

ELIET

MANUAL

E750

- When irregularities occur, always switch off the engine and check the knives for defects.

- When maintaining the machine always switch off the engine and remove the spark plug cable.

1.2 Symbols used

The list below lists all symbols used on the machine.



Danger



Always read the manual attentively.



Always wear safety goggles



Always wear ear muffers



Always wear working gloves



Keep your hands away from the rotating knife

2. General provisions and functions

Eliet scarifier is a machine which removes moss and other plants from your lawn. It consists of the following parts:

- Frame
- Knives and drive
- Adjustment
- Push shackle with control handle

In the sections below you will find a description of the different parts.

2.1 Frame

The frame carries all parts. The wheels are mounted at the side of the frame. The engine is mounted on the frame and the knives are covered by the frame.

2.2 Knives and drive

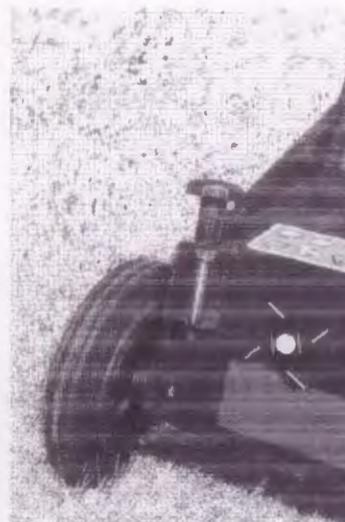
The engine is mounted on the frame. A V-belt transmission drives the cutter spindle. The engine can be an electrical engine as well as a combustion engine. The engine will always revolve at a maximum speed so no speed regulation is foreseen.

The cutter spindle which is mounted under the frame, can consist of fixed knives, individual knives or double-cut knives.



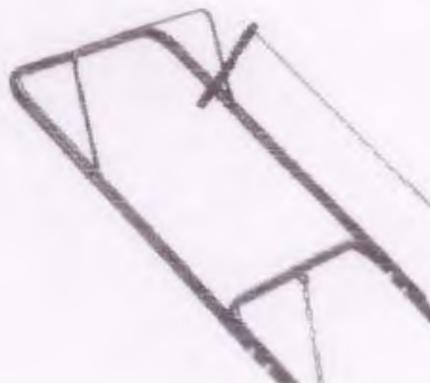
2.3 The adjustment

The depth can be adjusted at the front side of the scarifier. The wheels are moved upwards or downwards with the height adjustment foreseen.



2.4 The push shackle and control handle.

The push shackle, fixed at the back of the scarifier, has on top a handle to control the drive. When pulled, the V-belt is tightened. When released, the cutter spindle stops.



3. Technical specifications

Working width	75 cm
fixed knives	25 knives - 3 mm thick
types of knives	surfaced with stellite by welding
individual knives	46 knives - 2.5 mm thick
types of knives	surfaced with stellite by welding fixed with nylon hinge point
distance between knives	25 mm
wheels	rubber tires on aluminium rims with industrial ball bearings
depth adjustment	stepless quick-lock system
depth blocking	with automatic blocking
belt tension	vertical
push shackle	floating
weight	□ 79 kg
engine options	B & S Vanguard - 9 HP Honda GX 270 - 9 HP Kubota GH 250
max speed	3200 rpm

4. Moving the machine

To be able to use the scarifier, the knives have to be situated deeper than the wheels (see chapter 5B). To move the machine, following steps have to be followed :

1. Switch off the engine.
2. Push the push shackle downwards so that the front wheels are lifted 10 cm from the ground.
3. Move the scarifier.
4. Put the scarifier down on the lawn.
5. Start the scarifier.



Attention : Not following the above-mentioned instructions can damage knives and subsoil.

5. Put the scarifier into use

5.1 First use

Scarifiers with a combustion engine are always delivered without oil or petrol. Fill it up with good engine oil of the type SAE 20-40. Fill also the petrol tank with unleaded petrol (see engine manual).  **Attention : Never smoke when filling up the petrol tank.**

5.2 Adjustment for operation

Before the scarifier can operate the correct depth of the knives has to be adjusted. The way to adjust depends on the type of scarifier :



Always wear working gloves

1. Switch off the engine.
2. Remove the spark plug cable from the engine (see engine manual).
3. Place the machine on a flat surface (concrete, asphalt,...)



4. Rotate the V-belt manually till the tops of the knives reach their lowest point. It is possible that the front wheels will be lifted.
5. The distance from the front wheels to the ground determines the depth of knives for operation
6. Pull the handle of the blocking system so that the starlike button can be turned.
7. Turn the starlike button to move the wheels upwards or downwards :
turn left : draw in the knives or work less deep.
turn right : push out the knives or work deeper.
Humid periods : adjust the depth of the knives at 5 mm.

Dry periods : adjust the depth of the knives at 2 mm.

8. Release the handle of the blocking system so that the starlike button is secured.
9. Put the spark plug cable back in place.

When the starlike button comes too close to the frame and the frame upfront nearly touches the ground (1 to 2 cm), the back wheels have to be heightened. (It will be harder to push the machine forward).

1. Loosen the bolt and the concerning nut.
2. Position the wheel one hole upwards and secure it with the bolt and the concerning nut.
3. Move the front wheels downwards by turning the starlike button to the left.
4. Release the handle of the blocking system so that the starlike button is secured.
- 5.

5.3 Starting the machine.

Before using the machine, always follow the steps below.
Place the machine on the grass.



1. Start the engine (do not pull the control handle). See engine manual.
2. Push the push shackle downwards.
3. Pull the handle towards you and let the knives go to full speed.
4. Slowly lower the front wheels so that the knives cut in the grass.
5. Slowly push the scarifier forward.

6. Using the scarifier.

Using the scarifier is just like using a lawn mower. One walks through the lawn in one direction. When necessary, one can walk through the lawn for a second time but then in cross-direction.

