

Dear Customer,

We are pleased that you have decided to purchase a MU-C/HUS Flail Mulcher and thank you for placing your confidence in us. We would like to justify this confidence by supplying you with an efficient, reliable and modern machine, combined with the best possible service provision. Our machines are always state-of-the-art and we constantly endeavour to improve and develop them.

Please carry out the following tasks before you start work:

- **Transfer the details from the identification plate onto the following guarantee certificate and send us the copy as requested.**
- **Before using the machine you should first read the “Important information before use”, which is printed on the next page. Here you will find compact information on preparations for mulching and on maintenance.**
- **You should also read the entire manual thoroughly, especially the chapter entitled “Safety” on page 11.**

Yours sincerely

Müthing GmbH & Co KG Soest

Important information before use

- The machine should **only be used by qualified personnel**.
- **Only drive within its permissible power range** (see spares list).
Using tractors with higher performance may damage the machine!
- The Flail Mulcher MU-C/HUS is designed for the Husqvarna PT 26D and may only be used on this machine.
- **Only use the machine within its permissible power range**, this is the only way to achieve **maximum suction** and the **desired quality of mulch**. If the engine speed is too high the rotor, bearings and transmission could be damaged
- **Arrange the machine settings** so that the **mulcher is horizontal** to the ground. This is the only way for the machine to be used to its best advantage and for the mulcher to adjust itself to the ground over which it travels. If the mulcher is tipped forward it will cut too short, and it may clog or dig in. If it is tipped backward, stones or debris may be projected forward.
- Keep **P.T.O. shafts** as **straight** as possible, severely bent shafts wear out very quickly.
- **Carry out mulching in dry conditions** whenever possible; this improves results considerably.
- **Don't cut too short** (drive with the backup roller in the centre slot); otherwise you will prevent further plant growth. **Set backup roller lower on unfamiliar areas** (low slot position, raising flails higher) in case you encounter debris or exposed roots.
- Always set the **forward sensing wheel (optional)** to match the setting of the backup roller at the level above the hole adjustment so that they **can in principle run free as sensing wheels**. The mulcher must not be supported by the sensing wheels, as this can damage the wheels.
- **Finely mulched vegetation rots more quickly!** You can set the length of cut by way of the backup roller, the travel speed and the shredding bar.
- On bends or when turning raise the mulcher; otherwise bearing load will be too high.
- **Driving slowly** improves mulching! It also makes it easier to avoid obstacles.
- **Carry out regular servicing and maintenance (see Chapter 6)**. Stop work and deal with any malfunction or damage. Don't take risks!
- **Lack of lubricant** causes premature wear and tear. Don't use too much pressure when injecting grease into the bearings.
- Re-tension new **drive belts** after the first 30 minutes of use, then check them regularly.
- When you use the machine for the first time check all bolts after 3 min to ensure that they are correctly seated, then check them regularly afterwards.

Guarantee certificate (to be retained by customer)

Date:

I have purchased a MU-C/HUS Flail Mulcher and confirm that I have taken delivery of the machine including the operating manual and spares list and that I have been instructed in the use of the equipment by your authorised dealer.

I also confirm that I have read and understood the instruction manual and am in agreement with the instructions included therein. This particularly applies to the chapter on safety, first use and guarantee.

Type: MU-C/HUS

Gearbox: MAL7 T1.9 right extension 630mm

Working width: 120 cm

Serial number:

Year of construction:

Supply date:

Supplied by:
.....

.....
Signature

.....
Stamp and signature of authorised dealer

provided the guarantee certificate and transfer of ownership (see next page) is returned to MÜthing GmbH & Co KG Soest within **10 days** of the machine being supplied the flail mulcher will be covered by guarantee in accordance with the guarantee terms listed under Point **9**.

Guarantee certificates (to be returned)

Name: First name:

Town, Postcode: Street:

.....

Telephone:

To Fax:

Müthing GmbH & Co KG E-mail:

Am Silberg 23 Date:

D – 59494 Soest

I have purchased the flail mulcher and confirm that I have taken delivery of the machine including the operating manual and spares list and that I have been instructed in the use of the equipment by your authorised dealer.

I also confirm that I have read and understood the instruction manual and am in agreement with the instructions included therein. This particularly applies to the chapter on safety, first use and guarantee.

Type: MU-C/HUS

Gearbox: MAL7 T1.9 right extension 630mm

Working width: 120 cm

Serial number:

Year of construction:

Supply date:

Supplied by:

.....

.....

Signature Stamp and signature of authorised dealer

To enable the guarantee to become effective from the supply date this sheet must be returned within 10 days of the supply date to Müthing GmbH & Co. KG, Soest.
 (Please remove this sheet and post it to Müthing, Soest. Thank you !)

