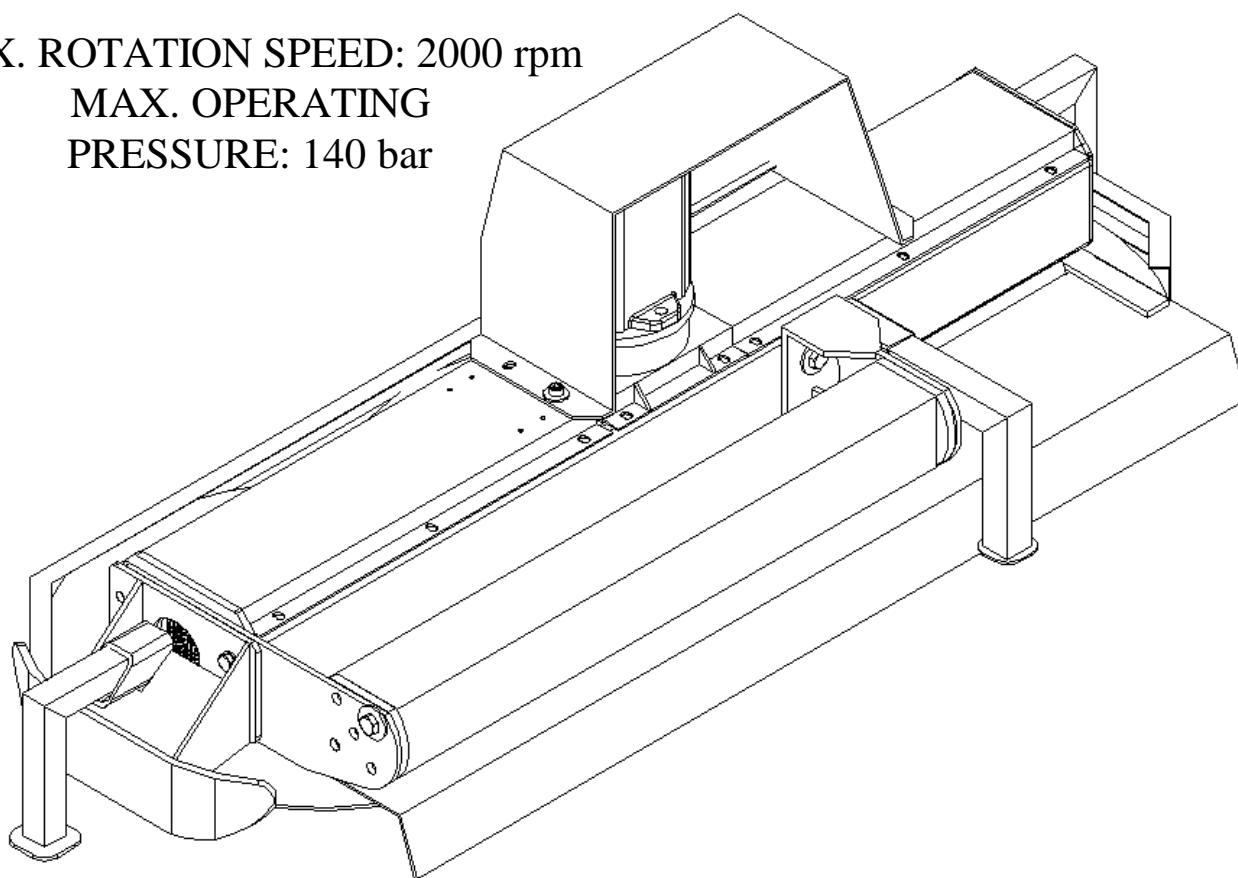


CUTTING SYSTEM 3650

MAX. ROTATION SPEED: 2000 rpm

MAX. OPERATING
PRESSURE: 140 bar



USER'S MANUAL

AND

SPARE PARTS LIST

It is very important to follow the operating instructions

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1-/ FOREWORD:

All our equipment is designed with the greatest care and manufactured with the best components, resulting in extreme reliability:

- Top-performance motor providing high output with proven durability.
- Blades machined from special steels for extra strength.
- Cutters featuring a special sharpening system and heat-treated for extra hardness.

The result is a range of ultra-professional tools tested to strict standards and suited to the toughest jobs.

Read the operating and maintenance manual before use.

- When starting or stopping blade rotation, the power take-off must be at minimum setting.
 - The blade rotation speed must be between 1900 and 2000 rpm.
 - The operating hydraulic pressure is 140 bar.

**To minimise operating hazards
and avoid incorrect operation
it is essential for hedge cutter users
to familiarise themselves
with this handbook**

2-/ INTRODUCTION:

You are now in possession of your new **hedge cutter**. Thank you for choosing our product. We hope it provides you with the total satisfaction you are entitled to expect from high-performance equipment.

The operating, maintenance and spare part manual contains the information you need in order to:

- benefit from the best operating conditions and advanced technical features of your equipment,
- obtain optimum operation through the simple **but thorough** application of maintenance recommendations,
- remedy as quickly as possible small operating problems not requiring specialist attention.

The short time you spend reading this manual will be more than rewarded by the information you gain from it. If some points are still not clear, our after-sales technicians will be pleased to provide any additional information.

3-/ SAFETY INSTRUCTIONS:

Never allow inexperienced operators to use the machine unsupervised.
Never stand below the cutting section in raised position.
Never cut the top of a hedge with the blades or flail cutters pointed towards the operator.
Never continue using the blades if a wire becomes entangled in them.
Never use the blades or rotary flails without the rear protective casing.
Never exceed the recommended blade operating speed of 2000 rpm.
Never stop the thermal motor with the power take-off engaged.
Never move along the road without fitting the blade protection cover delivered with the equipment.
Never use a blade that no longer cuts.

Always inspect the work area or hedge to check for wires, metal posts, large stones, bottles and other dangerous objects. Remove these objects before starting work.

Always keep people away from the machine during cutting operations. Set up warning signs indicating moving plant at work. Set up a safety area with a radius of at least 100 metres.

Always check that nuts and bolts are tight and that the blades have no cracks.

Always replace damaged flails as soon as vibration is noticed. Flails must always be replaced **in pairs** to keep the disc balanced.

Always disengage the power take-off and stop the tractor motor before making adjustments.

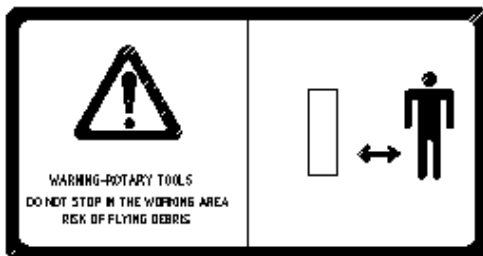
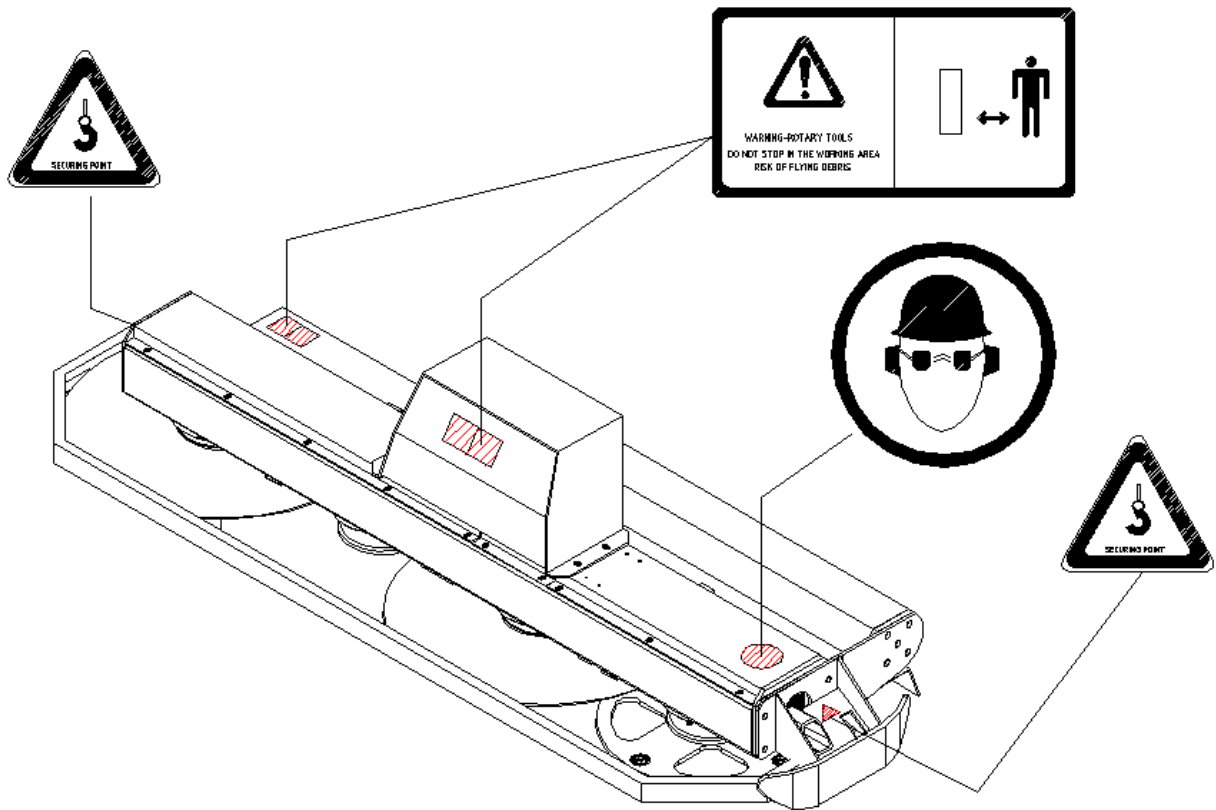
Always stay alert when working close to overhead obstacles, especially high voltage lines.

Never, under any circumstances, use the floating position of the head, the oleopneumatic arm suspension or the automatic return system if the verge cutter is fitted with this equipment.



One of the principal features of the equipment is its cutting capacity. Strict compliance with the constructor's data is therefore essential.

4-/ SAFETY LABELS:



ROTARY TOOLS: Objects and debris may be thrown out. Keep a safe distance from the hedge cutter.



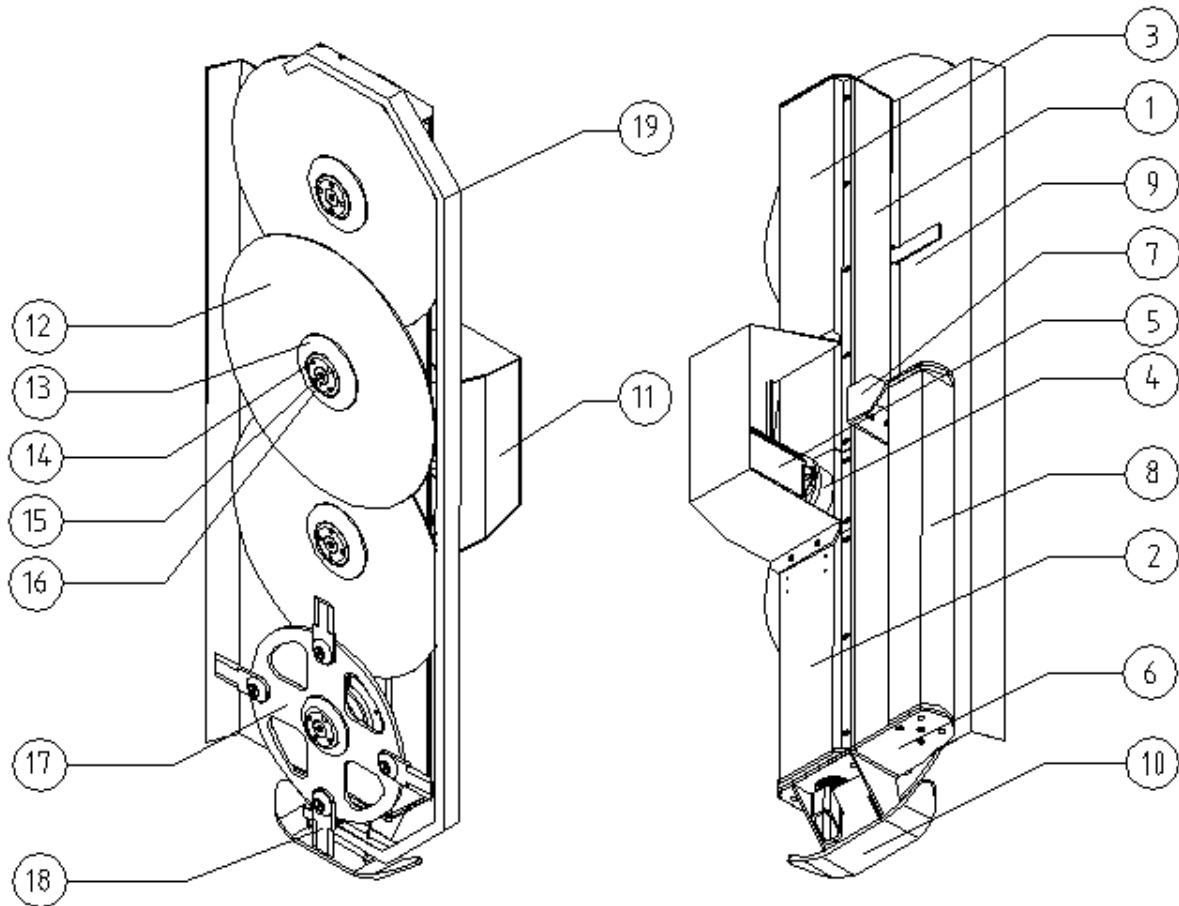
Helmets and safety goggles must always be worn in the work area.