During operation it can be necessary to adjust the depth again. Follow the instructions described in chapter 5.



Always make sure that the knives do not hit stones or hardened subsoil. This can seriously damage your knives.



Always wear protective clothes and ear protection.

7. Stopping and storing the machine.

7.1 Stopping

After finishing the job the scarifier has to be switched off. Therefore, follow the instructions below :

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Push the push shackle downwards so that the knives - while rotating - come out of the grass. 2. Push the scarifier a little bit further away so that no moss remains on the knives. 3. Release the handle while the knives are still above the grass. 4. Let the knives come to a standstill. | <ol style="list-style-type: none"> 5. Turn the knives in so that the scarifier can be moved on hard ground without the knives touching the bottom. (see chapter 5). 6. Note down the operating hours. 7. Compare the operating hours with the maintenance table and do the necessary maintenance work. |
|---|---|

7.2 Storing

Before storing, following steps have to be taken :

1. Do the necessary maintenance work, including cleaning.
2. For a winter stop all petrol has to be removed from the tank and the engine.
3. Let the engine run till it stops by lack of petrol.
4. Place the engine horizontally.

8. Maintenance

The rules of true workmanship are always to be observed during maintenance. Whenever something is unclear, consult your dealer or constructor.

8.1 Maintenance table

action	after the first 10 hours	after operation	after 10 hours	after 25 hours
engine			<input type="checkbox"/>	
oil level engine				
checking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
changing				<input type="checkbox"/>
air filter				
cleaning				<input type="checkbox"/>
lubricating		<input type="checkbox"/>		
V-belt			<input type="checkbox"/>	
knives			<input type="checkbox"/>	
general check-up			<input type="checkbox"/>	<input type="checkbox"/>
cleaning		<input type="checkbox"/>		

8.2 Procedures

1. ENGINE :

The maintenance of the engine is described in detail in the engine manual.

2. OIL LEVEL OF THE ENGINE :

Checking : As described in the engine manual, the oil level has to be checked. If necessary the suitable oil of the type SAE 20-40 has to be added.

Changing : The engine oil has to be changed after the first 10 hours and after 25 hours. Follow the instructions in the engine manual. Use oil of the type SAE 20-40.

3. AIR FILTER :

Cleaning : After 25 hours of operation the air filter has to be cleaned. The procedure to be followed is described in the engine manual.

4. LUBRICATION :

After every operation the parts have to be lubricated. Clean the scarifier before lubrication. Following parts are to be lubricated :

- wheels
- control cable
- adjusting screws

- bearings of the cutter spindle with penetrating oil

5. V-BELT :

After some time the tension on the V-belt can lessen. Depending on the type of scarifier, following procedures have to be followed :

1. Switch off the engine and remove the spark plug cable from the engine.
2. Dismount the cover(39) by loosening the bolts (38).
3. Loosen bolt (24) so that the cable (59) is loosened.
4. Push the V-belt tensioner against the V-belt.
5. Tighten the cable (59).
6. Secure the cable with the bolt (24).
7. Remount the cover.
8. Refix the spark plug cable.

For changing the V-belt following procedure has to be followed :

1. Switch off the engine and remove the spark plug cable from the engine.
2. Dismount the cover hood by loosening the bolts.
3. Remove the V-belt from the pulley.
4. Mount the new V-belt.
5. Remount the cover.
6. Refix the spark plug cable.

6. KNIVES :

The knives have to be checked on their effectiveness. When replacement is necessary, following procedures have to be followed :

fixed knives :

1. Switch off the engine and remove the spark plug cable from the engine.
2. Loosen the cutter spindle from the frame by loosening the bolts of the bearings.
3. Dismount the bearing at the side where there is no V-pulley.
4. Remove the knives together with their distance sleeve one by one from the spindle.
5. Mount new knives in the same way. Make sure that the cutting edge points forward.
6. Remount the bearing on the shaft.
7. Mount the whole on the frame.
8. Refix the spark plug cable.

Individual knives :

Here you have the possibility to replace knives separately. It is advisable to replace all knives at once. Follow therefore the procedure below :

1. Place the scarifier on its side, with the air filter upwards.
2. Loosen the knives one by one by loosening the bolt (60) and replace the knives.
3. Put the scarifier back on its wheels.

Double-cut knives :

Follow the same procedures as for fixed knives.

7. GENERAL CHECK-UP

After 10 hours of operation the scarifier has to be checked for possible wear and defects. Check every connection and hinge point. Make sure that everything is functioning perfectly.

8. CLEANING :

Each time the scarifier has been used, it has to be cleaned. Remove all dirt and remains of moss from the engine and frame. Use therefore a hard brush. Avoid as much as possible the use of water on the scarifier

9. Guarantee conditions

The Certificate of Guarantee consists of two parts :

The Customer Guarantee Certificate

The Manufacturer Guarantee Certificate

The 'Customer Guarantee Certificate' is strictly personal and is to be held in the customer's possession. With this certificate the manufacturer N.V. ELIET grants a

- one year guarantee if the machine is employed for private use.
- six months guarantee if the machine is used professionally or leased.

The guarantee period starts with the date on which the machine is purchased. Guarantee claims are invalid if the required guarantee procedure is not strictly followed.

The 'Manufacturer Guarantee Certificate' is to be sent to the below address. On signing this certificate the customer confirms having received and understood the user's manual. The user is to follow the instructions included in the manual. Non-observance of the instructions may cause unsafe situations. Each use exceeding the user manual requires the manufacturer's written consent.

This guarantee however does not cover damage to parts that are subject to normal wear, i.e. : knives, belt, bearings, closing piece, chain, chain wheels.

Each dismounting, alteration or addition of non-Elie part renders the guarantee null and void. This also applies to the damage due to non-observance of the use and maintenance rules included in the user's manual.