Table of contents

1	Technical description	8
1.1	MU-C/HUS	8
1.2	Technical data	9
1.3	Flails (MU-C/HUS)	10
2	Safety	11
2.1	Proper use	11
2.2	Warning symbols	11
2.3	Safe transportation by road	13
2.4	Mounting and removing equipment safely	13
2.5	Mulching safely	14
2.6	Safe cleaning, maintenance and troubleshooting	15
2.7	Using a P.T.O. shaft safely	16
3	Using the machine for the first time	17
3.1	Taking delivery and what is included	17
3.2	Adjusting and mounting the P.T.O. shaft	18
4	Fitting and removal	19
4.1	Two point linkage	19
4.2	Shutting down safely	19
4.3	Taking the front mulcher on the road	20
5	Settings and operation	21
5.1	Front mulcher with backup roller	21
6	Cleaning, servicing and maintenance	25
6.1	General checks	26
6.2	Servicing and maintenance procedures	27
6.3	Lubricating chart	35
7	Malfunction chart	38
8	Additional options	40
8.1	Rubber front wheels, can be swivelled through 360°	40
8.2	Other types of flail	40
9	Guarantee	41

The following symbols are used to indicate peculiarities or dangers.



The text following the symbol contains information on procedures that you must adhere to in order to avoid injury to the operator or damage to the machine.

➤ Step-by-step instructions

- Lists

This manual is intended to assist you in familiarising yourself with your flail mulcher and make best use of its **features and applications**.

Our machines are state-of-the-art and comply with the relevant industrial protection and safety regulations. Appropriate engineering techniques are used to ensure that the operator enjoys the maximum possible level of safety.

Nevertheless, the machine may be **dangerous** if it is operated by inadequately trained personnel or used in an improper and inappropriate manner.

The **technical documentation** includes important information on how to **operate the machine safely, properly and economically**. If you make use of this information you will avoid risks, reduce repair costs and downtime and extend the reliability and life of the machine.

The operator / employer should supplement the technical documentation with existing national regulations and instructions for accident prevention and environmental conservation.

