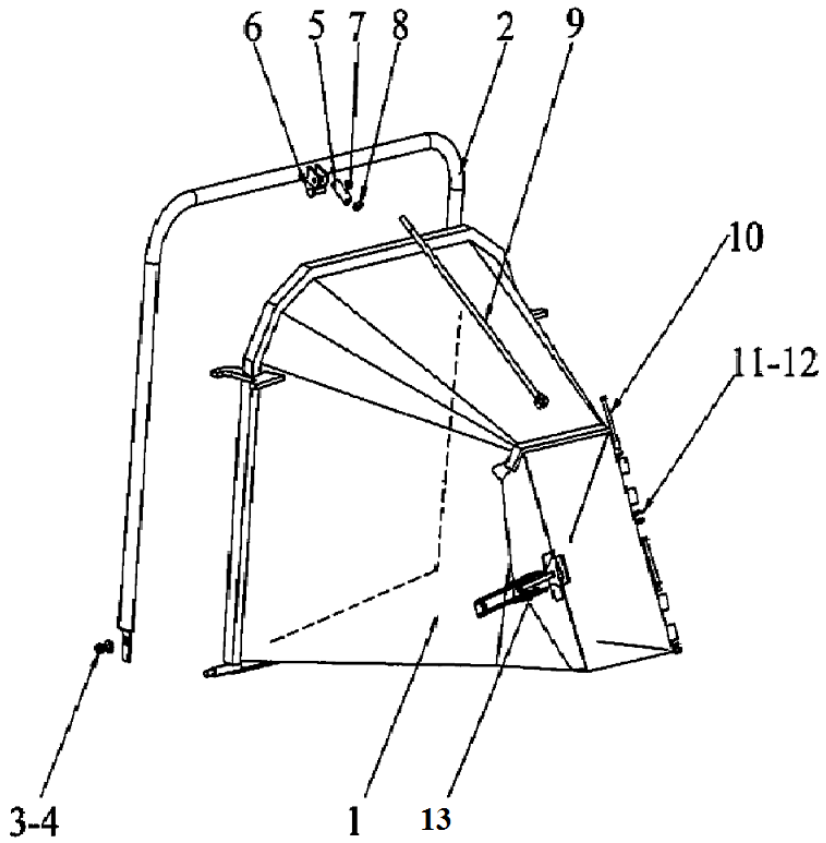
19: Hydraulic Feed Chute



Part	Order#	Mfg#	Description	Remarks	Qty
1	48010031	480-D10-01	Hydraulic Feed Body		1
2	48010032	480-D10-02	Upper Cover		1
3	48010033	480-D10-03	Connect Pin		1
4	48010132	B13-07	Greaser	8mm	1
5	48010142	B14-10	Detent Pin		1
6	48010035	480-D10-05	Rubber Shield		1
7	48010036	480-D10-06	Rubber Connector		4