The manufacturer N.V. Elie reserves the right to decide whether or not the customer has met the guarantee conditions (be it a one year or a six months guarantee).

If N.V. Elie rejects the guarantee claim definitely, it will not pay any damages for repairs or compensate any costs resulting from such repairs.

If parts are replaced under guarantee, these new parts are covered during the original guarantee period (starting on date of purchase).

Guarantee procedure

-The complete certificate of guarantee (two parts) is to be filled out correctly and truthfully on the day of delivery.

-Both certificates are to be stamped by the dealer and to be signed by both the dealer and the customer

-The 'Manufacturer Certificate of Guarantee' is to be sent to the address mentioned on the certificate immediately after delivery.

-In case of malfunction during the guarantee period the customer is to take the certificate of guarantee and his/her machine to the dealer for inspection.

-The dealer will then send a guarantee claim on behalf of the customer to the manufacturer. (A copy of the certificate of guarantee is to be enclosed with the letter).

-The dealer is to dismount the defective part and send it to the below address.

-N.V Elie will approve or reject the guarantee claim.

EC-Declaration Of Conformity - E750

Machine: **SCARIFYER**
Type: **ELIET E750**
Model number: **MA 009 010 207**
MA 009 020 207
MA 009 030 207

The previously mentioned machine has been designed and manufactured to comply with the following European CE regulations :

EN 13684: Garden equipment - Pedestrian controlled lawn aerators and scarifiers - Safety

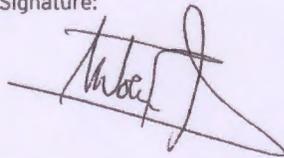
ELIET mfg. cy. hereby declares that after performing a hazard analysis, it is fully aware of the potential hazards and risks associated with the machine. In this knowledge, the necessary steps have been taken in line with Machine Directive 2006/42/EC in order to ensure absolute operator safety for the operator, when the machine is used correctly.

The value of the measured sound power level and the guaranteed sound power level were obtained according the procedures set forward in the directive 2000/14/EG annex III/B clause 49 and directive EN 13684.

Measured sound power level Lwa : 94 dB(A)
Guaranteed A-weighted sound power level : 95 dB(A)

Date: 01/01/2011

Signature:



Frederic LIETAER
Managing Director ELIET EUROPE NV
Date of birth: 02/01/1975

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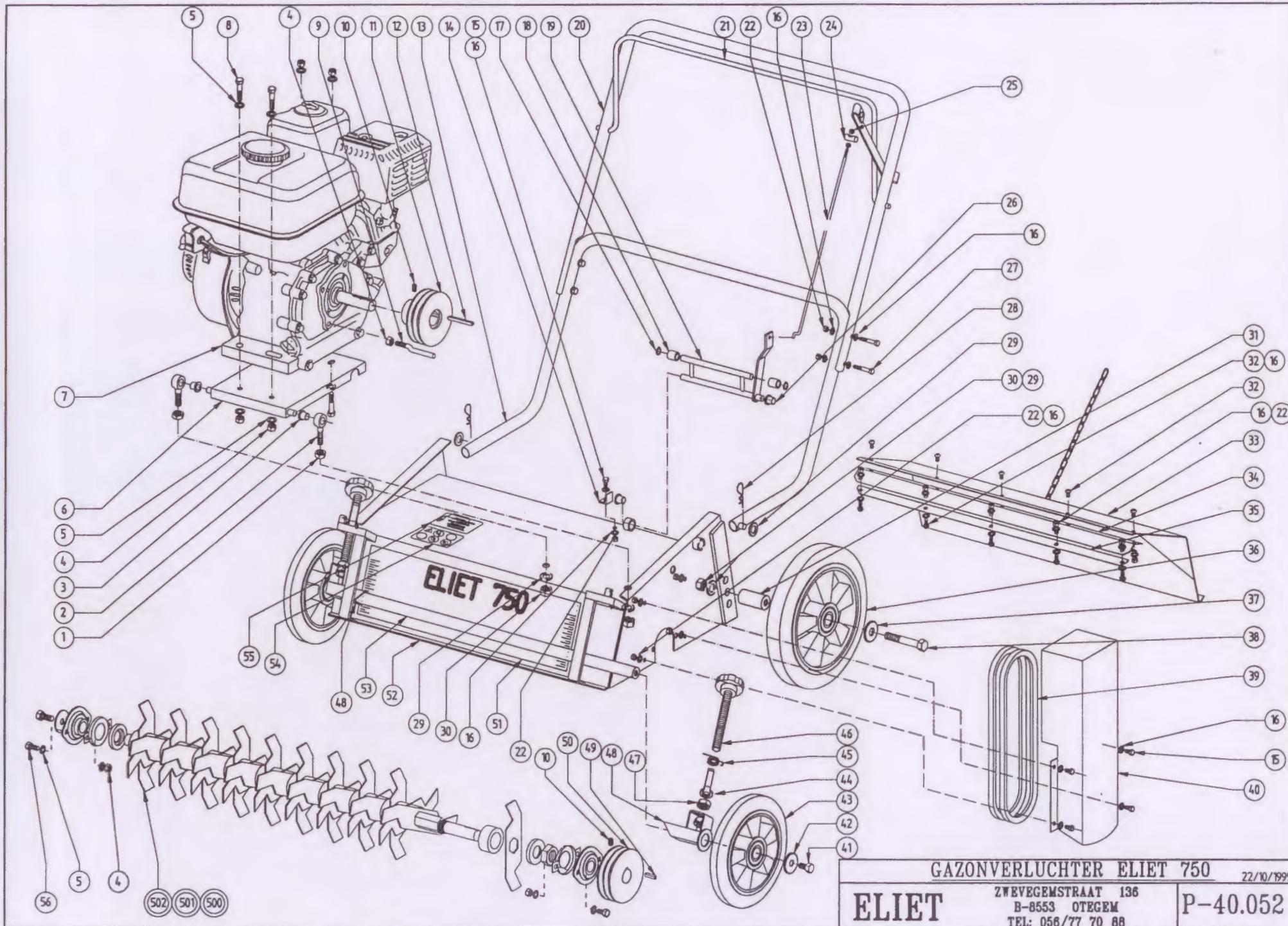
ELIET: GAZONVERLUCHTER 750