Hedge cutter securing points for handling

5-1/ PRESENTATION OF THE EQUIPMENT:

Names of the various components of the hedge cutter:



PARTS LIST:

- | | |
|-------------------------------------|-------------------------------|
| 1- Bare hedge cutter case | 12- Blade |
| 2- Bottom cover plate | 13- Tightening plate |
| 3- Top cover plate | 14- Tightening nut |
| 4- Motor seat | 15- Safety washer |
| 5- Motor | 16- Safety screw |
| 6- Tube securing plate, foot side | 17- Rotary flail plate |
| 7- Intermediate tube securing piece | 18- Double-sided cutter W 128 |
| 8- Hedge cutter support tube | |
| 9- Rear protective casing | |
| 10- Foot | |
| 11- Motor cover | |
| 19- Blade casing | |

5-2/ DESCRIPTION OF EQUIPMENT:

Specifications:

Length	1.57 m.
Weight	175 kg.
Required flow rate (if delivered with motor)	75 to 85 l/mn
Operating pressure	140 bar
Blade rotation speed	1800 to 2000 rpm
Drive power	28 Hp
Max. pressure on motor drain	2.5 bar
Blade diameter	650 mm
Blade thickness	4 mm
Vane motor (if Vickers motor)	43.9 cm ³ /rev.
Built-in pressure limiter	140 bar
Linear speed	58 m/s
Motor filter	10 µm

Series equipment:

3 saw blades, diameter 650 mm. 80 reclined teeth, thickness: 4 mm.

Optional equipment:

Flail plate.
Reinforced flail plate.

Recommended uses:

Flail plate: - cutting green wood: branches Ø25 mm,
 - cutting dry wood: branches Ø20 mm.

Saw blade: cutting branches Ø5 to Ø180 mm.

It is essential to choose the suitable cutting tool for the work to be carried out.

Once the blade is engaged, to avoid damage to the equipment, the work must always be carried out in the direction of the blade. It is strictly forbidden to change the angle during the cut. Incorrect operation may result in buckled or possibly broken blades.

High-quality work and user safety can only be achieved if the cutting tools are correctly serviced. Likewise, blunt cutting edges make a greater demand on the hydraulic and mechanical components and causes them to wear out more rapidly. Parts damaged under these circumstances will not be covered by the guarantee.

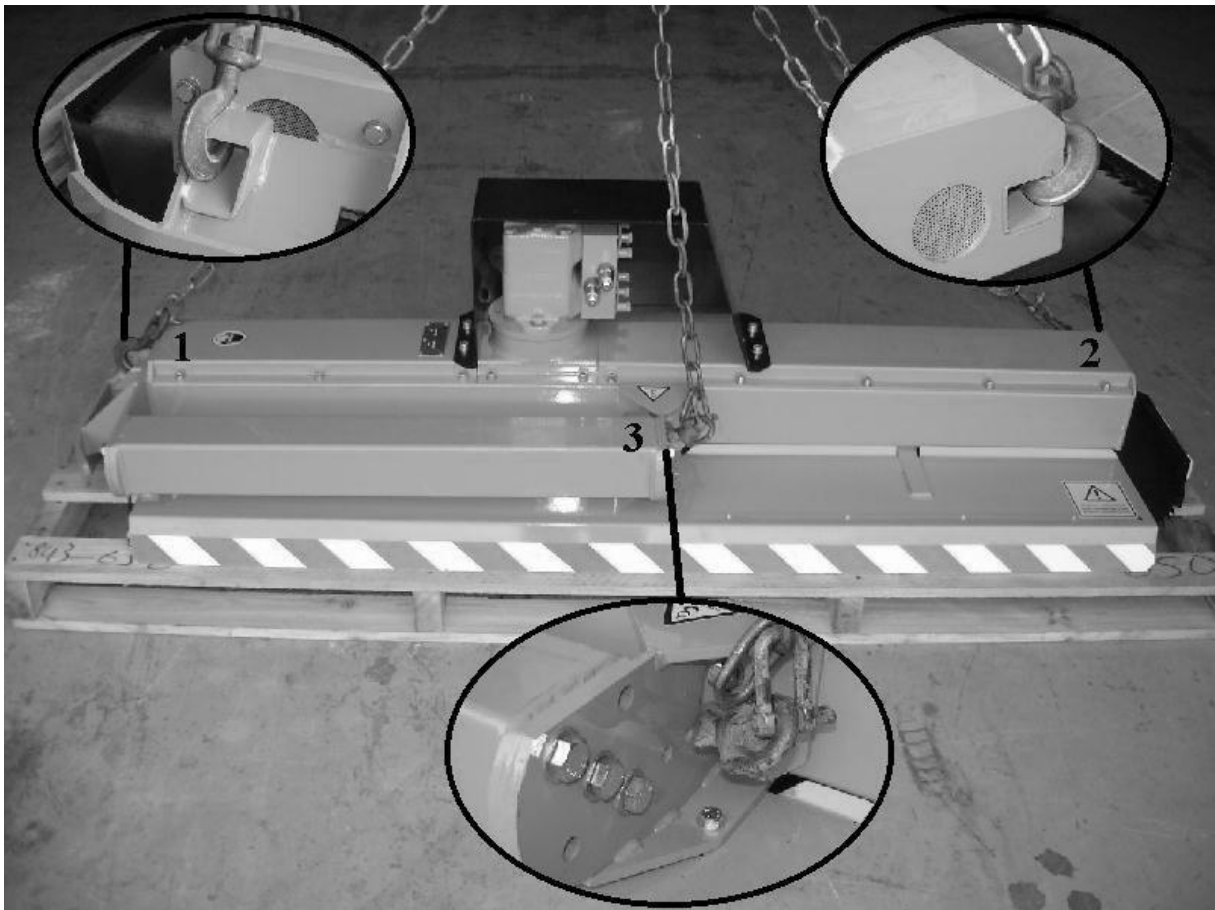
6-/ HANDLING:



The hedge cutter must always be fitted with the blade protection casing during handling and movement.

To handle the hedge cutter, the lug securing tubes (items 1 and 2) can be used as anchoring points and if necessary the support tube fastening plate (item 3) for balancing.

When the hedge cutter is laid on the floor, it must be horizontal, the floor must be level and the blades must face towards the floor.

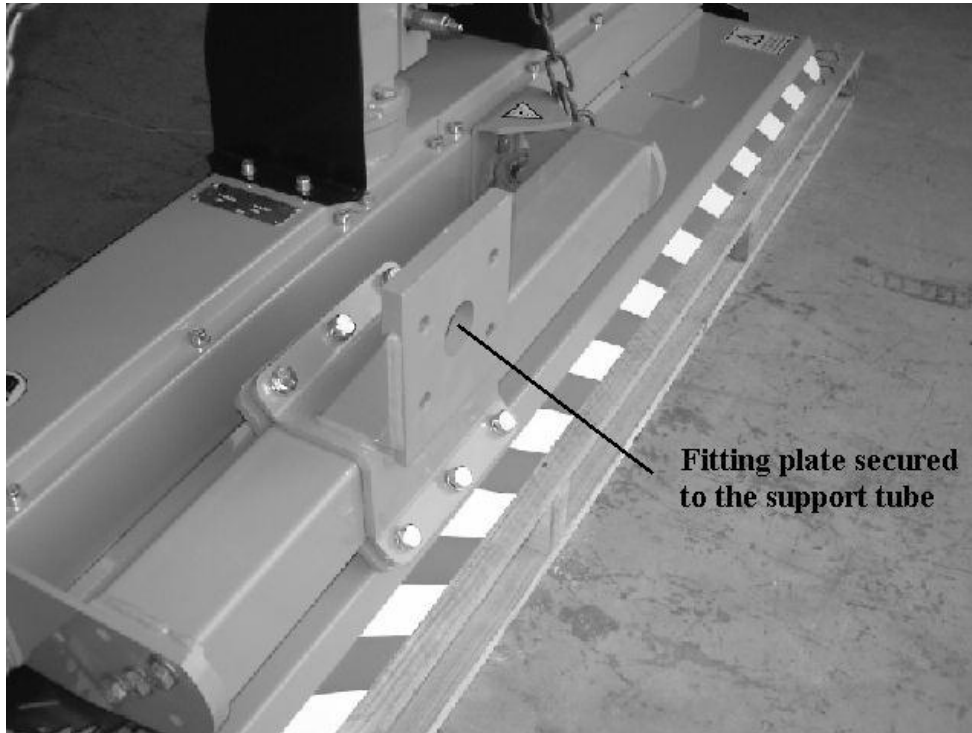


7-/ INSTALLATION AND START-UP:

7-1 / Installation Procedure:

When securing the hedge cutter to the verge cutter it is essential to place the hedge cutter on a level, horizontal floor with the blades facing the floor.

Regardless of the type of verge cutter, the fitting plate must first be secured to the support tube, preferably level with the second blade.



With the shredding head removed, arrange the verge cutter arm so that the plate used to secure the end of the arm is opposite the fitting plate secured to the hedge cutter.

If required, a hose kit can be supplied for the hydraulic connections. The two wide hoses are used for the motor supply and the narrow hose for the drain.

If the verge cutter is not a two-way model, check that the supply and return hoses are in the correct position and allow the blades to rotate in the correct direction.

7-2/ Hedge Cutter Calibration:

On first start-up, the machine must be correctly calibrated.

Operating pressure: 140 bar.

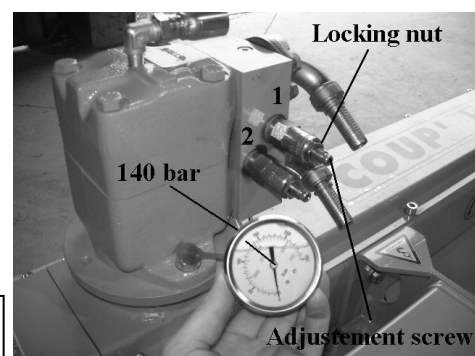
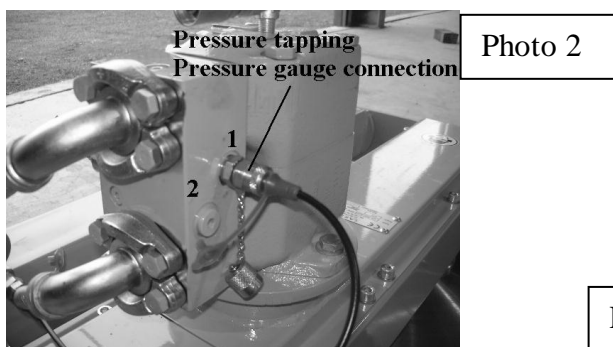
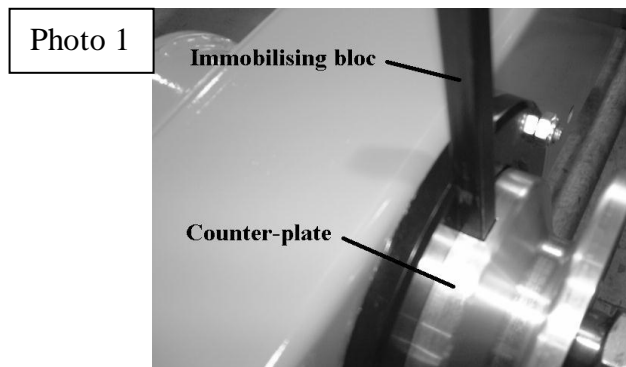
Blade rotation speed: 2000 rpm.