1 Technical description

1.1 MU-C/HUS

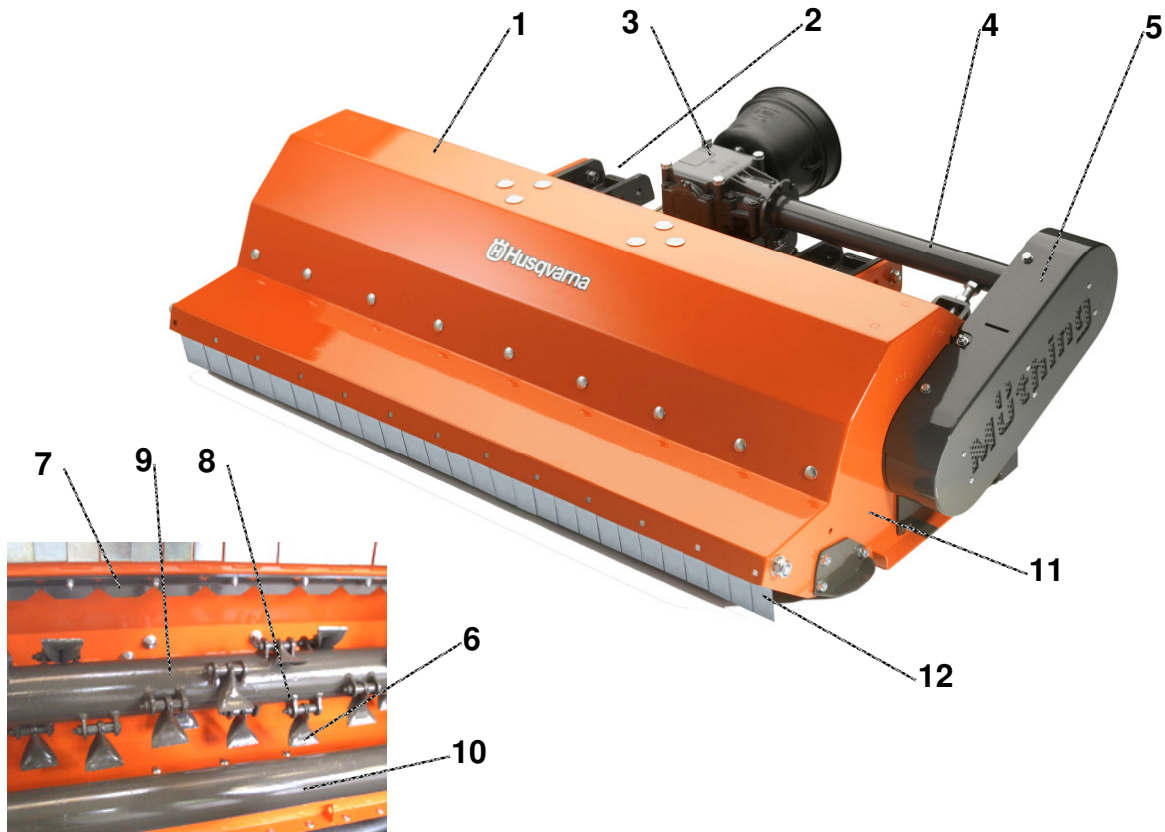


Illustration 2: Overall view

The MU-C/HUS Flail Mulcher consists of a robust **mulcher housing (1)** in an optimised housing and a special 2-point location for front mounting. Power is transmitted from the P.T.O. shaft via a **gearbox (3)**, an **extension shaft (4)** protected against spooling and a **V-belt drive (5)**.

The rotating **flails (6)** (see Chapter 1.3) with self-sharpening blade and **shredding bar (7)** (see Chapter 8.2) ensure that the cut is both precise and fluid, and produces an excellent mulch. They are mounted using locked screw connections in the **flail holders (8)** of the **rotor (9)**, which is supported on both sides. When mulching the flail mulcher runs on a height-adjustable and self-cleaning **backup roller (10)**.

To the side the **panels (11)** and to the front **self-aligning flaps (12)**, which can turn inwards depending on the condition of the terrain, provide protection from stones and debris. The discharge area behind the rotor is protected by a solid rubber guard, which also ensures that the mulch is deposited properly.

1.2 Technical data



Type MU-CHUS	Operating width (cm)	External width (cm)	max. tractor HP	Mounting categ.	Weight kg	Number flails
120	120	137	25	Special	135	20

Standard equipment	
Flails	“M” scoop flails in special steel
Housing	Fine-grained steel, premium quality
Mounting	Lugs to fit Husqvarna PT 26
Mulcher position	Central, balanced fitting in front of the motorised ride-on mower.
Gearbox	with integrated freewheel
Oil circuit	Oil filler in gearbox, maintenance-free extension shaft
V-belt drive	V-belt drive and output pulley with fixed screwed drive belt guard.
Rotor	Sturdy tubular construction with external bearings and special flail holders for protection against damage from debris
Shredding bar	Screwed and exchangeable.
Roller	Self-cleaning self-cleaning, stable tubular construction with exterior bearings rounded corners, and rounded corners to protect the soil, serve to steer and set the height of the machine.
Skids	Skids, wear-resistant on both sides and welded firmly to the housing
Guards - front	Row of spring steel rotary locks, which can change direction depending on the condition of the terrain
Guards - rear	Solid rubber guard

Special equipment	
Height-adjustable rubber wheels with adjustable track, can be swivelled through 360°	

1.3 Flails (MU-C/HUS)

Details of the flails available are listed in the table below Please check column "E" to determine whether the flails in question are available as **standard (N)** or must be ordered separately as **special equipment (S)**:

Diag.	Item	Description and conditions of use	E
	"M" type scoop flail	Hardened with straight cutting edge. Universal flail for a precise cut and for material up to about 1.5 cm (½ inch) thick.	N
	"M" type tungsten carbide shackle flail (short)	Hardened special flail with straight cutting edge. Its shackle attachment helps it avoid obstacles. Good, clean cut; use it on thicker vegetation. Material up to 2 cm (5/8 inch)	S



Defective and irregularly changed flails can unbalance the rotor and damage the machine. Change damaged or worn flails immediately, if necessary changing the whole set and ensure by checking the opposite side of the rotor that they are equally balanced.

Only use flails supplied by Müthing GmbH & Co. KG Soest as specified in Chapter 1.2. Use of other makes or home-made parts will invalidate any liability or guarantee claims.

2 Safety

2.1 Proper use

The MU-C/HUS Flail Mulcher has been designed specifically for **mulching grass and light undergrowth**, and for **trimming organic residues** (up to finger thickness) above the ground. The details provided in technical data Chapter 1.2 of this document should be noted and adhered to.