20-10-98

MACH.TYPE : GV ELIET 750 REF.Nr.:40.052

Nr.	AANT.	PLAN Nr./ART.Nr.	BENAMING	PRIJS BTW EXL.
500	1	40.050	MONTAGEPLAN AS LOSSEN MESSEN	0
501	1	40.051	MONTAGEPLAN AS DUBBELE CUT MESSEN	0
502	1	40.049	MONTAGEPLAN AS VASTE MESSEN	0
				0
1	2		6KT. TEGENMOER	0
2	2	1.323	OOGBOUW	0
3	2	1.322	LAGERBUS OOGBOUW	0
4	9		ZELFBORGENDE MOER	0
5	16		SLUITRING	0
6*	1	10.180	MOTORPLAAT-HONDA+BR&ST	0
6**	1	10.084	MOTORPLAAT KUBOTA	0
7	1		MOTOR	0
8	4		6KT.TAPBOUW	0
9	1	1.803	REGELSTUK V-RIEM	0
10	2		STELSCHROEF	0
11	1	1.683	V-RIEMSCHIJF MOTOR	0
12	1		SPIE AS MOTOR	0
13	1	10.174	DUWBEUGEL	0
14	1	1.321	SUPPORT	0
15	5		6KT TAPBOUW	0
16	25		SLUITRING	0
17	2		BORGVEER	0
18	2	1.330	BUSJE EXCENTRIEK	0
19	1	10.176	EXCENTRIEK MOTORPLAAT	0
20	1	10.173	DUWBEUGEL BOVEN	0
21	1	10.175	KOPPELINGSHENDEL	0
22	20		ZELFBORGENDE MOER	0
23*	1	1.680	REGELSTANG	0
23**	1	1.682	REGELSTANG-HONDAMOTOR	0
24	1	1.325	ASJE RIEMSPANNER	0
25	2		ZELFBORGENDE MOER	0
26	2	1.327	LAGERBUS EXCENTRIEK	0
27	4		6KT TAPBOUW	0
28	2		BETASPELD	0
29	4		SLUITRING	0
30	4		ZELFBORGENDE MOER	0
31	2	1.028	DUIM WIELEN	0
32	10		LAGE BOLKOPSCROEF MET BINNENZESKANT	0
33	1	10.182	AFSCHERMKAP	0
34	1	1.678	KOPPELSTUK AFSCHERMKAP	0
35	2	1.679	OPSPANSTUK KOPPELSTUK AFSCHERMING	0
36	2		WIEL	0
37	2		SLUITRING	0
38	2		6KT. SCHROEFBOUW	0
39	2		V-RIEM	0

40	1	10.181	AFSCHERMKAP AANDRIJVING	0
41	2		6KT TAPBOUT	0
42	2		SLUITRING	0
43	2		WIEL	0
44	2	1.329	KLEM AS WIELEN	0
45	2	1.328	VEER	0
46	2	1.035	REGELSCHROEF	0
47	4		ZELFBORGENDE MOER	0
48	2	1.685	SUPPORT HOOGTEREGELING	0
49	1		SPIE AS MESSEN	0
50	1	1.681	V-RIEMSCHIJF MESSENAS	0
51	1		ZELFKLEVER ELIET 750	0
52	1	25.014	GESTEL	0
53	1	1.675	AS WIELEN	0
54	1		ZELFKLEVER INSTRUKTIES	0
55	1		ZELFKLEVER MOTORSTOP	0
56	4		6KT TAPBOUT	0
				0
				0
				0