Setting the operating pressure:

This operation must be carried out with caution. It may prove dangerous if the procedure is not followed correctly.

- Place the hedge cutter in vertical or horizontal position.
- Remove the motor cover.
- Place the immobilising block in the notch for this purpose between the bearing case and the blade counter-plate **on the motor bearing**. (Photo 1)
- Connect a pressure gauge to a pressure tapping at the rear of the limiter block. (Photo 2)
- Loosen the nut of the corresponding pressure adjustment cartridge.
- Start up the hedge cutter motor in the direction to be adjusted: as the blades are immobilised by the block, the circuit pressure increases.
- Tighten the limiter cartridge screw until a pressure of 140 bar is read on the pressure gauge, then retighten the nut and stop the motor. (Photo 3)
- Repeat the same operation, connecting the pressure gauge to the other pressure tapping and changing the motor rotation direction.

Your limiter is now calibrated to 140 bar for both rotation directions.
You can remove the block.



Adjusting blade rotation speed:

- Place the hedge cutter in vertical position,
- Start hedge cutter rotation.

Using a revolution counter, measure the blade rotation speed and set it to 2000 rpm by adjusting the tractor motor speed. Record this motor speed so that it can be set to the same value each time the hedge cutter is used.

8-/ WORKING WITH THE HEDGE CUTTER:

8-1/ Choosing the Cutting Equipment

The original blades fitted on the hedge cutter are saw blades with a diameter of 650 mm. These blades can cut branches with a diameter of 5 mm to 180 mm.

As an option, flail plates can be fitted (also known as cutters). These are designed for cutting young shoots up to 25 mm in diameter.



Ø 650 blade



4-cutter rotary flail



Warning: choosing the right work tool and maintaining it correctly are very important for achieving good quality work, but also, and above all, for your safety and that of other users.

WARNING: The use of the rotary flail is strictly forbidden for working on large diameters of wood as it can be dangerous.

8-2/ Choosing the Rotation Direction

- For vertical cutting, the blades and plates must cut in an upward direction for the best cutting quality.

- For horizontal cutting, the blades and plates must rotate in such a way that debris is thrown away from the user.



Our general recommendation is to box in the cabin for protection against flying debris and falling branches.

8-3/ Choosing the Motor Speed

The blade rotation speed is 2000 rpm. This corresponds to the motor speed recorded during hedge cutter calibration on first start-up.

8-4/ Choosing the Forward Speed

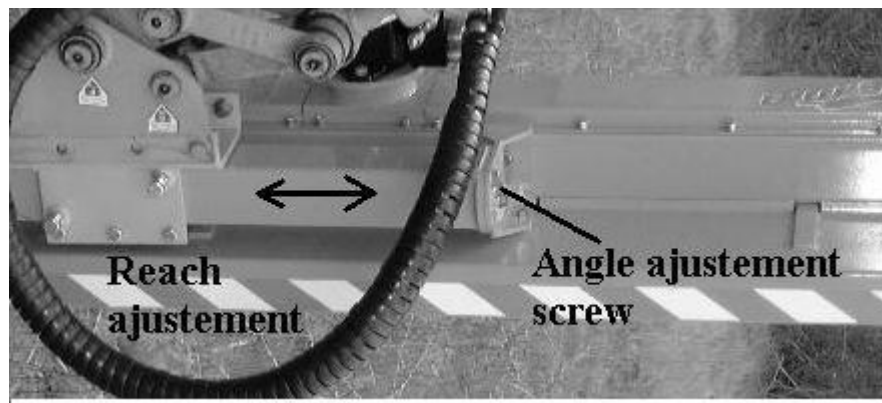
The forward speed depends on the type of vegetation and its density. It also depends on the condition of the terrain over which the tractor is moving. For denser vegetation with larger branches the forward speed must be slower. Similarly, the forward speed must be reduced over uneven terrain. In general, we recommend a forward speed of 1 to 2 kph.

8-5/ Choosing the Reach

The reach can be adjusted by sliding the fitting plate on the hedge cutter support tube. In general, the fitting plate should be placed level with the motor bearing.



WARNING: Check the angle of attack of the hedge cutter. It must be parallel with the right sidewall of the tractor tyre. If it is not, you can adjust the angle by changing the position of the securing screws at the end of the hedge cutter support tube.



8-6/ Start-up Procedure:

Each time the hedge cutter is started up, apply the following basic rules:

- Remove the blade protection casing.
- Check that there is no obstacle or person near the blade.
- Start up the hedge cutter with the thermal motor operating at reduced speed.
- Operate the equipment for 5 minutes at a mid-range speed to bring the oil and transmission up to temperature (blades rotating at 1500 rpm).
- To start working, set the tractor motor speed to the value recorded during calibration.

8-7/ Precautions During Use:

* During use, we recommend the following precautions if the blades become entangled in the branches:

- Keep the tractor on course
- Do not try to correct the reach or height of the verge cutter arm.
- Set your speed according to the size of the branches.

* It is preferable to start working from the bottom: the vegetation will then drop away vertically from the cut.

WARNING: Working at ground level is strictly forbidden.

* When cutting thick branches, the tractor must be kept as far away as possible to avoid any damage to it. We recommend cutting thick branches in several stages.

* If the blades jam you must:

- stop the hedge cutter
- extract all the equipment by moving the tractor out rather than retracting the arm or changing the cutting angle.

* **WARNING:** Poorly serviced blades and rotary flails will not cut well and will damage the hedge cutter transmission.

8-8/ After Work:

Before switching off the hedge cutter, it should be left to run for 5 minutes with the blades facing upwards so that the roller bearing at the top of the bearing block is well lubricated.

Before switching off the motor, it is essential to reduce the power take-off speed to the minimum. Only then can the motor power supply be switched off.

8-9/ Transport Position:

The hedge cutter is supplied with a **blade protection casing which must be fitted on the hedge cutter each time it is transported as soon as work stops.**

9-/ MAINTENANCE AND ADJUSTMENT:

9-1/ Lubrication:

- All the bearings are greased during assembly at the factory for a period of 150 hours.
- Greasing frequency: every 100 hours of operation.
- Quantity of grease: 18 grams per bearing (3 to 6 pump strokes).
- Approved grease: IGOL Rally GREASE with synthetic agents (420g pack)
- Use the grease gun designed for the purpose.
- The bearings should be greased with the equipment in the vertical position.
- Whenever work (maintenance, disassembly, reassembly) is carried out on the blades or rotary flails, apply grease to thread of the nuts securing the plates.

Tightening torque for CL 8.8 screws:

Screw M10	5.7 m. kg
Screw M12	9.7 m. kg
Screw M14	15.5 m. kg
Screw M16	23.4 m. kg
Screw ½ (flail screw)	11 m. kg
Nuts M30x150 (grooved wheel nut)	70 m. kg

WARNING:

The belts are not covered by guarantee

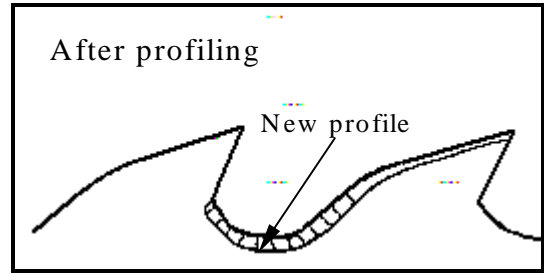
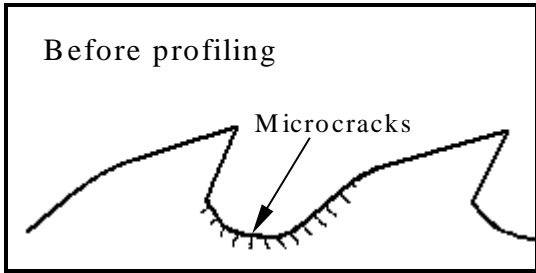
9-2/ Troubleshooting:

FAILURE	CAUSES	REMEDIES
Damaged belts	<ul style="list-style-type: none"> - Jammed blade <ul style="list-style-type: none"> * Blade striking an obstacle (rock, post, etc.) * Incorrect action while cutting a thick branch * Blades not sharpened or incorrectly set - Working with flails on thick wood - Using incorrect blade rotation speeds (2000 rpm) Too fast or too slow 	<p>Determine the exact cause Change the damaged belts (see Changing the Belt page 19.</p>
Damage to a bearing: Broken rod	<ul style="list-style-type: none"> - Violent impact with an obstacle - Moving the hedge cutter when the blade is engaged in a thick branch - Bearing seized: Incorrect lubrication 	<p>Remove the bearing and repair: be careful to change all damaged parts</p>
None of the bearings turn	<ul style="list-style-type: none"> - Check that the hydraulic supply to the motor is correct. - Motor cotter broken - Flexible coupling destroyed. 	<ul style="list-style-type: none"> - Check machine connection and circuit - Change the cotter. Check condition of shaft and ½ coupling - Change the coupling and check condition of other parts
Unusual noise in the hedge cutter	<ul style="list-style-type: none"> - Coupling damaged - Grooved wheel loose 	<ul style="list-style-type: none"> - Change the coupling and check condition of other parts - Check the condition of the grooved wheel, cotters, shaft and grooved wheel insert and re-tighten correctly.
Leak on motor shaft	Motor drainage pressure	<ul style="list-style-type: none"> - If couplings are used for connection, check they are fitted correctly. - Check that drainage is direct to the tank without passing through the filter. - Check that the drainage pipe is not damaged, pinched, etc.

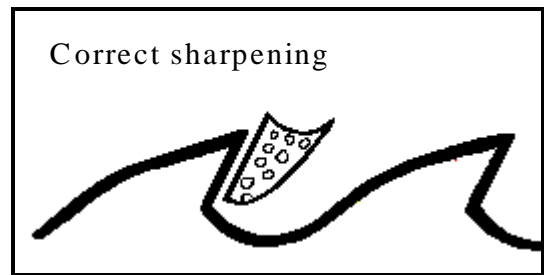
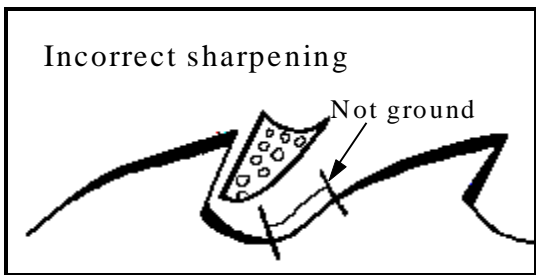
9-3/ Blade Sharpening: Once every three days under normal operating conditions.

Frequent sharpening ensures that the blades stay in top condition and optimises work safety.

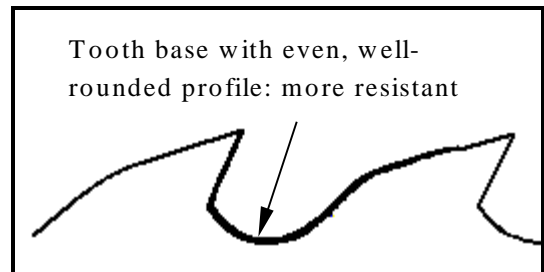
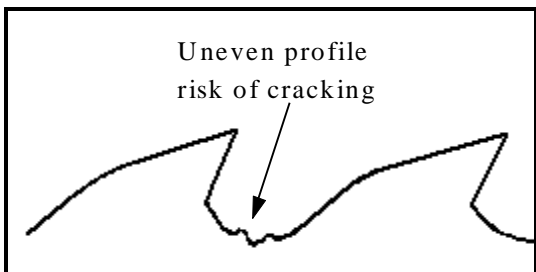
- high cutting capability for easy and straight cutting,
- less effort during cutting, less fatigue on the blade body, ensuring that it stays level and rigid for a longer time and reducing the risk of cracking.