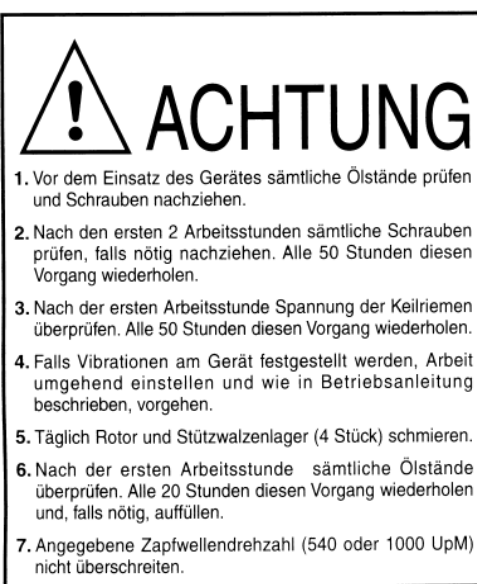
Any use outside or beyond this will be regarded as improper. The user/operator will be liable for any resultant damage. This also applies to any unauthorised changes made to the machine.





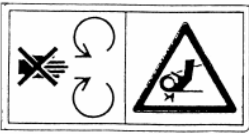
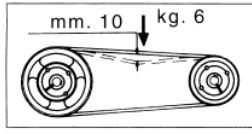


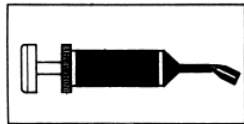
Improper use

The MU-C/HUS has been designed specifically for **mulching grass and light undergrowth**, and for **trimming organic residues** (up to finger thickness) above the ground.

2.2 Warning symbols

The labels attached to the machine provide important information on using the machine safely. Replace them as soon as they become detached or illegible. The labels can be ordered from the manufacturer and are explained below:

 <p>Müthing D - 59494 Soest</p> <p>Modell : MUL/S 250 Serial No : 5100501 Year : KA 07 kg : 850</p> <p>Made in Germany / EU</p>	<p>Serial plate, details are in line with the requirements of machine guideline 98/37/EC</p>
 <p>ACHTUNG</p> <ol style="list-style-type: none"> 1. Vor dem Einsatz des Gerätes sämtliche Ölstände prüfen und Schrauben nachziehen. 2. Nach den ersten 2 Arbeitsstunden sämtliche Schrauben prüfen, falls nötig nachziehen. Alle 50 Stunden diesen Vorgang wiederholen. 3. Nach der ersten Arbeitsstunde Spannung der Keilriemen überprüfen. Alle 50 Stunden diesen Vorgang wiederholen. 4. Falls Vibrationen am Gerät festgestellt werden, Arbeit umgehend einstellen und wie in Betriebsanleitung beschrieben, vorgehen. 5. Täglich Rotor und Stützwalzenlager (4 Stück) schmieren. 6. Nach der ersten Arbeitsstunde sämtliche Ölstände überprüfen. Alle 20 Stunden diesen Vorgang wiederholen und, falls nötig, auffüllen. 7. Angegebene Zapfwellendrehzahl (540 oder 1000 UpM) nicht überschreiten. 	<p>Important information, safety instructions specific to the machine</p>

	<p>Read and adhere to the instruction manual and safety information before using the machine for the first time</p>
	<p>Risk of parts being projected when engine is running, minimum safety distance from machine 80 m (85 yards).</p>
	<p>Danger from moving machine parts and flails; do not open or remove protection devices.</p>
	<p>Switch off engine and remove key before carrying out any maintenance and repairs</p>
	<p>The belt drive can be dangerous, don't open or remove protective devices when the engine is running</p>
	<p>Re-tension the V-belt regularly; correct tension is 10 mm sagging at a pressure of 50 N / 5 kg</p>
	<p>Gearbox speed 2,200 rpm.</p>
	<p>Only use SAE 90 EP gearbox oils</p>
	<p>Grease point</p>

2.3 Safe transportation by road

Adhere to the following safety instructions before and during transportation on public roads:

- The **Highway Code** and the **Department for Transport Road Vehicles and Licensing Regulations** for the mulcher and tractor must be adhered to as well as requirements of the tractor manufacturer.
- Equip the vehicle with the proper **lighting and warning signs** before travelling, the lighting equipment of the transportation vehicle must not be concealed.
- When transporting equipment separately or **on trailers** it is essential to ensure that equipment is **properly attached** and that all relevant safety regulations and requirements are adhered to.

2.4 Mounting and removing equipment safely

Observe the following safety instructions before and while mounting and removing equipment:

- Make sure that there is nobody between the tractor and the flail mulcher when you are attaching equipment; take care when doing so.
- Turn off the engine and remove the ignition key before mounting and removing equipment; secure the tractor against rolling away.
- **Swing out** any available **supports** to ensure stability.
- Only use the flail mulcher in combination with a suitable tractor. Take account of the **permissible engine performance levels**.
- There is a **danger** of crushing and shearing **around the pickup bracket**.
- Always **set and drive the tractor** so that the **mulcher is horizontal**. If the mulcher is tipped forward it will cut too short, and it may clog or dig in. If it is tipped backward, stones or debris may be projected.