GAZONVERLUCHTER ELIET 750 22/10/1999

ELIET

ZWEEGEMSTRAAT 136
 B-8553 OTEGEM
 TEL: 056/77 70 88

P-40.052

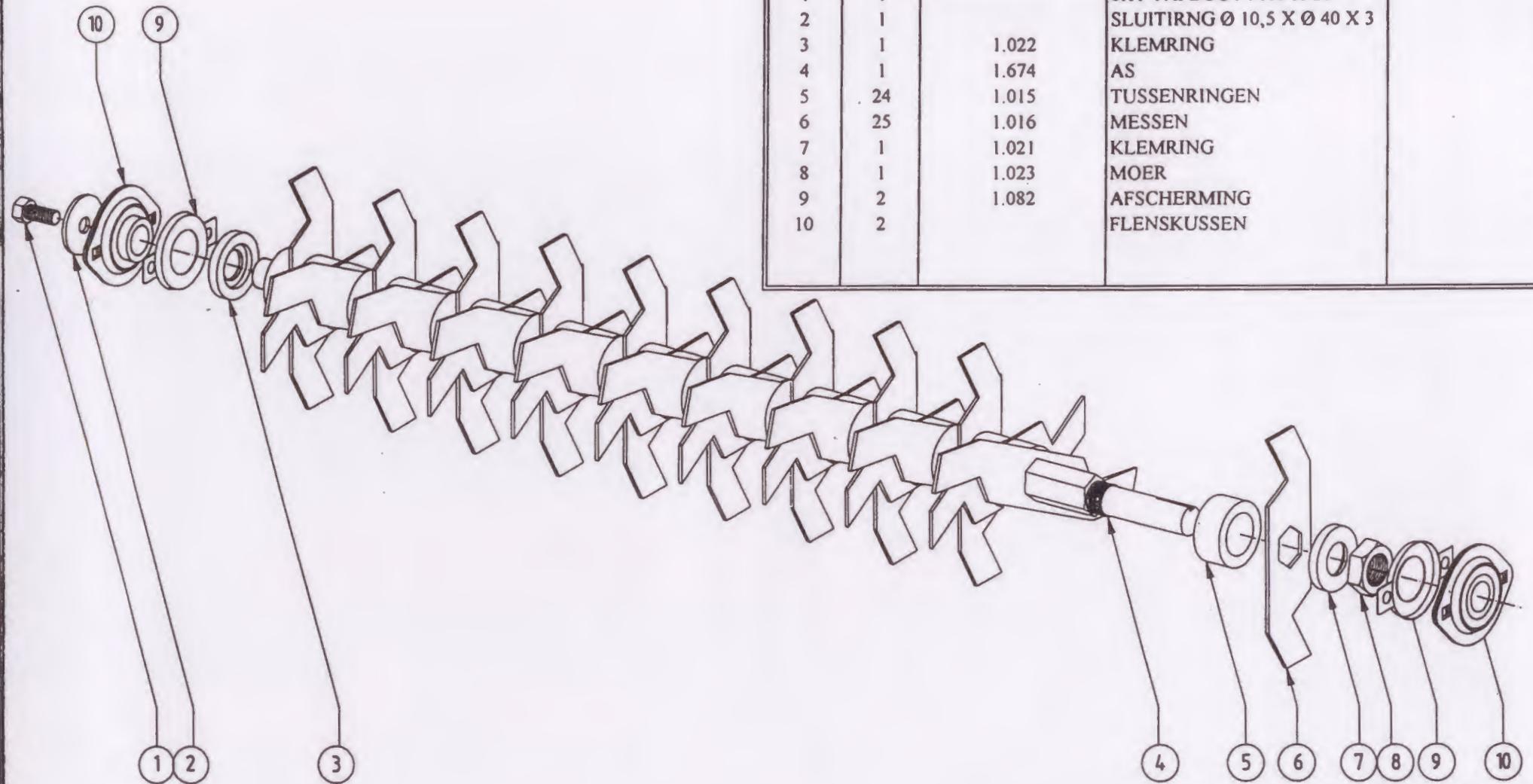
ELIET 750: MONTAGEPLAN VASTE MESSEN

10-09-98

MACH. TYPE /GV. ELIET 750

REF. Nr.: P-40.049

Nr.	AANT.	PLAN Nr./ART.Nr.	BENAMING	PRIJS BTW EXL.
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2	1		SLUITIRNG Ø 10,5 X Ø 40 X 3	0
3	1	1.022	KLEMRING	0
4	1	1.674	AS	0
5	24	1.015	TUSSENRINGEN	0
6	25	1.016	MESSEN	0
7	1	1.021	KLEMRING	0
8	1	1.023	MOER	0
9	2	1.082	AFSCHERMING	0
10	2		FLENSKUSSEN	0