Before tooth setting, grinding or stelling operations, profile the tooth carefully on the sharpener, using a few light strokes to remove microcracks produced by the cutting tool around the rim of the teeth. If this precaution is not taken, the teeth may break during setting or chip during grinding. In addition, cracks may spread from the base of the teeth into the blades during cutting.

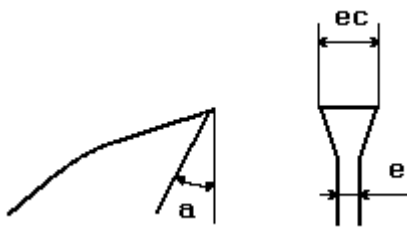


Surface blades are delivered pre-sharpened. Their first operation should therefore be kept relatively short and followed by re-profiling and sharpening with a few light strokes. Cracking at the tooth base often results from poor profiling during which the sharpening wheel has not removed the traces of fatigue in the metal at the tooth base.



Sharpening must not create an uneven profile, hollows, humps or facets likely to reduce the strength of the blade and therefore initiate cracking. It is specially important to produce an even, well-rounded tooth base. A suitable grinding wheel must be used, making several strokes with moderate pressure to avoid "burning" the steel.

Choosing a suitable blade for the wood to be cut:



Wider track and angle of attack for soft wood:

$a = 24 \text{ to } 30^\circ$ $ec = (e \times 2 \text{ to } 2.2)$

Narrower track and angle of attack for hard wood:

$a = 20 \text{ to } 24^\circ$ $ec = (e \times 2 \text{ to } 2.2)$

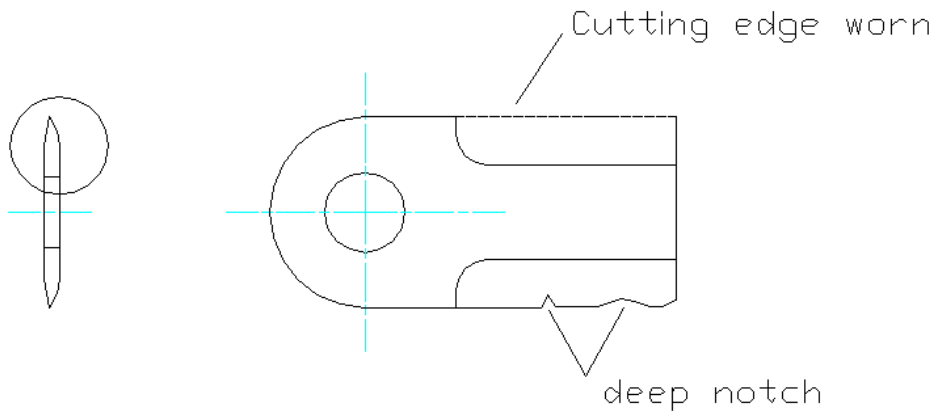
Note: The values given are average values and may vary in special cases.

9-4/ Sharpening Flail Cutters:

When using new cutters, whether on first start-up or after replacing, the cutting edge should be reworked with a fine file.

A well-sharpened cutter will make a cleaner cut and will have a longer life. The condition of the flails should therefore be checked every day, replacing them if they are damaged (deep notches) or sharpening them if the cutting edge is marked.

If an obstacle (piece of metal, concrete post, stone, etc.) is struck during work, it is essential to stop and change the damaged flails.

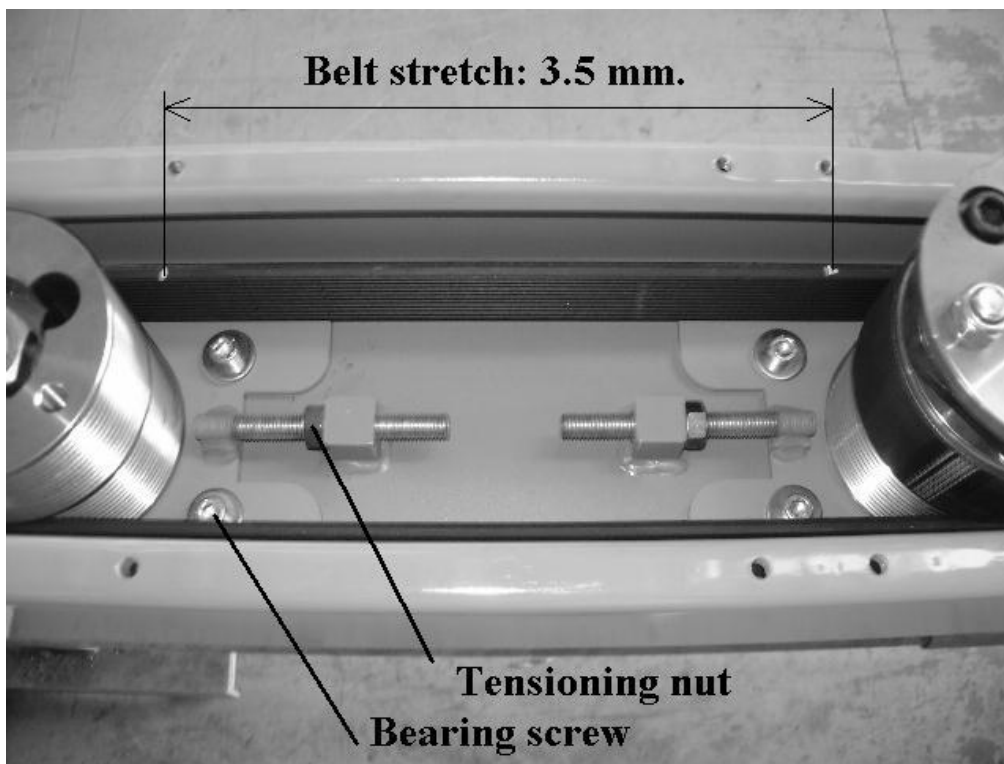


Cutting edge profil after sharpening



9-5/ Checking Belt Tension:

- Place the equipment horizontally, preferably on the ground or on a stand.
- Remove the two top casings.
- Relax the 2 bearings (but not the motor bearing) by loosening the treaded rods (there is no need to remove the blades or rotary flail plates). For easier adjustment, all the inside screws are accessible from above.
- Tighten the belt slightly and make two marks on one side of it, 300 mm apart. Next tighten the threaded rod until the distance becomes 303.5 mm. Tighten it 3 or 4 turns by hand, then check the distance again. Repeat this operation until the distance of 303.5mm is obtained (carrying out tensioning with the 4 bearing screws slightly tightened).



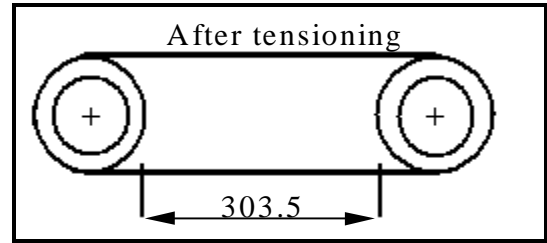
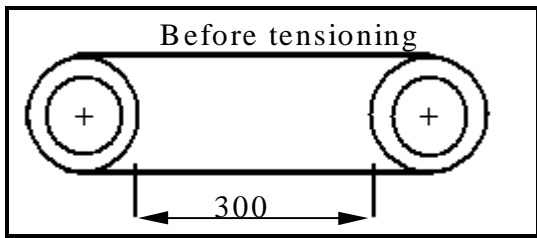
- Tighten the bearing screws and the counter-nut on the threaded rod.
- Repeat this operation on the other bearings.



If the motor bearing is removed, it must be centred on the motor, before any other operation is carried out. It must be in the axis of the motor (no force should be required to remove or refit the motor)

9-6/ Changing the Belts:

The operations are the same as above except that motor brace must be removed to allow the belts to be removed, and then re-centred on the motor.



Fitting the belts:

- Remove the worn belts.
- Clean the inside of the hedge cutter thoroughly.
- Check the condition of the roller bearings and bearing block seals.
- Check the condition of the grooved wheel furrows and make sure they contain no foreign matter.
- Proceed gradually, always starting from the motor shaft.
- Fit the belts.
- Before any tensioning operation, centre the fixed bearing (motor).
- The motor must be situated exactly in line (no force should be necessary to remove or refit it).
- For easier tensioning, remove the motor.
- To tension the belt, use the inward-facing tensioning nut on each bearing block.
- Tighten the belt slightly and make two marks 300 mm apart on the slack side.
- Tighten the belt until this distance is 303.5 mm.
- Rotate the blades manually 2 or 3 turns.
- Check the distance and repeat the operation if it is not correct.
- Tighten the bearing screws and go on to the next bearing.

9-7/ Changing a Blade or Rotary Flail Plate

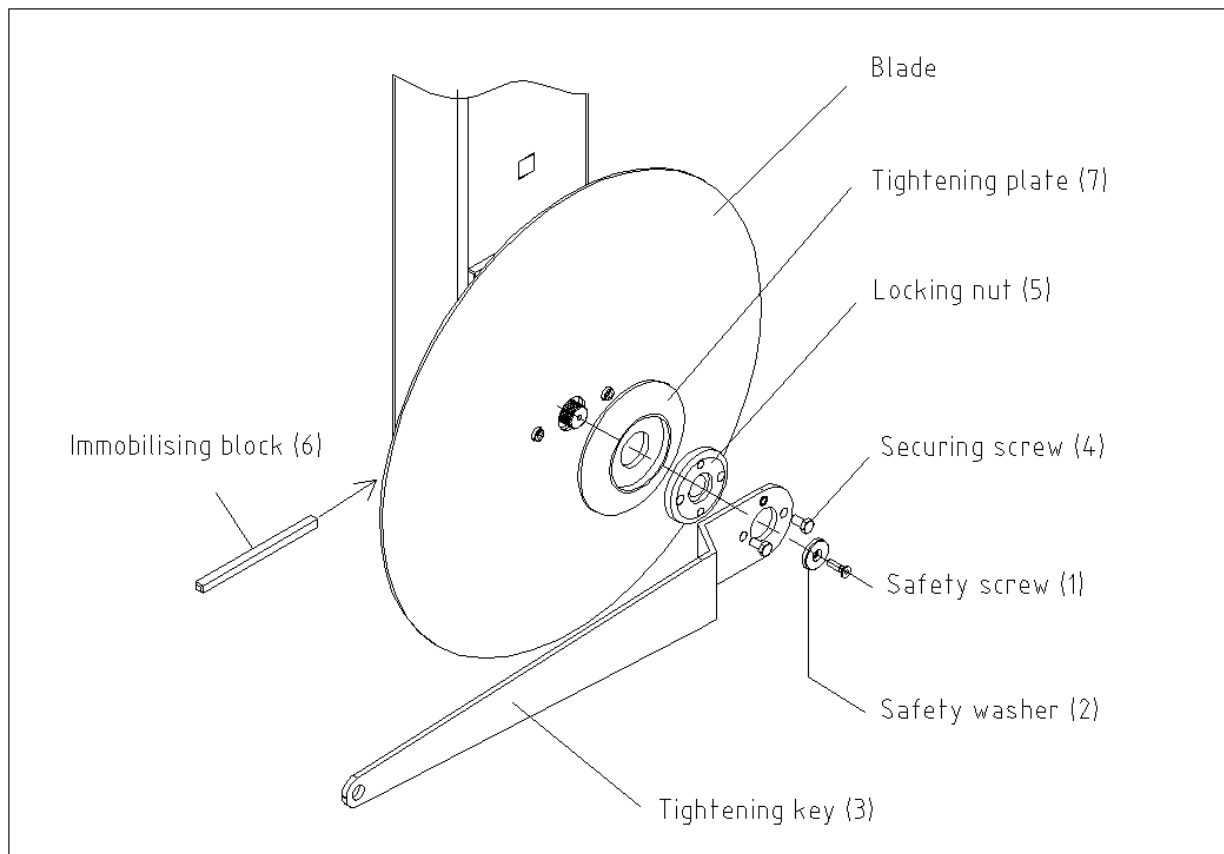
Gloves must be worn for all blade or rotary flail plate operations

Removing and refitting a blade.