2.5 Mulching safely

Please observe the following safety instructions when mulching:

- Always give priority to safety as far as traffic and operation concerned. Also adhere to the **general safety** and **accident prevention regulations**.
- **Avoid wearing loose clothing**, as there is a risk of its being caught up, wrapped round or drawn into the machinery.
- **Familiarise yourself** with the equipment and its functions **before use**, all **protective devices** must be available. **Plate guards and rubber guards** must be freely mobile and undamaged. Check all **locking pins and eyebolts**.
- Only **operate** mulcher if there is no-one in front or between the tractor and the machine.
- When **rotor, flails, V-belt drive** and other units for transmitting torque are engaged there is always a **risk** that clothing and limbs might be caught up and pulled in, and limbs crushed or sheared. Don't operate mulchers unless the protective devices are complete and intact.
- Only **mulch** from a horizontal position! **Keep your hands away from moving parts and externally powered parts**; risk of crushing and shearing.
- Before starting and before engaging the P.T.O. drive ensure that there is nobody in the vicinity. It is essential to maintain a safe distance of 80m all round the flail mulcher.
- Look out for **debris and other objects** (glass, metal, wood and stones...) within range. These can cause **accidents and damage** if they are run over, smashed and ejected.
- Lookout for any **obstacles** (large stones, kerbs, tree stumps, plastic bags or sheeting...). These can **block the rotor** and damage the mulcher!
- If you do hit an obstacles turn the flail mulcher off immediately and check for damage.
- **Driving, steering and braking** can be influenced or equipment that has been mounted or attached, or by ballast weights. Take account of the load and the balance weight **when taking bends**.
- **Never dismount when travelling, never** let the machine **operate unsupervised** and never carry passengers.
- **Flails can continue to turn** after the drive has been switched off; don't approach until they have come to a standstill!
- Take care when mulching on **uneven ground or on slopes!** Always work **slowly and carefully** with the mulcher, and **always keep it uphill of or centrally behind the tractor** to reduce the risk of the tractor tipping over.
- **With steeper slopes never drive across the slope** but always up or down. **Never work where the terrain is dangerous or steep.**
- Before **leaving** the tractor, place the machine on the ground, switch off the engine and remove the ignition key. Ensure that the tractor **does not run away** by applying the handbrake, and by using a wedge if necessary.

2.6 Safe cleaning, maintenance and troubleshooting

If you carry out cleaning, maintenance or troubleshooting please adhere to the following safety instructions.

- Before carrying out these operations, ensure that the **drive is disengaged** and the **engine is at a standstill**.
- Secure the machine **against tipping over**, by swinging out existing supports where necessary. When working on a **raised machine** always use **suitable supports**, load-bearing devices and lifting tackle. Don't stand or lie under suspended loads!
- Use **personal protection equipment** and **suitable tools**. Wear gloves when changing flails.
- Check the flail mulcher at regular intervals for externally visible **damage and defects**, especially flails, flail mountings and drive belts for breaks, cracks and wear and tear.
- Change damaged or worn **protective devices** immediately.
- Always isolate the current before working on the **electrical system**!
- When carrying out **electric welding** on the tractor and the mounted machine disconnect the connection cable from the battery and the generator.
- Check all **screwed elements** for security and tighten where necessary.
- Dispose of **oil, grease and filters** as required by current regulations.
- To avoid the risk of fire always keep the flail mulcher clean.
- **Spares** must at least meet the specifications laid down by the equipment manufacturer! This will always be the case if you use **original spares**!

2.7 Using a P.T.O. shaft safely

When using equipment with a P.T.O. shaft observe the following safety instructions:

- Only use P.T.O. shafts that we have approved.
- Do not **fit or remove** the P.T.O. without first **turning off the engine and removing the ignition key!**.
- All **protective devices must be available and functional** (protective shield on tractor, protective tube protective funnel, retention chain, protective **cap** on machine), see also Chapter 3.2.
- Only use the **prescribed sizes of PTO drive**. P.T.O. drives often have to be **adapted** before being used for the first time. Have this carried out **professionally** by qualified technicians.
- Ensure that P.T.O. shafts have the proper **pipe covers** in transport and operating positions!
- Always ensure that it is **properly mounted and secured**, ensure that the PTO is protected by locking the **chain** to prevent it rotating.
- Before engaging the P.T.O. always make sure that the selected output **drive speed** matches the gearbox speed set on the mulcher.
- **Never engage the P.T.O. drive with the engine switched off!**
- Switch off the P.T.O. if **too much distortion** occurs or it is not required.
- The P.T.O. drive is still dangerous after it has been turned off **if the rotor is still turning**.
- Do not clean, service or carry out maintenance work without first **turning off the engine and removing the ignition key!**
- Always secure disengaged P.T.O. shafts to the **mounting** provided and refit the **protective cover** on the P.T.O. stump.
- **Repair damage** to the P.T.O. shaft or **exchange** it for a new one.