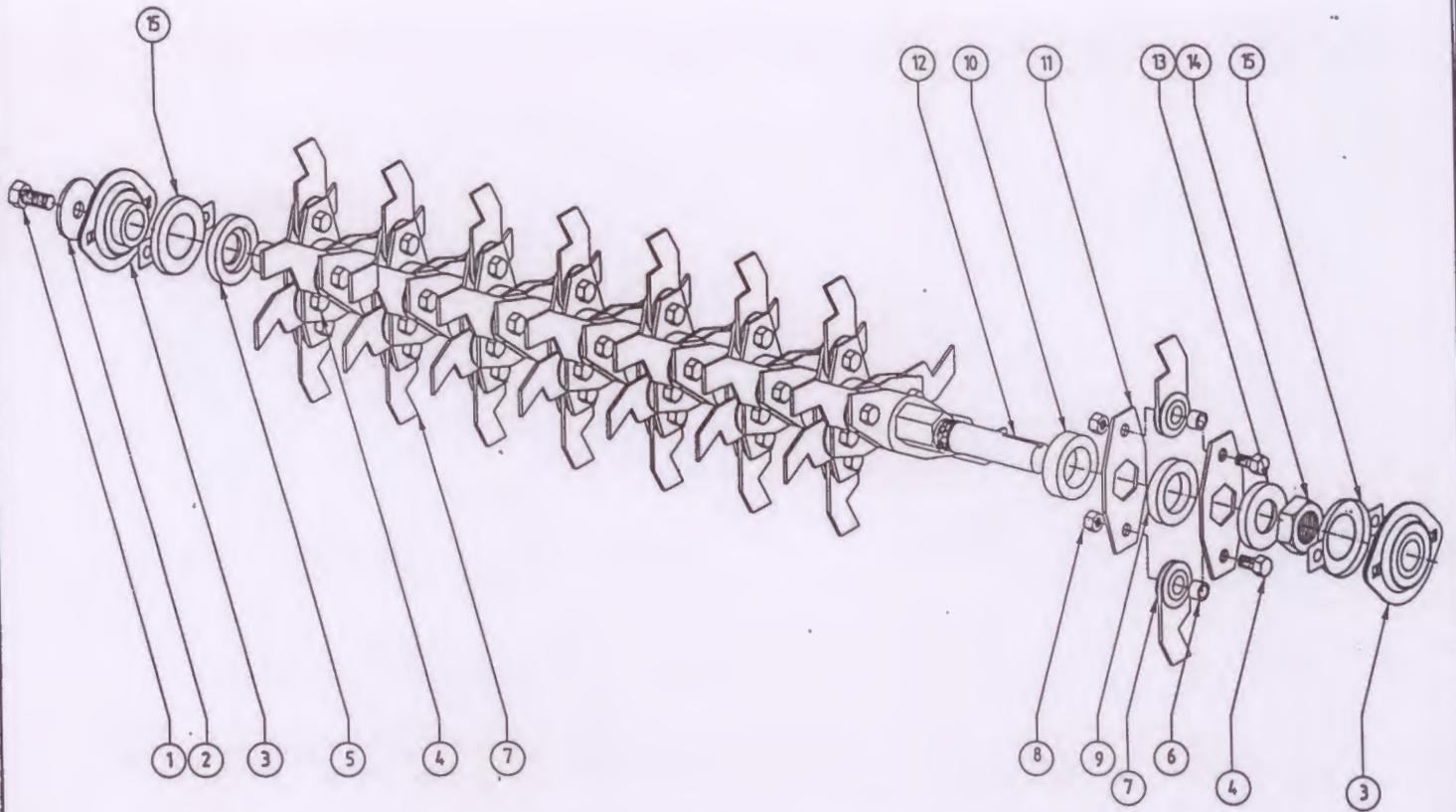


ELIET 750 : AS VASTE MESSEN

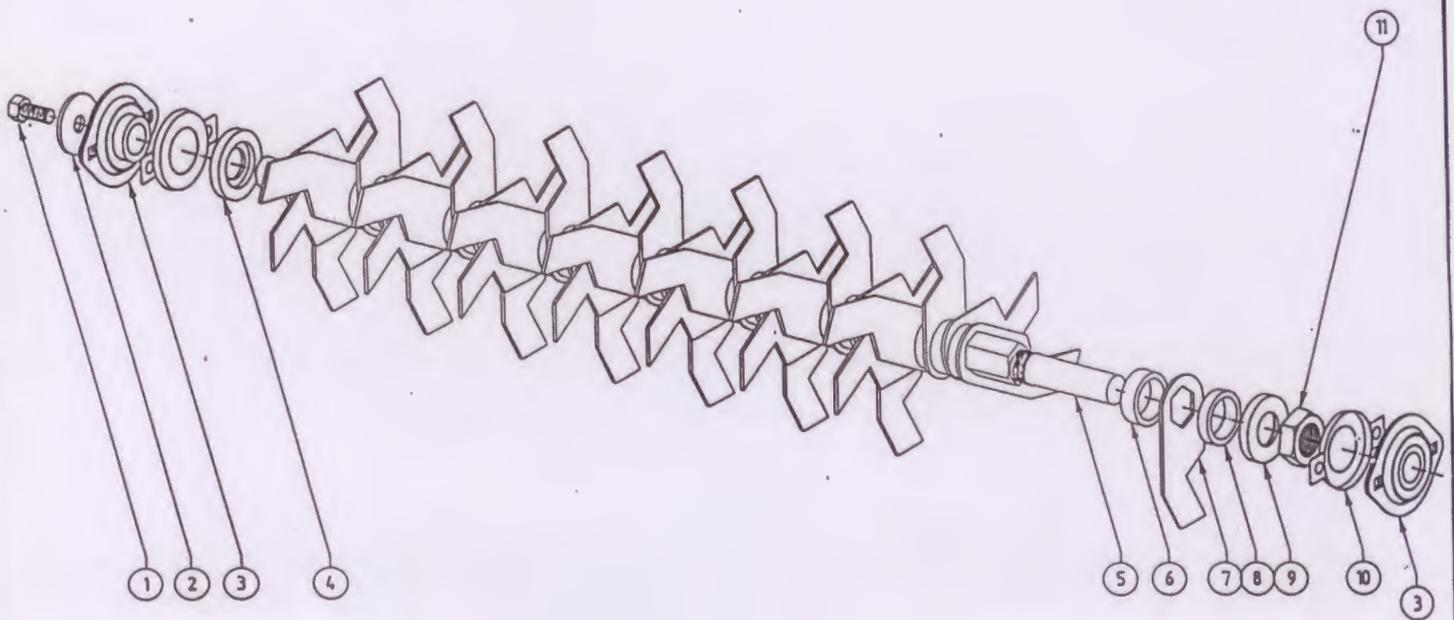
ELIET

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P-40.049



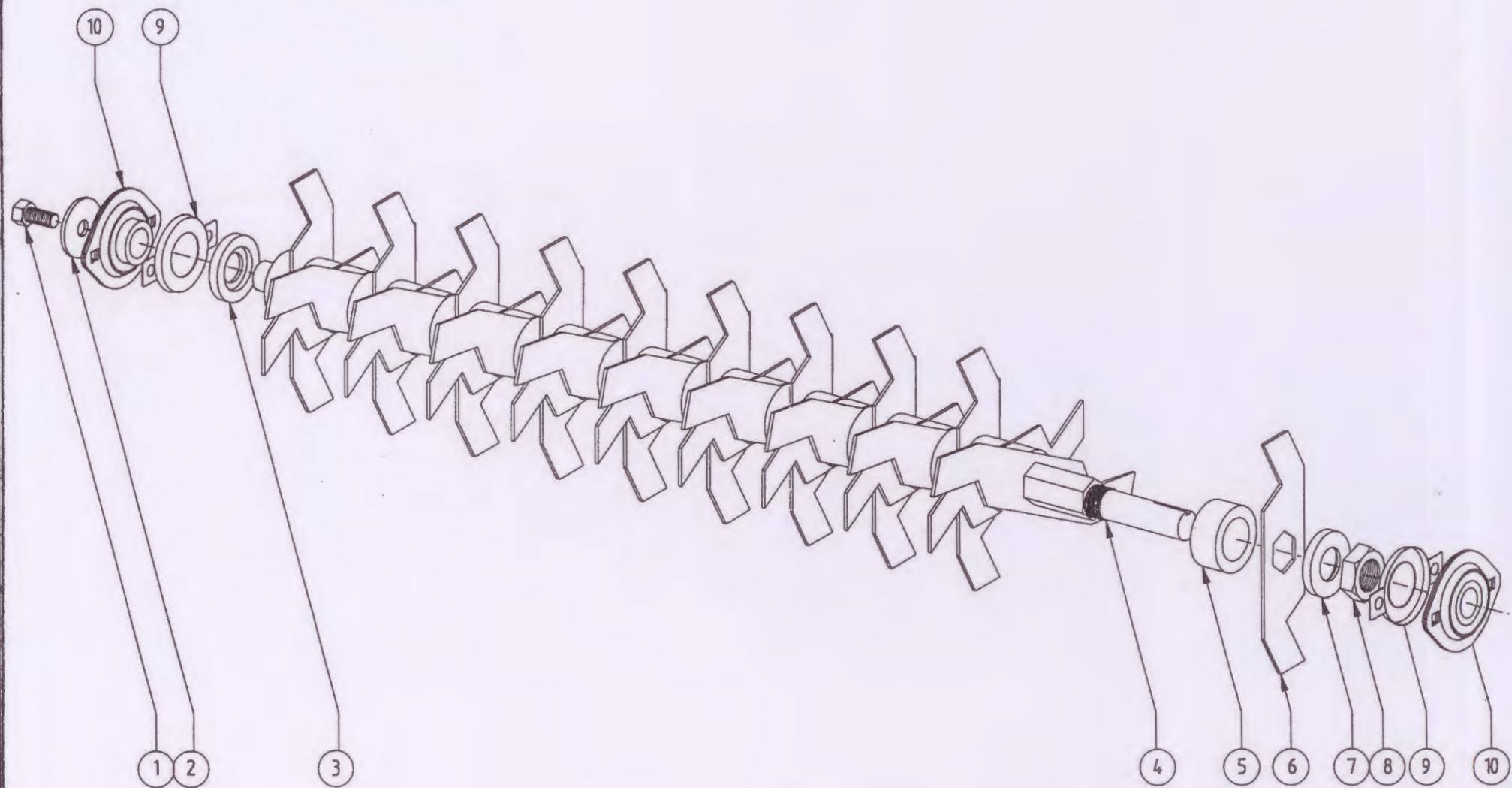
ELIET 750 : AS LOSSE MESSEN		
ELIET	ZWEVEGEMSTRAAT 136	P-40.050
	B-8553 OTEGEM	
	TEL: 056/77 70 88	



ELIET 750 : AS DOUBEL CUT MESSEN		
ELIET	ZWEVEGEMSTRAAT 136	P-40.051
	B-8553 OTEGEM	
	TEL: 056/77 70 88	

ELIET:MONTAGEPLAN AS LOSSE MESSEN				20-10-98
MACH.TYPE GV.ELIET 750			REF.Nr.:P-40.050	
Nr.	AANT.	PLAN Nr./ART.Nr	BENAMING	PRIJS BTW EXL
1	1		6KT TAPBOUT M10 X 20	0
2	1		SLUITRING Ø 10,5 X Ø 40 X 3	0
3	2		FLENSKUSSEN	0
4	48		6KT TAPBOUT M8 X 20	0
5	1	1.022	KLEMRING ST	0
6	48	1033	TUSSENRING MESSEN	0
7	48	1.030	LOS MES	0
8	48		6KT MOER M8	0
9	24	1.017	TUSSENRING	0
10	23	1.019	TUSSENRING	0
11	48	1.029	MESHOUDER	0
12	1	1.674	AS	0
13	1	1.021	KLEMRING	0
14	1	1.023	6KT MOER	0
15	2	1.082	AFSCHERMING	0

ELIET:MONTAGEPLAN DUBBEL CUT MESSEN				20-10-98
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Nr.	AANT.	PLAN Nr./ART.Nr.	BENAMING	PRIJS BTW EXL.
1	1		6 KT TAPBOUT M10 X 20	0
2	1		SLUITRING ERTALONØ 10,5 X Ø 40 X3	0
3	2		FLENSKUSSEN	0
4	1	1.022	KLEMRING	0
5	1	1.674	AS	0
6	45	1.332	MESSEN	0
7	44	1.019	TUSSENRING	0
8	1	1.017	TUSSENRING	0
9	1	1.021	KLEMRING	0
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11	1	1.023	ZESK. MOER	0