- Fit the immobilising block (item 6) in the notch on the bearing block of the blade you wish to change.
- Loosen the safety screw (item 1)
- Remove the safety washer (item 2)
- Fit the tightening key (item 3) on the locking nut using the screws (item 4) to secure it.
- Loosen the locking nut (item 5)
- Remove the tightening plate (item 7)
- Change the blade

Before refitting the locking nut, grease the thread on the shaft and nut.

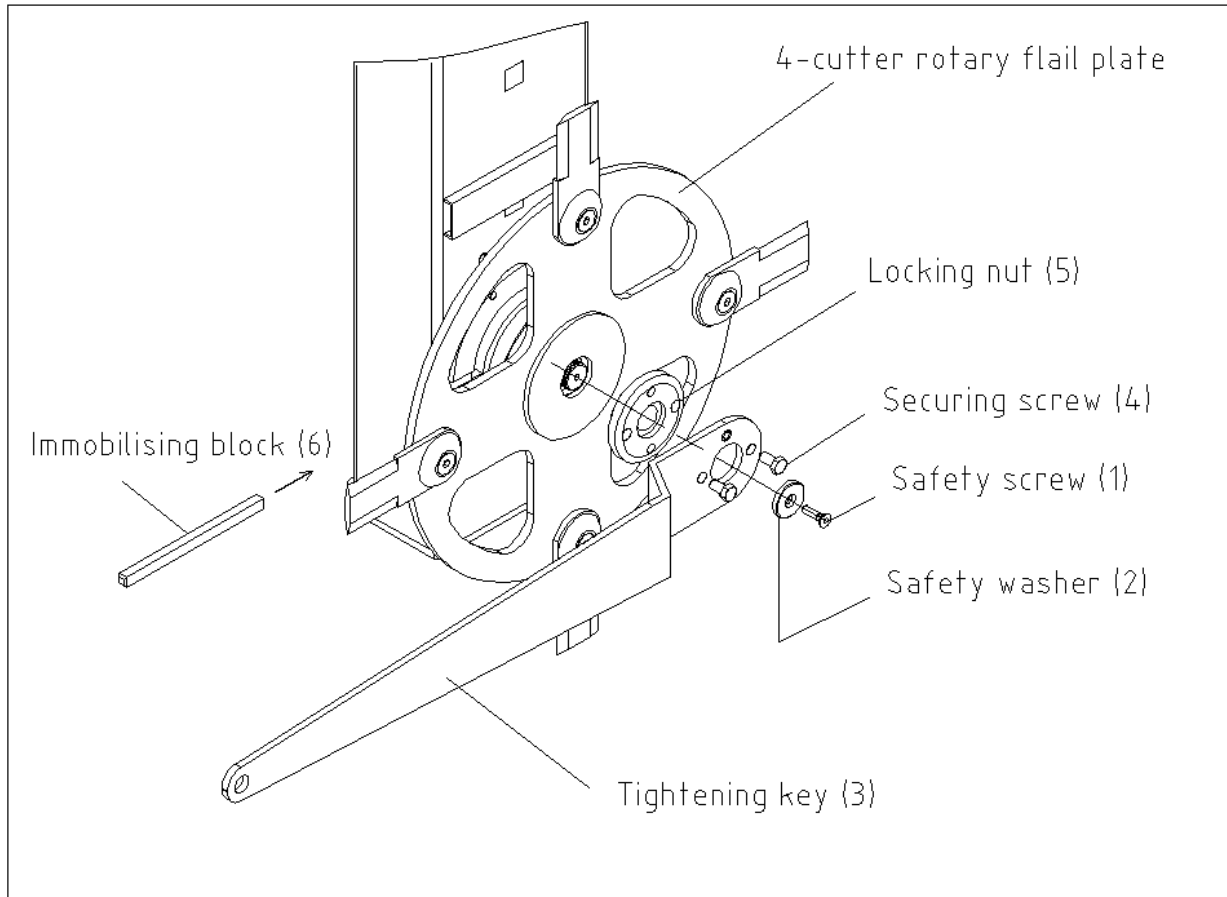
- Refit the assembly applying the prescribed torque (70 kg m.)



When refitting the blades, check that they are all fitted in the same direction.

Removing and refitting the rotary flail plates:

To fit the rotary flail plates, the tightening plate must be removed and the locking nut fitted directly on the cutter plate. The procedure to be followed is the same as for removing the blades.



Putting into storage, with or without the verge cutter:

Clean and grease the hedge cutter thoroughly, leave it to operate for 10 mn, then disconnect the hydraulic kits and fit the protective casings. Store in a dry place providing protection against knocks.

We also recommend wiping the blades with an oil-soaked rag before storage. This will protect them against rust and extend their operating life.

If the hedge cutter is removed from the verge cutter, it should be stored on a flat floor resting in horizontal position on two beams or a pallet, with the blades facing downwards.

If the hedge cutter is left on the verge cutter, store the verge cutter on a flat floor at an angle that guarantees its stability (see Verge cutter Storage).

If a part has to be removed, the openings left must be plugged to prevent foreign matter entering. The length of the machine's operating life depends on keeping the hydraulic circuit clean.

10 -/ GUARANTEE CONDITIONS:

- The guarantee provided by COUP'ECO is for a duration of **1 (one) year** from the date that the equipment is made available at our factory. It only covers manufacturing defects confirmed by our own examination and only commits us to dispatching parts for those recognised as being faulty (excluding labour) and without liability to pay compensation for down-time.

- Faulty assemblies or subassemblies must be returned to the after-sales service within 8 days of the incident, accompanied by a guarantee request:

**Complete and not dismantled
for a STANDARD
REPLACEMENT request**

**Complete and not dismantled
for a GUARANTEE
request**

- Carriage and packing costs for faulty parts, as well as new parts replaced under guarantee will be entirely at the buyer's expense.

- Repair or replacement of parts during the guarantee period do not extend its period of validity.

- All faulty parts replaced by a new part remain the property of COUP'ECO.

- The seller shall not be liable to pay compensation to the buyer for damage suffered, such as:

- personal injuries,
- damage to goods other than those covered by the contract.

- The guarantee does not cover everyday wearing parts such as blades, cutters, hoses, etc. or parts damaged accidentally or as the result of inadequate maintenance or failure to follow equipment operating instructions.

- The guarantee expires:

- if replacements or repairs are made by third parties or the buyer himself, without the seller's written consent,

- if parts fitted by the constructor are replaced by parts from a different source,
- if equipment is modified or transformed in any way by any person.

- We reserve the right to make any modifications to our models that we consider necessary, without being under obligation to make these modifications on equipment already delivered.

- In the event of disputes concerning the supply or payment for it, the Commercial Court of SAINTES is the only competent court, regardless of conditions of sales and means of payment accepted, even if the dispute concerns the guarantee or if there are several defendants.

- By express agreement, we remain the owner of delivered goods until they are fully paid for, under the terms of Law No. 80.335 of 12 May 1980.



The constructor disclaims all responsibility if the equipment is used in a manner contrary to the recommendations made in this manual.

The user must observe general hygiene and safety rules.

Other measures may be required in addition to our advice and safety rules.

12-/ SPARE PARTS LIST:

Whenever maintenance work is carried out on the hedge cutter, it is essential to contact us to avoid any wrong actions.

For top performance, use COUP'ECO spare parts. This will give users the benefit of the latest developments.

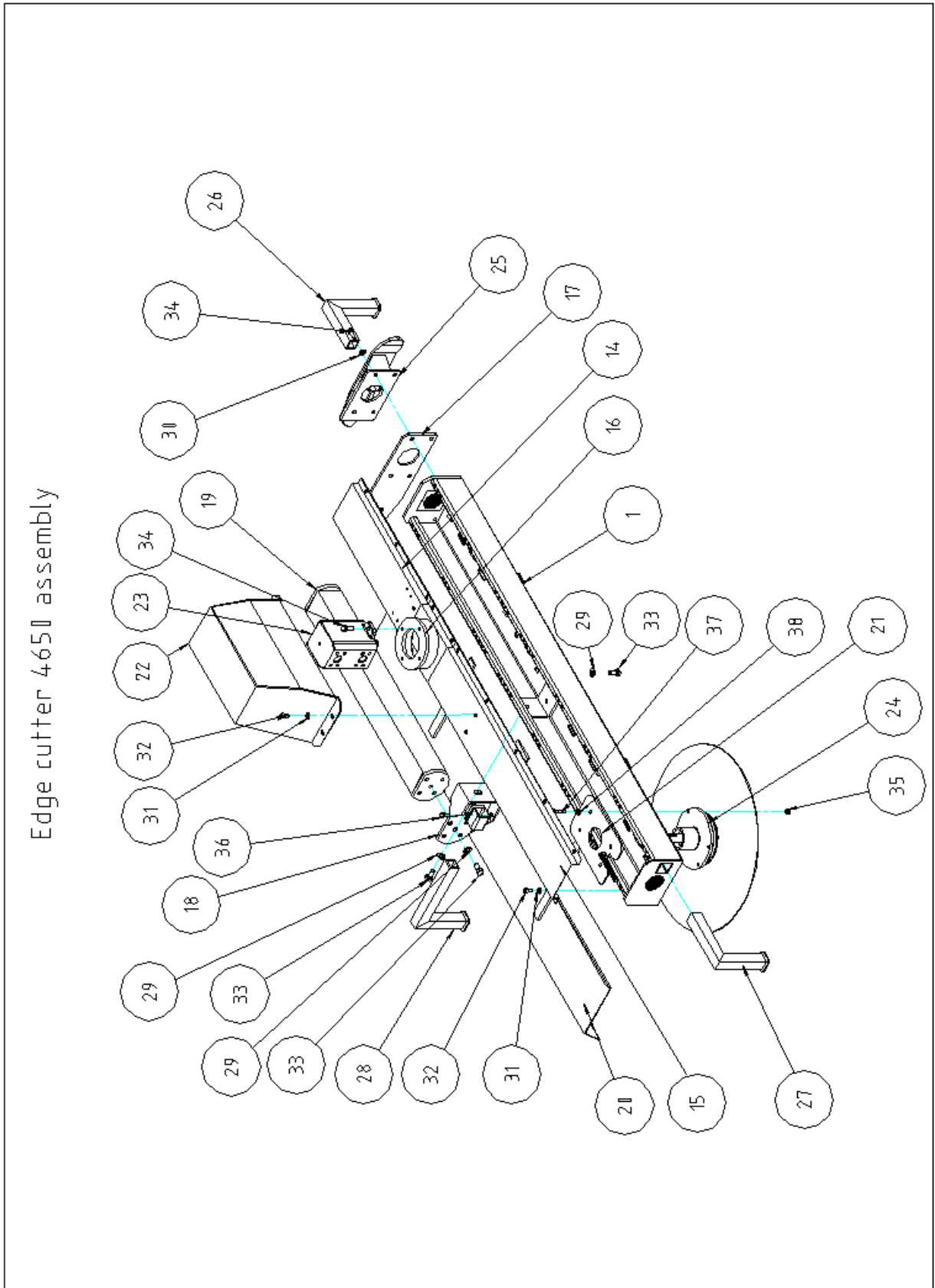
Buy your spare parts from the COUP'ECO original part constructor via your importer or regional approved dealer.

Always mention the type of machine, serial number and part reference number.