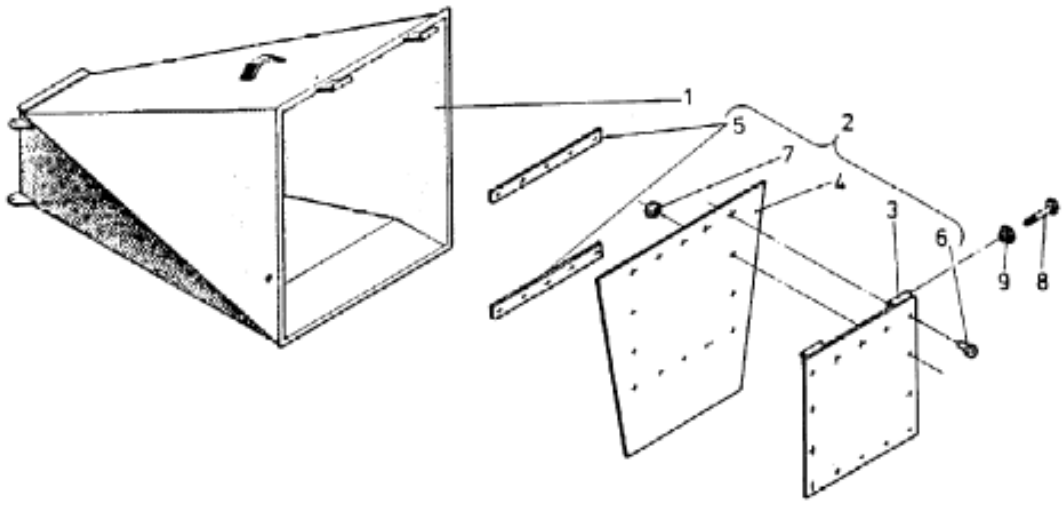
Part	Order#	Mfg#	Description	Remarks	Qty
8	48010073	A10-18	Bolt	8x25mm	2
9	48010075	A10-20	Nut	8mm	8
10	48010037	480-D10-07	Bolt	16x240mm	1
11	48010080	A10-25	Nut	16mm	1
12	48010108	B11-17	Bolt	12x40mm	2
13	48010082	A10-27	Nut	12mm	2
14	48010038	480-D10-09	Shield for Hydraulic		1
15	48010039	480-D10-10	Roller Frame		1
16	48010040	480-D10-11	Feed Roller		1
17	48010042	480-D10-13	Bearing	6207	1
18	48010043	480-D10-14	Roller Support		1
19	48010044	480-D10-15	Extension Ring		1
20	48010173	C11-24	Bolt	10x10mm	4
21	48010045	480-D10-16	Spring		1
22	48010046	480-D10-18	Fixing Pin		1
23	48010047	480-D10-19	Hose Shield		1
24	48010048	480-D10-20	Hydraulic Motor Plate		1
25	48010049	480-D10-21	Spring for Press		1
26	48010050	480-D10-22	Detent Pin		1
27	48010051	480-D10-23	Rubber Shield		1
28	48010052	480-D10-24	Rubber Shield		1
29	48010074	A10-47	Washer	8mm	8
30	48010071	A10-24	Bolt	10x45mm	1
31	48010034	480-D10-04	Hydraulic Motor		1
32	48010108	B11-03	Bolt	12x40mm	2
33	48010041	480-D10-12	Bolt	16x10mm	12
34	48010092	A10-37	Washer	6mm	12
35	48010091	A10-36	Nut with Fiber	6mm	3
36	48010172	C11-23	Bolt	8x10mm	2
37	48010172	C11-23	Bolt	8x10mm	2
38	48010133	A11-30	Bolt	8x20mm	6
39	48010072	A10-17	Nut	10mm	1
	48010255		Seal Kit		