3 Using the machine for the first time

Your flail mulcher was installed by our authorised dealer and supplied ready for use. He has instructed you in its use and application. Below you will find some important information and instructions on taking delivery, carrying out necessary checks and using the mulcher.

3.1 Taking delivery and what is included

When you take delivery, check that everything has been included. The **delivery** includes:

- Flail mulcher as standard (see Chapter 1.2 – Standard equipment)
- Optional equipment and fittings (see Chapter 1.2 – Special equipment)
- P.T.O. shaft
- Instruction Manual and Spare Parts List

If there is any **transport damage** or there are missing parts it is important to claim immediately as according to the terms and conditions of the carriers only immediate claims will be considered. Ensure that the driver confirms any damage.

In case of doubt please get in touch with our distributor or contact MÜthing GmbH & Co. KG Soest.

Carry out the following **checks**:

- Ensure that all **screws and nuts** are tight and properly seated; **retension the belt drive** if necessary. **When using the machine for the first time it is essential to repeat these checks after no more than 30 minutes.**
- **oil levels** (top up if necessary) and **lubrication points** (re-lubricate if necessary).

3.2 Adjusting and mounting the P.T.O. shaft



Adhere to the safety instructions “Using a P.T.O. shaft safely” in Chapter 2.7!

A **P.T.O.** shaft is normally included with the sale of the mulcher **as standard**. If you want to use your own, you must ensure that you only use the **size of P.T.O. drive that we have specified**.

P.T.O. drives usually have to be **adapted** to the tractor before use. Always have this work carried out by a **specialised workshop**.

Before use always make sure that all **protective devices** are complete and intact. Protective cap on machine (1), 2 x funnel guards with support ring (2), 2 x retention chains (3), shaft guard - interior and exterior (4):

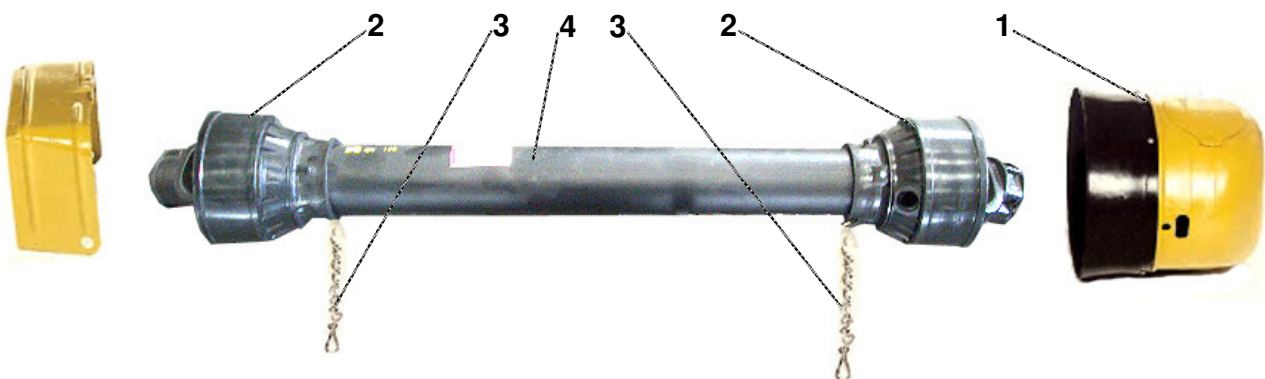


Illustration 4: Sicherheitseinrichtungen Gelenkwelle

You will find notes on installation, security and maintenance in the **shaft manufacturer's manual**.

Mount the P.T.O. shaft on the machine and the tractor PT 26 as follows:

- a) First of all fix the P.T.O. drive to the gearbox of the mulcher and secure it as recommended.
- b) Then release the opening in the tread plate on the tractor. You can now put your hand through the opening and mount the P.T.O. drive on the tractor. Then secure the PTO shaft there too and close the opening in the tread plate.

Before engaging it is essential to ensure that the P.T.O. speed on the tractor matches the permissible speed of the machine (2000 or 2500 rpm). (See plate mounted on machine). If it proves necessary to change the gearbox speed on the machine, you must have this carried out by a specialised workshop.

The MU-C/HUS Flail Mulcher is equipped with a **free-wheel gear** as standard, so no free wheel P.T.O. shafts are required. As a rule the P.T.O. should remain on the machine after work.