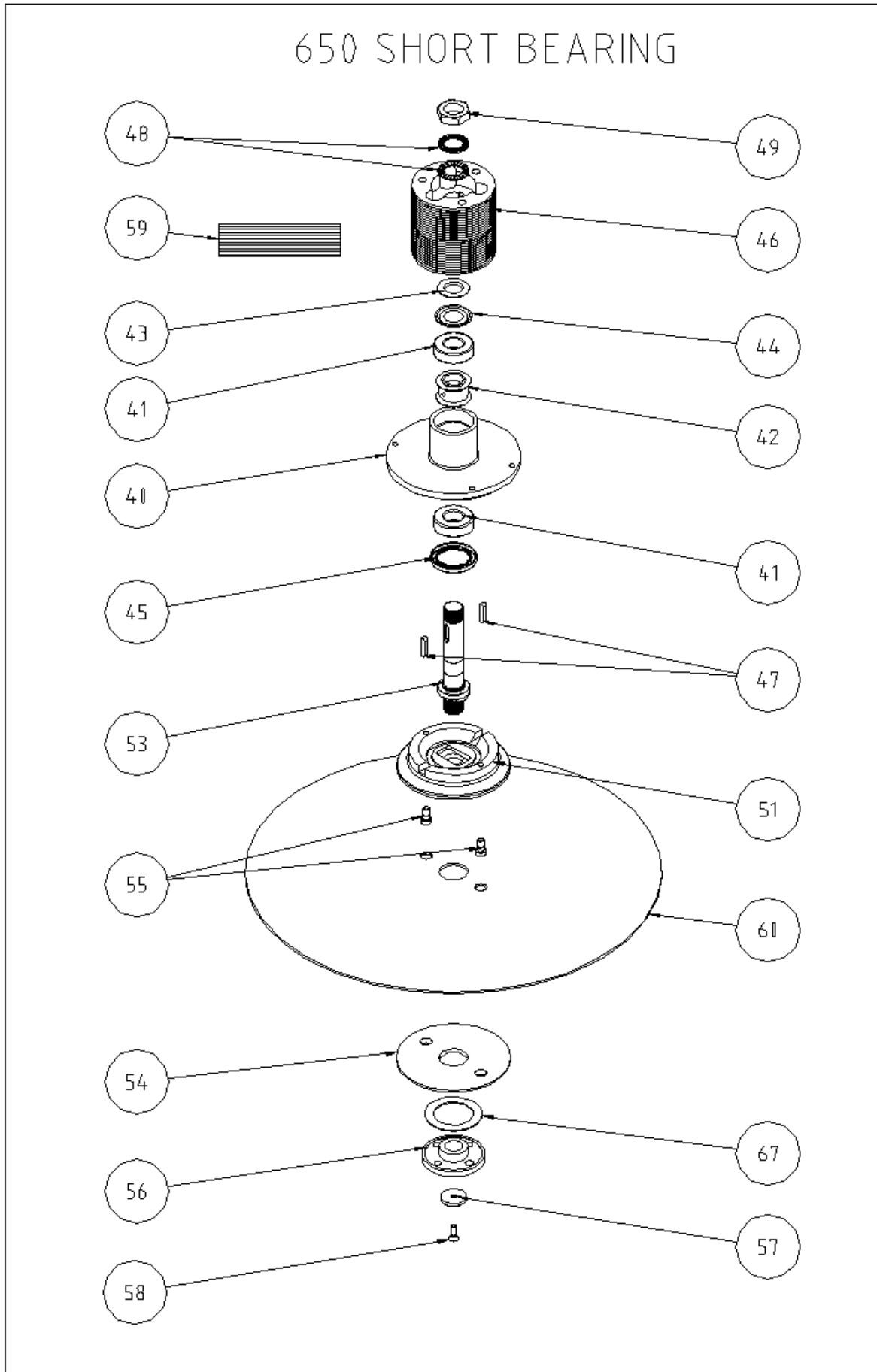
Developments made by our company may result in modifications to some parts mentioned in this manual. We always supply the most recent part if it is interchangeable with the previous model.

Please contact us for any additional information you require and also for special studies or products.

REFERENCE	PART NAME	ITEM
	Ø650 Hedge cutter case	
30.650.100	Bare case	1
30.650.155	Hedge cutter cover, small side	14
30.650.150	Hedge cutter cover, large side	15
30.650.119	Beam fastener (outside)	17
30.650.120	Beam fastener (inside)	18
30.650.130	Square support tube, 100 mm	19
30.650.160	Rear protective casing	20
40.700.014	Bearing tensioning plate	21
30.650.210	Motor seat	16
40.700.019	Motor case	22
21.620.702	Vickers motor	23
20.530.509	Overpressure block with valves	
	Complete bearing block	24
30.650.230	Foot	25
30.650.270	Blade casing	39
30.650.301	Hedge cutter end lug	27
30.650.305	Foot end lug	26
30.650.306	Rear lug	28
21.075.802	CHC M10x20	32
21.036.526	Contact washer 10x20	31
21.067.203	Screw H M14x30	33
21.036.528	Contact washer 14x30	29
21.067.802	Screw TH M10x25	36
21.067.102	Screw TH 12x35	34
21.036.525	Contact washer 12x24	30
21.026.505	Locking nut M10	35
21.075.812	Screw CHC 10x40 (bearing fastener)	37
21.040.002	Thick washer 10 (bearing fastener)	38

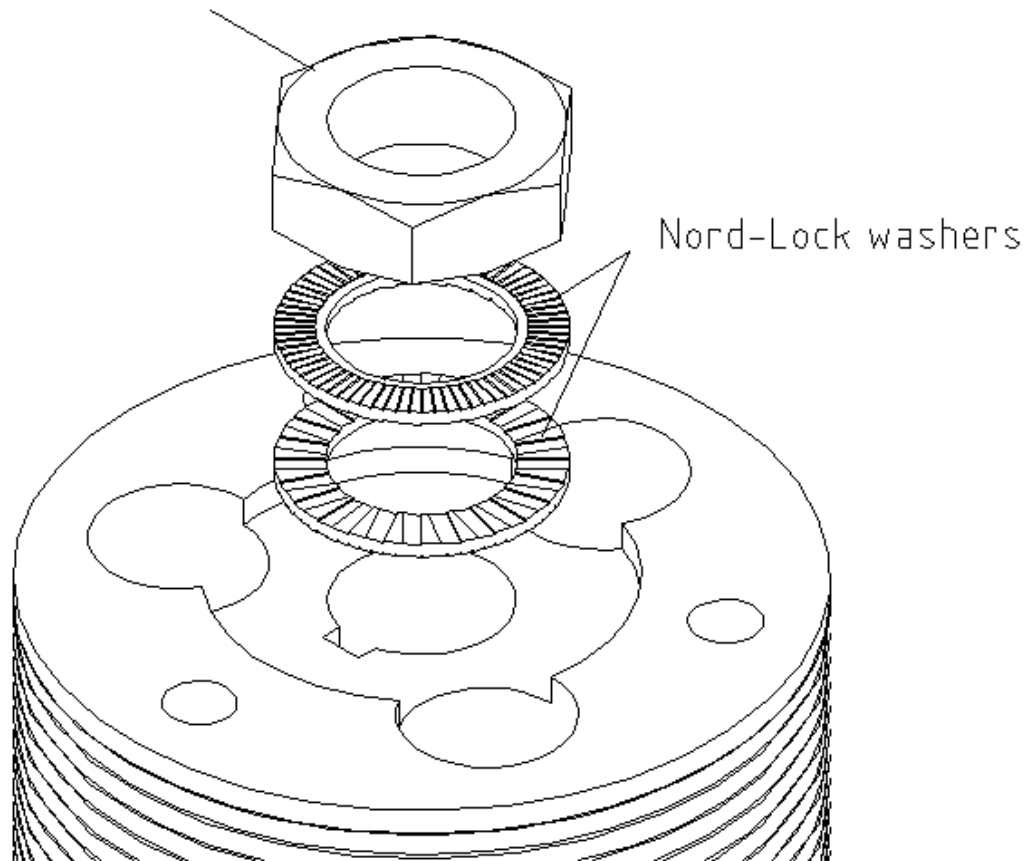


REFERENCE	PART NAME	ITEM
	Bearing Assembly	
30.600.107	Case	40
21.675.601	Roller bearing	41
30.100.504	Greasing insert	42
30.100.505	Grooved wheel insert	43
21.675.004	Nylon seal	44
20.581.807	Lip seal	45
30.650.561	Grooved wheel Ø130	46
21.650.502	Cotter 8x7x35	47
21.045.501	Washer, Nord-Lock	48
21.029.101	Flat nut, HM30 pitch 150	49
30.650.351	Counter-plate, large span 650	50
30.650.352	Counter-plate, small span 650	51
30.650.761	Long shaft 650	52
30.650.760	Short shaft 650	53
30.200.504	Locking plate	54
21.075.802	Screw CHC 10x20 (drive screw)	55
21.653.504	Washer, Permaglide	67
30.100.703	Plate locking nut	56
21.040.050	Safety washer	57
21.080.702	Screw TF HC M8x25 (safety screw)	58
21.750.509	Grooved belt, <i>Special FD</i>	59
35.600.680	Saw blade, Ø650 80 teeth, thickness 4 mm	60