20: HYDRAULIC FEED HOPPER

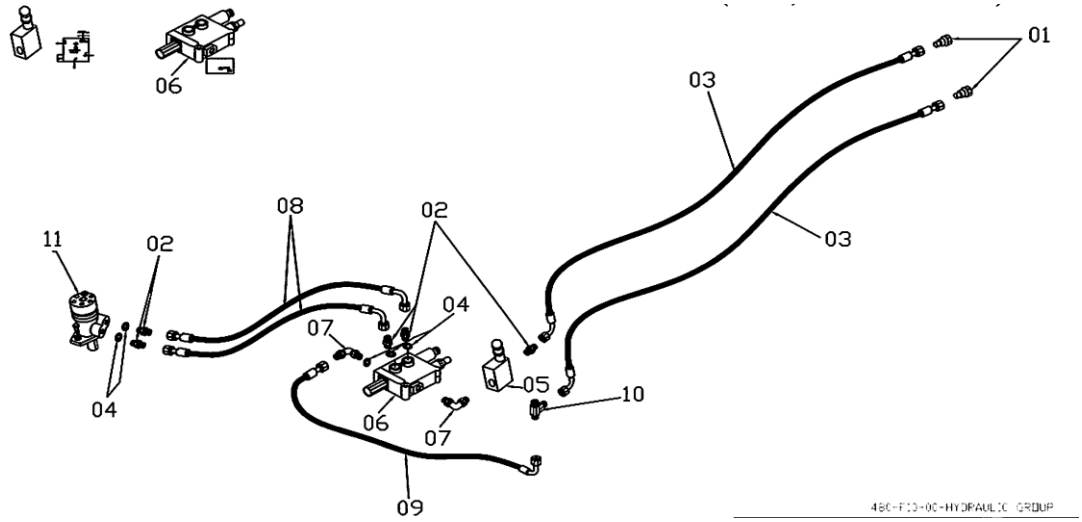


Part	Order#	Mfg#	Description	Remarks	Qty
1	48010191	E10-01	Feeding Hopper		1
2	48010194	E10-02	Function Handle		1
3	48010083	A10-28	Washer	12mm	2
4	48010082	A10-27	Nut	12mm	2
5	48010240	480-E10-03	Rod Cap		4
6	48010071	A10-16	Bolt	10x45mm	4
7	48010072	A10-17	Nut	10mm	1
8	48010082	A10-27	Nut	12mm	1
9	48010251	480-E10-04	Rod		1
10	48010189	D11-19	Bolt	8x110mm	1
11	48010075	A10-20	Nut	8mm	1
12	48010074	A10-19	Washer	8mm	2
13	48010242	480-E10-06	Lock		2

21: Manual Feed F600



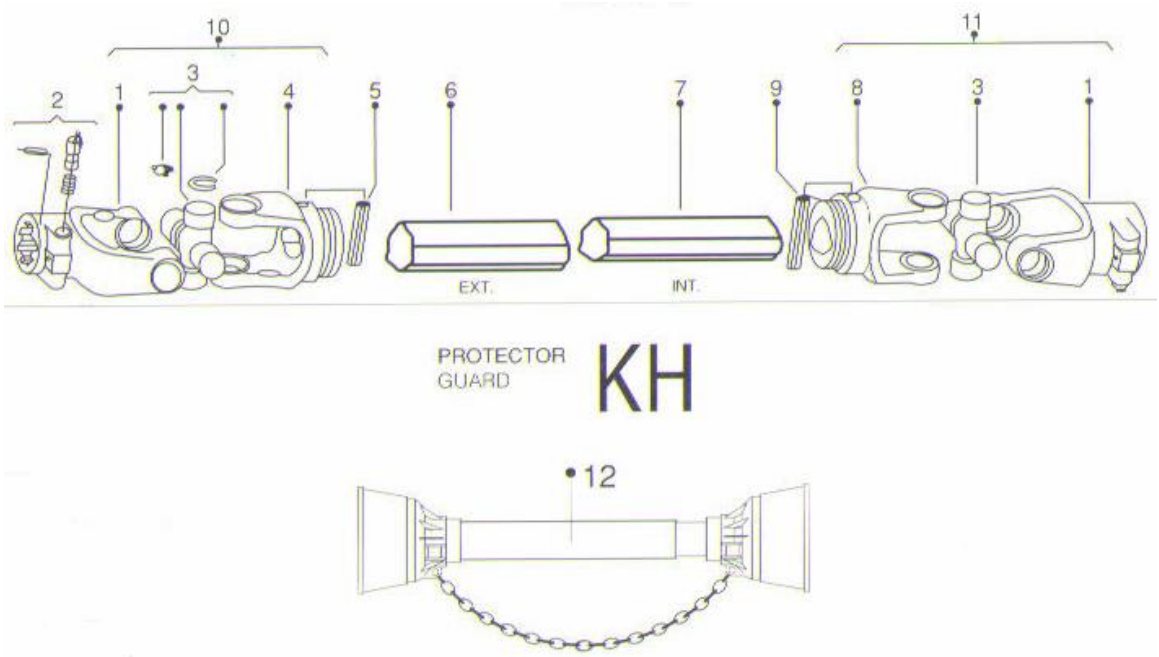
Part	Order#	Mfg#	Description	Remarks	Qty
1			Feed Chute		1
2			Flap Complete	Inc 3,4,5,6,7	1
3			Flap		1
4			Flap Rubber		1
5			Support		2
6			Rivet		14
7			Washer		4
8			Bolt		2
9			Nut		2