4 Fitting and removal



Adhere to the safety instructions “Mounting and removing equipment safely” in Chapter 2.4!

4.1 Two point linkage

To attach to the PT 26D ride-on mower, please proceed as follows:

- The flail mower is equipped for fitting to the PT 26D with suitable pickups. You will find information on tractor power and mounting category in Chapter 1.2.
- Drive the vehicle up to the mulcher while it is standing on the roller and support foot so that the two-point linkages are positioned close to the take-up bolts.
- Insert the lower linkage bolts to connect them.
- Release the support and move it into the top position. The mulcher just runs on the roller.



Illustration 6: Two-point linkage



Illustration 8: Support top position

4.2 Shutting down safely

Please observe the following instructions for mounting:

To remove the mulcher after work and park it safe please proceed as follows:

- Fahren Sie mit angehobenem Mulchgerät zum Abstellplatz, dieser muss eben sein und über einen festen Untergrund verfügen (z.B. Beton, Estrich, Pflaster ...). Raise the mulcher and drive to the parking area, which must be even and have a solid base (such as concrete, stone or asphalt...).
- **Only for models with a support leg:** Klappen Sie die die Abstellstütze heraus, sichern Sie diese mit den Verriegelungsbolzen. Fold out the support leg, securing it with the bolts.

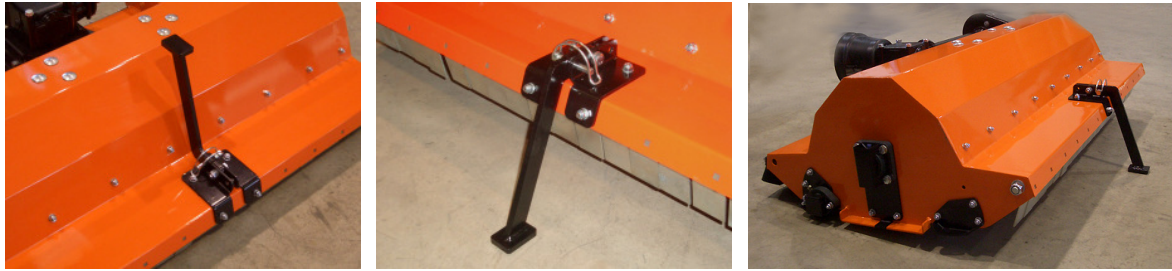


Abbildung 9: Illustration 10: Abstellstütze klappbarfolding support leg

- Senken Sie das Gerät über die Zweipunkt hydraulik vorsichtig zu Boden, schalten Sie den Motor ab und ziehen Sie den Zündschlüssel ab. Lower the machine slowly to the ground, using the two-point linkage, turn off the engine and remove the ignition key.
- Prüfen Sie den sicheren Stand, alle drehenden Teile müssen stillstehen. Check that it is standing firmly and that all rotating parts have come to a standstill.
- Ziehen Sie die Gelenkwelle entsprechend den Vorgaben des Wellenherstellers von der Zapfwelle des Trägerfahrzeugs herunter. Remove the P.T.O. shaft from the tractor drive as recommended by the P.T.O. drive manufacturer.
- Lösen Sie die Verriegelung des Aufsitzmähers und fahren Sie mit dem Fahrzeug langsam rückwärts gerade vom Schlegelmulchgerät weg, bis die Aufnahmelaschen völlig von den Aufnahmearmen getrennt sind. Release the fastenings on the drive-on mower and drive the vehicle slowly straight backwards from the mulcher until the lugs are completely separated from the take-up arms.
- Führen Sie nun die erforderlichen Reinigungs- und Wartungsarbeiten durch. Now carry out the necessary cleaning and maintenance. Hinweise hierzu finden Sie in den jeweiligen Wartungstabellen in Kapitel 6. You will find instructions for this in the relevant servicing tables in Chapter 6.

4.3 Taking the front mulcher on the road

Before transporting or driving on the road bear in mind the following instructions and procedures:

- Check the flail mulcher to ensure that all safety facilities are complete.
- Attach the additional lights and warning plates if necessary.
- Start the engine and lift the machine over the two-point linkage.
- Check with front mounting as to whether the rear axle is underloaded. Use rear weights as necessary, bearing in mind the permissible maximum weights and axle loads.
- Make sure that the lighting on your tractor is not covered.
- Check the maximum permitted transport widths and heights.
- Secure the machine using the transportation locks on the tractor (see tractor manual).
- The flail mulcher is now ready for transportation. The P.T.O. drive must be disengaged during transportation.

5 Settings and operation

Bear in mind the safety notes in Chapter 2!