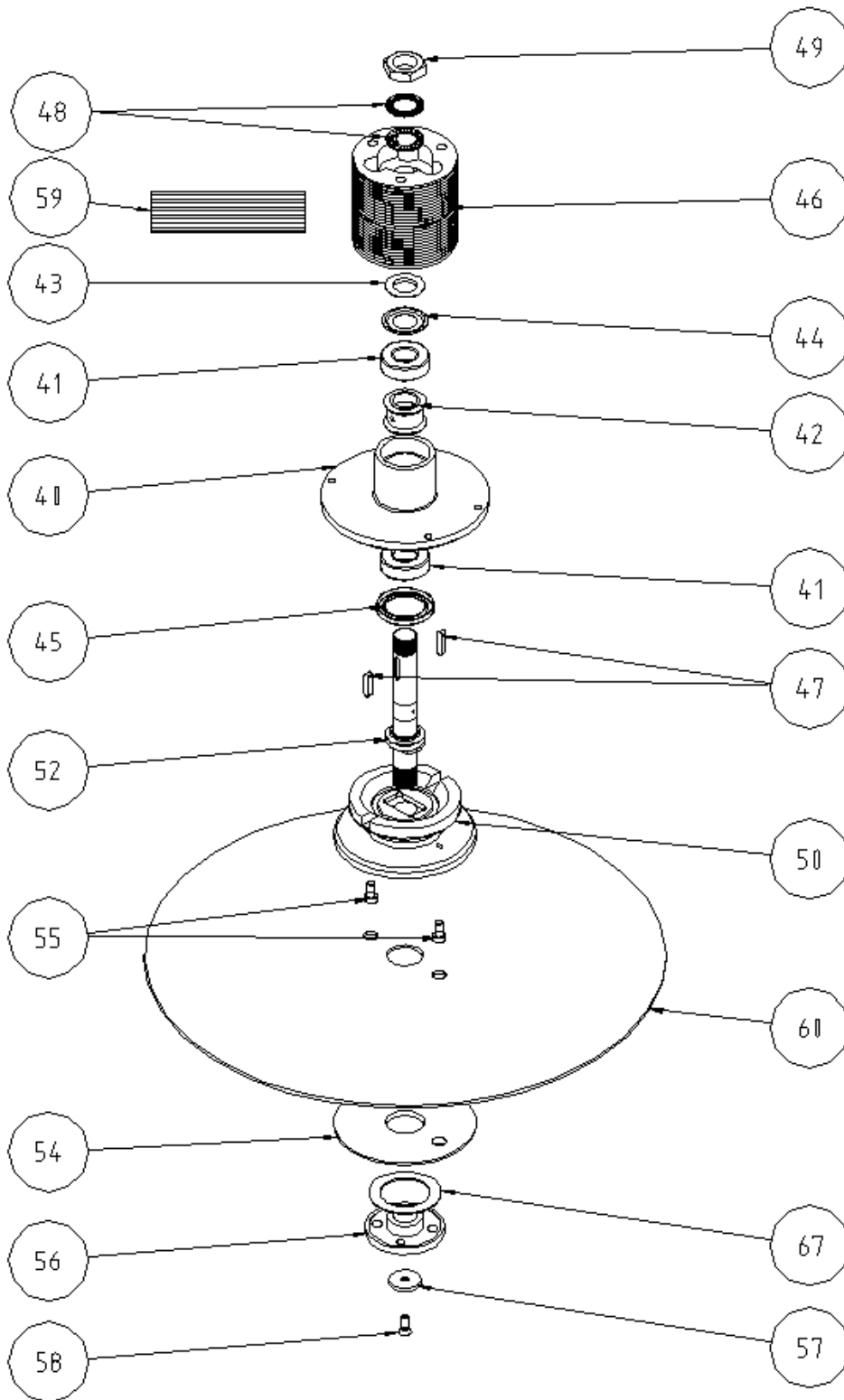
Fitting the Nord-Lock washers

Flat nut, HM 30

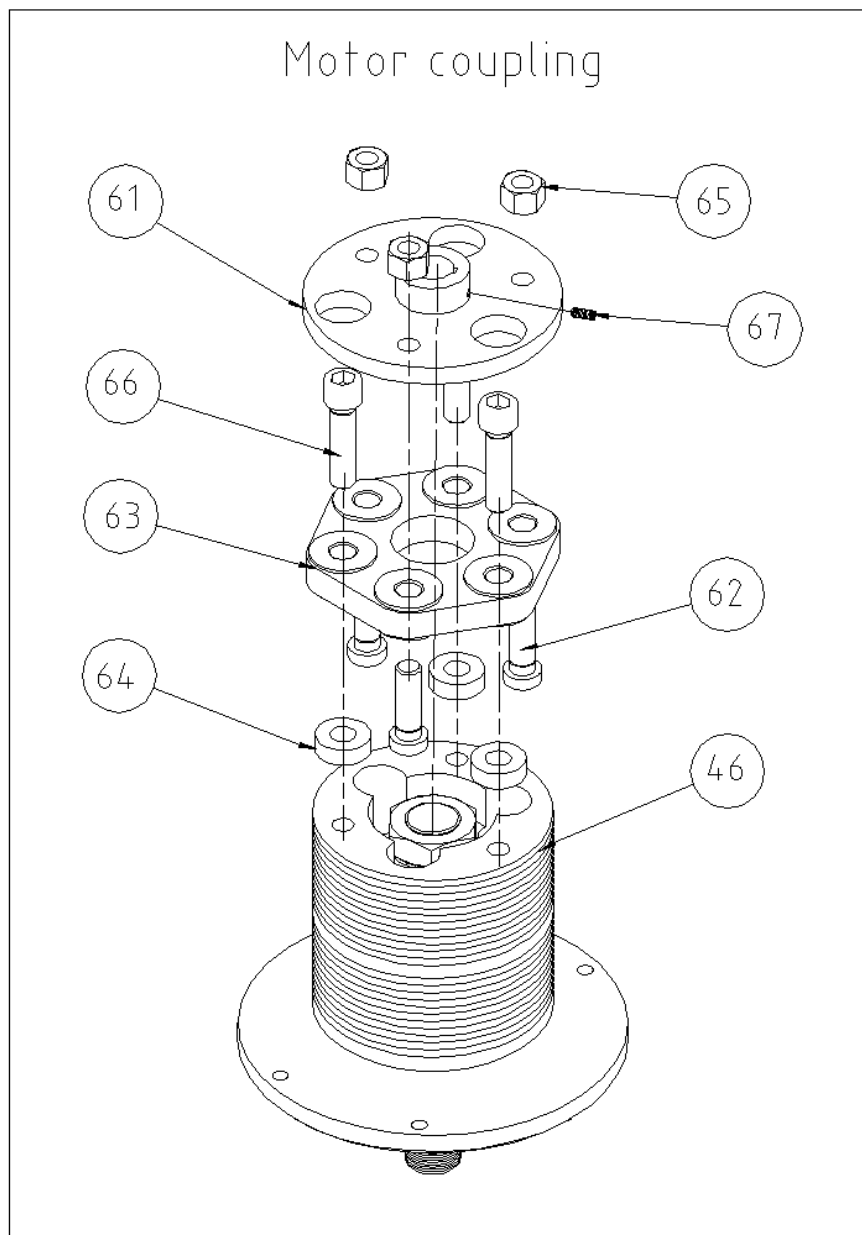


- Fit the Nord-Lock Washers
| fitted as a pair|
- Check fitting direction: wide stripes facing each other
- Tighten HM nut: Tightening torque: 70 mKg

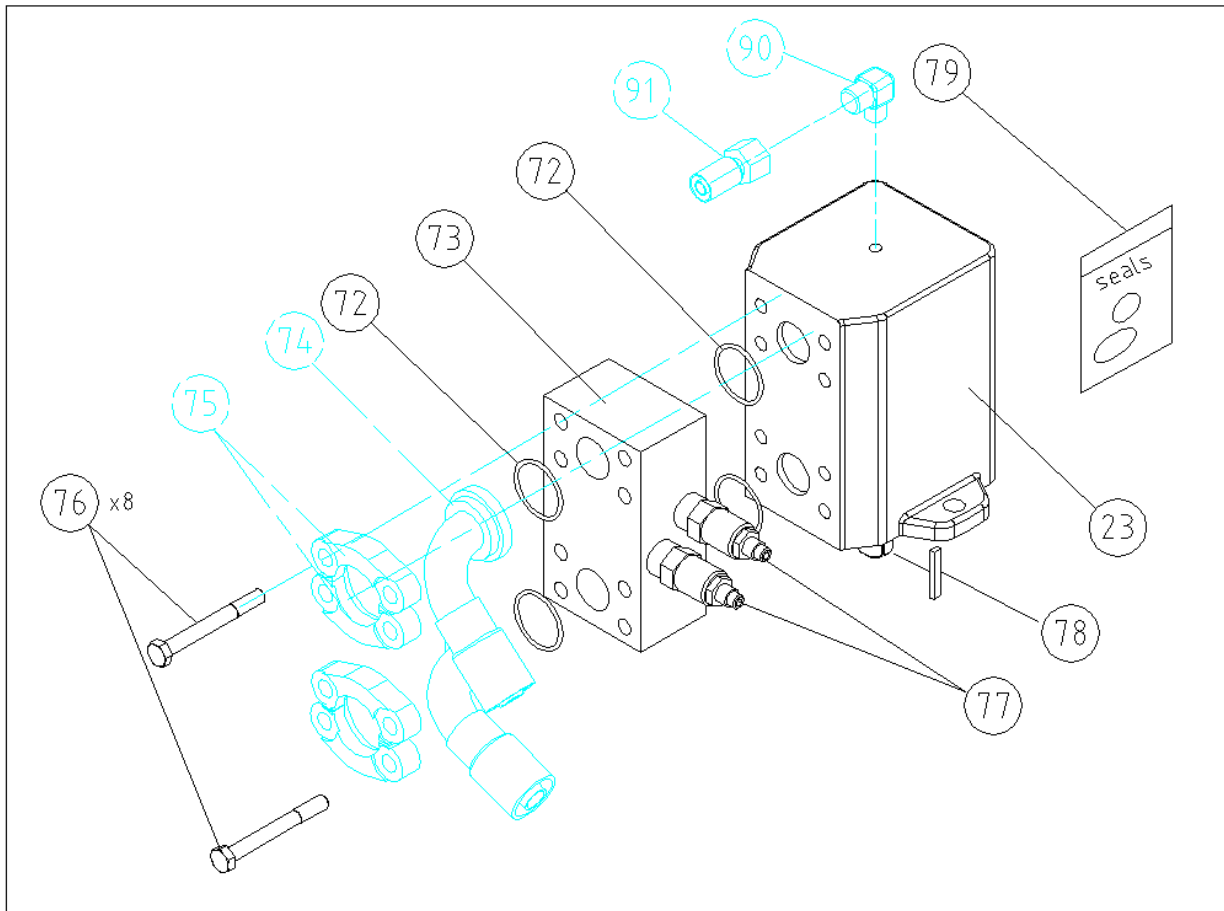
650 LONG BEARING



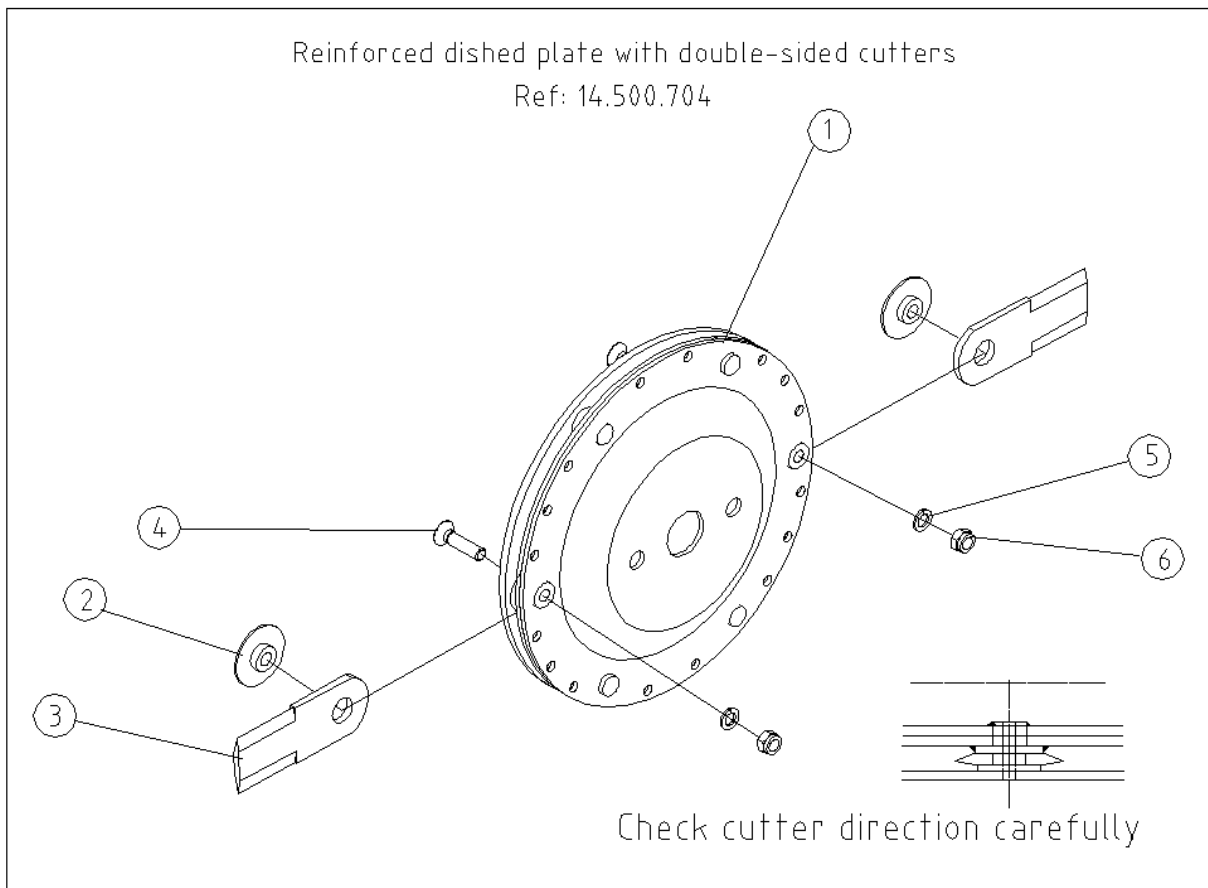
REFERENCE	PART NAME	ITEM
	Motor coupling assembly	
30.500.558	Vickers motor smooth half-coupling	61
21.067.201	Screw, TH 14x45	62
21.667.506	Coupling plate	63
30.650.553	Coupling insert	64
21.026.507	Locking nut, M14	65
21.075.205	Screw, CHC 14x55	66
21.052.502	Screw, STHC 6x16	67