22: HYDRAULIC HOSES

Part	Order#	Mfg#	Description	Remarks	Qty
1	48010220	F10-01	½" Quick Fitting		2
2	48010221	F10-02	½" Double Fitting		5

3	48010222	F10-03	½" Hose	11' ¾" Long	2
4	48010223	F10-04	½" Ring		5
5	48010225	F10-05	Flow Regulator Valve		1
6	48010226	F10-06	½" 4/3 Directional Valve		1
7	48010227	F10-07	1/2" L Angle Nipple		2
8	48010228	F10-08	½" R2 Hose	2 ft Long	2
9	48010229	F10-09	½" R2 Hose	1' 3" Long	1
10	48010230	F10-10	½" T Angle Nipple		1
11	48010034	D10-04	Hydraulic Motor		1
	48010255		Seal Kit		



23: PTO SHAFT

M4 Series Shaft

Ref#	Part#	MFG #	Description	Qty
1	8041	37.1	Yoke w/quick coupler	2
2	1070	9305	Quick Release Pin	2
3	8081	2140A	Cross	2

4	8225	47	Yoke for Outer Tube	1
5	8203	P.8-60	Spring Pin for Outer Tube	1
6	8205	008	Outer Tube	1
7	8106	007	Inner Tube	1
8	8115	46	Yoke for Inner Tube	1
9	4204	P.8-50	Spring Pin for Inner Tube	1
10	Sp. Ord	25.1-14	Complete Joint Outer Tube	1
11	Sp. Ord	25.1-13	Complete Joint Inner Tube	1
12	8091	KH2/1200	Complete Shield 47”	1
	1000	9100	Safety Chain 20”	1
	8263	9502	Retaining Ring Outer Tube	1
	8163	9002	Retaining Ring Inside Tube	1
PTO Shaft Complete	M4-32	n/a	Complete PTO Shaft	1

NOTES

Limited Warranty

The Chipper Company warrants our Chippers to be free from defects in materials and workmanship for twenty-four (24) months from date of purchase(two year warranty applies to chippers only), or one month from in-service, whichever is longer. For seals, the warranty is limited to six (6) months. The warranty covers parts replacement only. The free replacement of parts is exclusive. The manufacturer is not liable for any incidental or consequential damages. No labor costs cost are included, no freight costs are included in replacements. This warranty does not cover defects resulting from:

- misuse of product
- inadequate maintenance
- modifications of the product

The warranty is effective only, if the lower portion of this card is completed and returned to the importer within 14 days of receipt of the product.
IMPORTANT: Do not operate your equipment without reading the operators manual! If the operators' manual was lost, a new manual can be obtained from the importer (write address below or call 607-589-6160).

Tear From Manual Here

Date of Delivery: ____/____/____
Customer: _____
Address: _____
City: _____
State, Zip _____, _____
Telephone# (_____) _____-_____
Product: VALBY Model LC600
Serial# 6000_____
Purchased from: _____

Importer:
Northeast Implement
460 Halsey Valley Road
Spencer, NY 14883
USA

Phone: (607) 589-6160
Fax: (607) 589-4026
Email info@northeastimplement.com
Website: www.northeastimplement.com

Product Registration QR Code

****Please remove this page and mail to address below for warranty registration****
or complete on-line at www.northeastimplement.com, under "Products" tab, click "Product Registration"

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25: INDEX

NOTES

Thank you for your purchase…

Northeast Implement Inc.

Spencer, NY 14883
Tel: 607-589-6160
Fax: 607-589-4026
www.northeastimplement.com

Rev: 2017-05-15