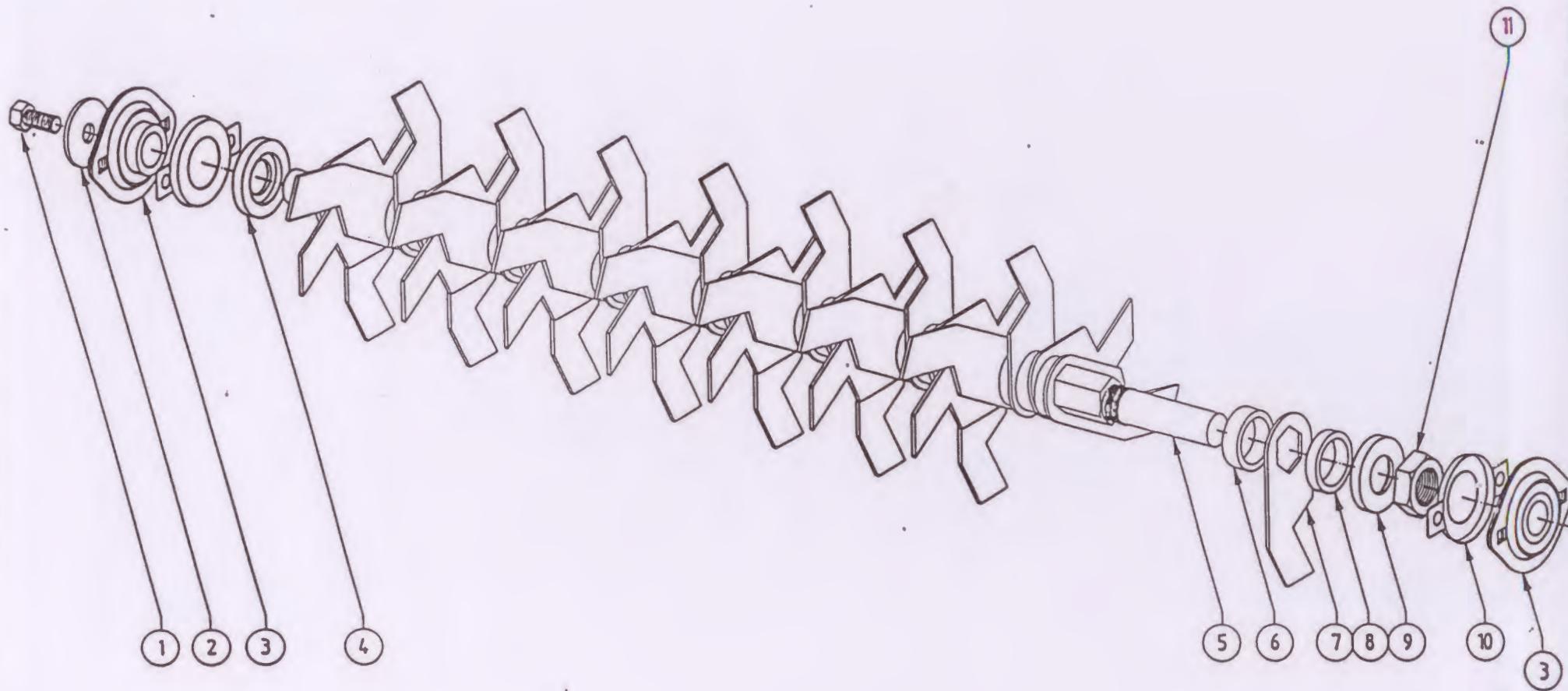


ELIET 750 : AS VASTE MESSEN

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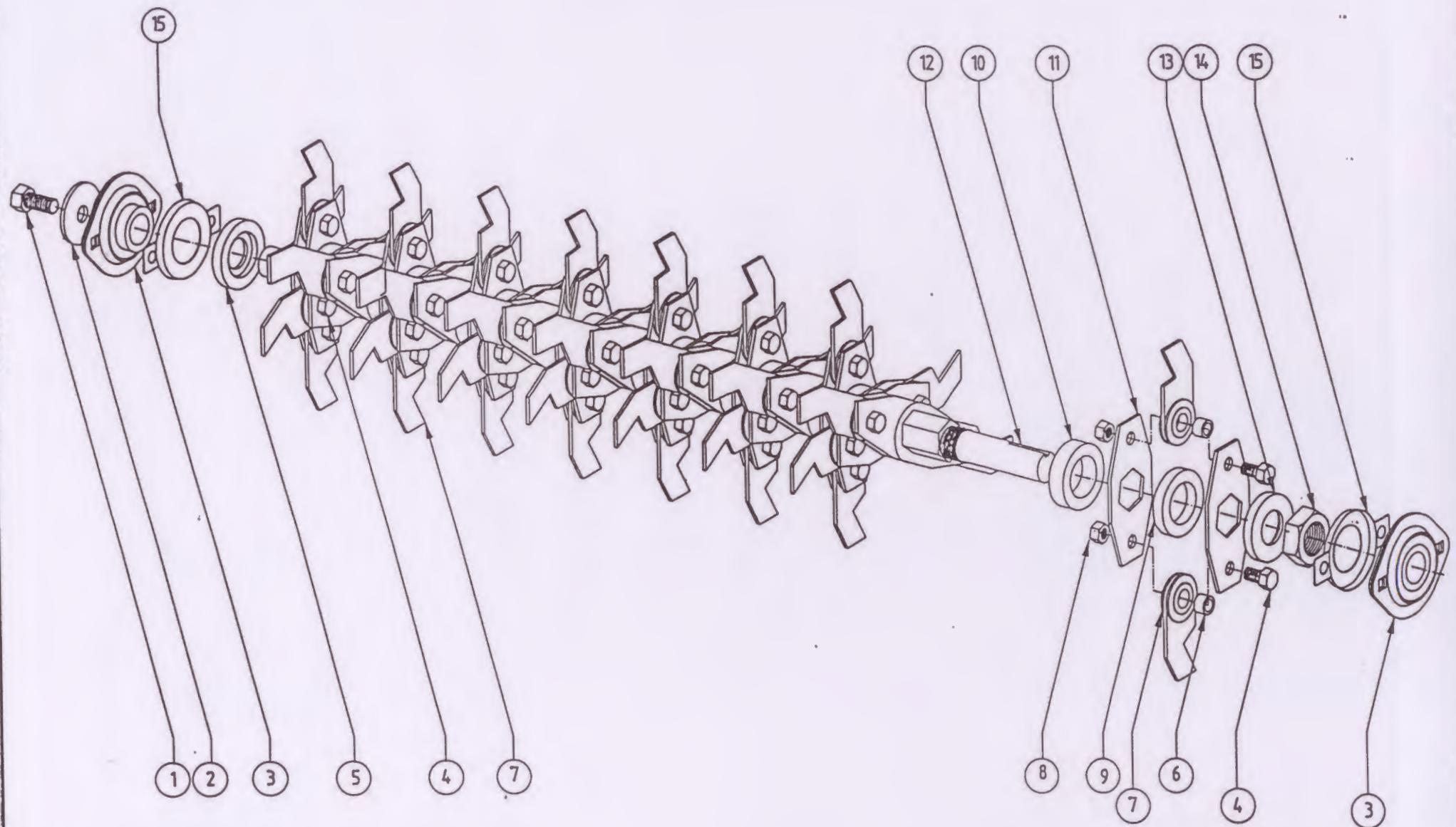


ELIET 750 : AS DOUBEL CUT MESSEN

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ELIET 750 : AS LOSSE MESSEN

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