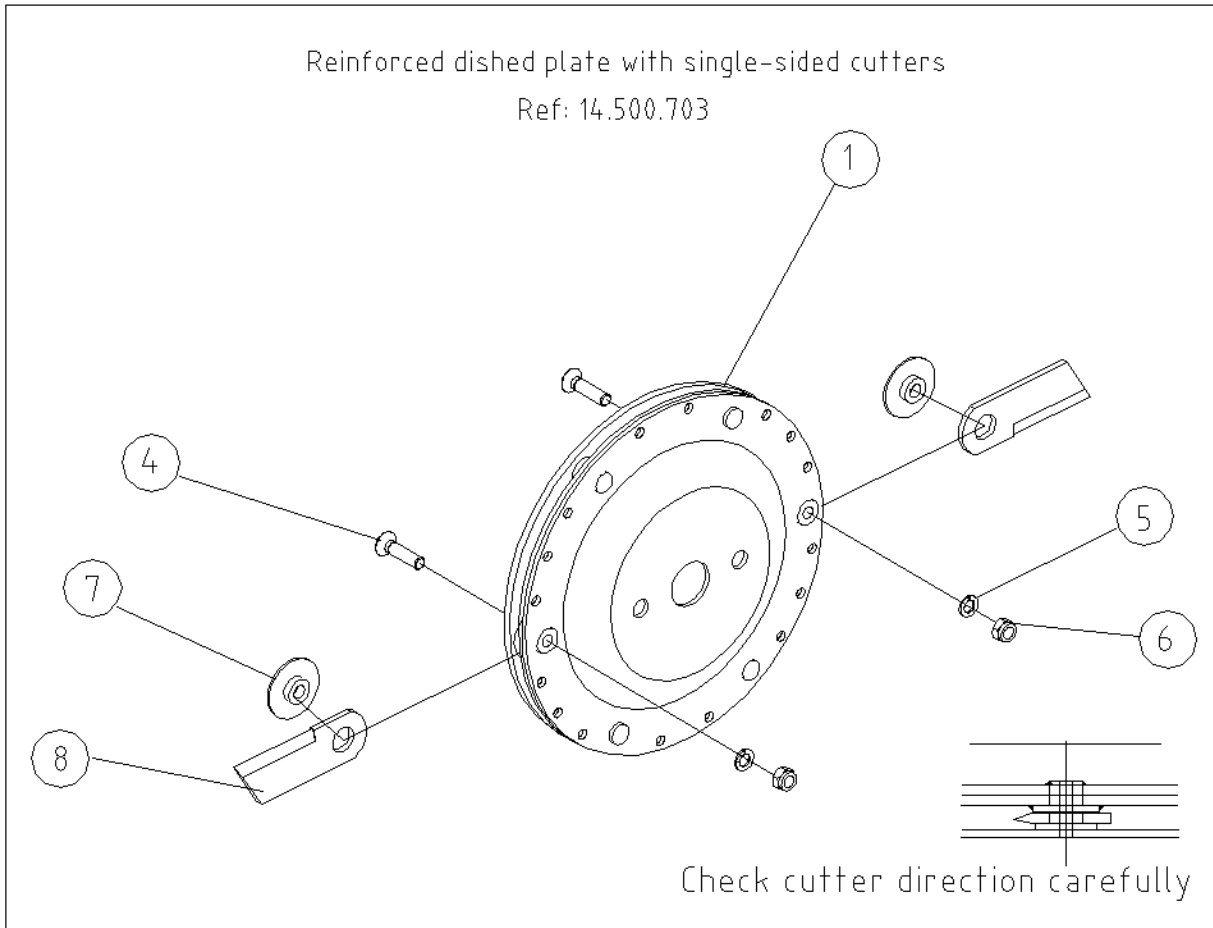
REFERENCE	PART NAME	ITEM
	Motor and limiter	
21.620.702	Vickers motor	23
JT.5054	O-ring, 1"1/4	72
20.530.300	Bare limiter block	73
	Alimentation flexible tube	74
	Clip	75
21.062.801	Securing screw for block and half-clips	76
20.530.309	Pressure relief valves	77
21.560.704	Vickers motor cotter	78
20.585.001	Pack of motor seals	79
20.530.509	Complete limiter block (with valves)	
	Drainage bend	90
	Drainage flexible tube	91



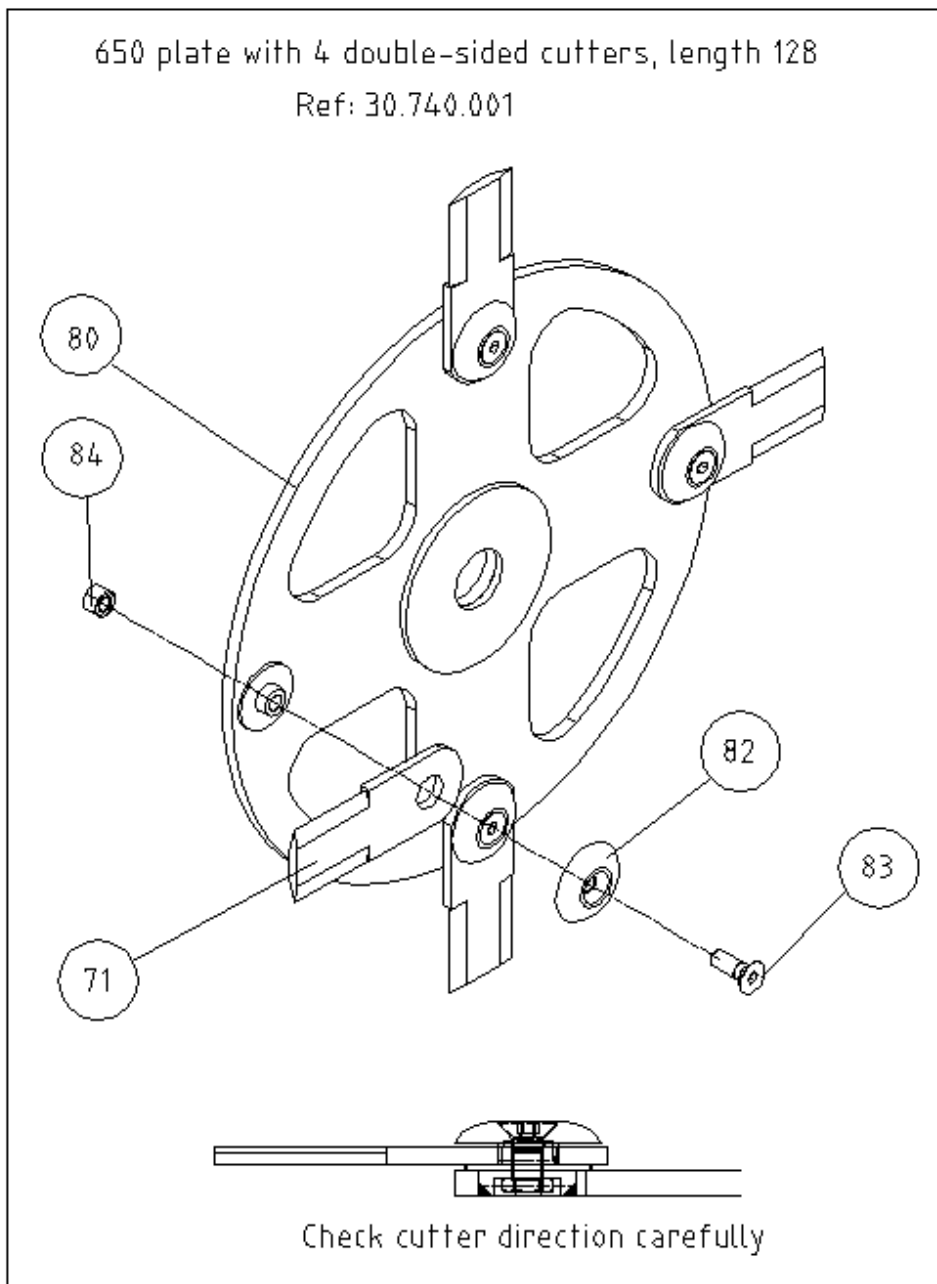
REFERENCE	PART NAME	ITEM
	Reinforced dished plate double direction rotary	
14.500.702	Reinforced dished plate	1
21.040.059	Shouldered washer for cutter 60x7	2
30.700.453	Double-sided cutter, 60x7x128	3
21.085.102	Screw, TFHC ½ 2 “	4
21.031.602	Washer, Grower ½	5
21.025.502	Nut, ½	6



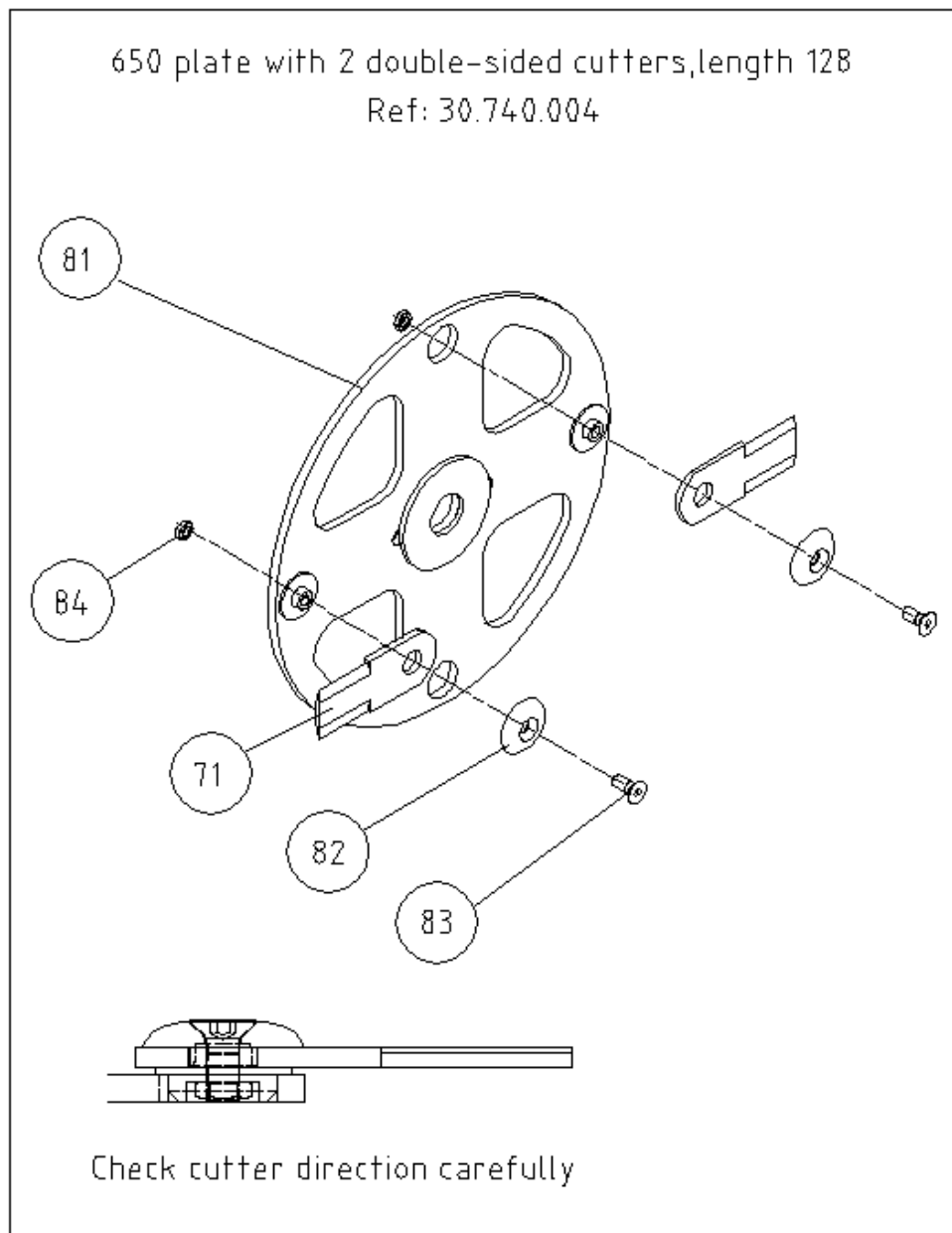
REFERENCE	PART NAME	ITEM
	Reinforced dished plate simple direction rotary	
14.500.702	Reinforced dished plate	1
30.700.450	Single-sided cutter, 50x6x128	8
21.085.102	Screw, TFHC ½ 2''	4
21.031.602	Washer, Grower ½	5
21.025.502	Nut, ½	6
21.040.060	Shouldered washer for 50x6 cutters	7



REFERENCE	PART NAME	ITEM
	4-cutter Ø650 plate	
30.740.002	Bare 4-cutter plate, Ø 650	80
30.700.453	Double-sided cutter, 60x7x128	71
30.740.006	Cutter tightening washing	82
21.085.107	Short screw, TFHC ½	83
21.025.503	Flat nut, ½	84



REFERENCE	PART NAME	ITEM
	2-cutter Ø650 plate	
30.740.003	Bare Ø 650 2-cutter plate	81
30.700.453	Double-sided cutter, 60x7x128	71
30.740.006	Cutter tightening washer	82
21.085.107	Short screw, TFHC ½	83
21.025.503	Flat nut, ½	84



REFERENCE	PART NAME	ITEM
	Tools	
21.886.005	Straight grease gun, M8x125	
30.700.753	Blade tightening key	90
30.700.754	Grooved wheel extractor key	93
30.700.755	Immobilising block	91
21.065.940	Screw, TH 12x20	92
30.700.751	8 mm Allen key, offset	4
30.700.752	5 mm Allen key, offset	5