When rotor, flails, V-belt drive and other units for transmitting torque are engaged there is always a risk that clothing and limbs might be caught up and pulled in, and limbs crushed or sheared. Don't operate mulchers unless the protective devices are complete and intact.

Before starting and before engaging the P.T.O. drive ensure that there is nobody in the vicinity. Make sure that you maintain a minimum clearance of 80 m on all sides of the mulcher!

5.1 Front mulcher with backup roller

General information before use

The **rotor** and the cutting flails between them constitute a considerable **gyrating mass**. When they are switched on they require considerable power, and when they are switched off they release enormous latent force. Your MU-C/HUS Flail Mulcher has also been equipped with a belt drive , which cushions and reduces this force.

Suddenly engaging under full load can damage the P.T.O. drive on the tractor or the energy transmission elements on the mulcher (P.T.O. drive, gearbox, belt drive). The same thing can happen with **sudden braking** or **switching off** under full load. So, when you switch on you should also always do so in the lowered position **at low speed** and then slowly move up to full power. **Slowly reduce power before switching off** and allow the mulcher's rotational speed to drop before disengaging the P.T.O. drive.

Setting the height

The height can be set via the **backup roller and also via the two sensing wheels at the front if available (optional)**. The support roller can be adjusted on both sides using two slots; generally speaking you should use the central position. The sensing wheels can be adjusted via the slot segments on the carrier shaft.

This will approximately produce the optimum cut of 2 to 6 cm (about 1 or 2 in).

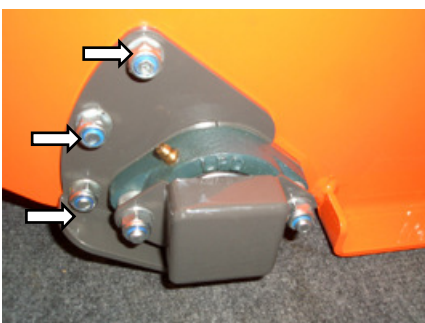


Illustration 12: Setting the height of the support roller

Please note further instructions relating to the height setting:

- With **dense vegetation** or to achieve a **higher travel speed** the **backup roller/sensing wheels** must be adjusted downwards.
- If you're cutting **very short at slow speeds** you need to set it **upwards**.
- Don't cut too short; cutting grass or vegetation down to the roots prevents them from regrowing.
- Use a lower slot in **unfamiliar** or **fallow areas** (higher cut, means flails higher too). Risks from debris, stones or exposed roots.
- If you **cut lower than an inch (2.5 cm)** you risk **damaging** the machine.
- The flail mulcher must always work and be driven parallel to the ground.

To **set the height of the support roller / rubber wheels** please proceed as follows:

- Raise the already mounted mulcher about 3 or 4 cm (approx. 1½") from the ground.
- Switch off the engine, remove the ignition key and wait for everything to come to a standstill; then secure the raised machine (see safety instructions in Chapter 2).
- Adjust the support roller on both sides by undoing the screws, swinging the support roller into the desired position, then retightening the screws.
- **Only with sensing wheels:** Select the desired setting via the whole segments on the carrier shaft.

Important notes on mulching

Before you start mulching please take account of the following:

- The flail mulcher is a **mounted device**, which mainly rests on the **support roller** or the **rubber wheels**, so that they bear the main weight. Always ensure that the **load** does **not** fall on the **glide shoes** at the side, which would damage the grass roots.
- It has been designed specifically for **mulching grass and light undergrowth**, and for **trimming organic residues** (up to finger thickness) above the ground. Always ensure that the **load** does **not** fall on the **glide shoes** at the side, which would **damage** the grass roots.
- It has been designed specifically for **mulching grass and light undergrowth**, and for **trimming organic residues** (up to finger thickness) above the ground (see Chapter 2).
- Keep the **rated speed constant** while working to achieve best results. A **constant rotor speed** produces intense **suction and optimum crushing performance**. If the rated speed fluctuates or drops too low the mulching performance will deteriorate, whereas too high a speed can damage the machine.
- Your flail mulcher can also crush long-stalked and dense material. So it is usually enough to **mulch just a few times**, maybe as little as **once a year**, for reasonable maintenance. So postpone this work to periods of **sunny dry weather** (avoid wheel slip and wasting energy).

- Always allow the hydraulic system to **operate freely with attitude control**. The combination of back-up roller and attitude control enables you to achieve the best possible alignment with the ground.
- **Only work in straight lines!** When **turning or on curves** raise the mulcher slightly in good time (about 3 to 5 cm / 1 or 2 inches) This will avoid damaging the machine and prevent the side glide skids from damaging the grass.
- Aim at an optimum cutting height of **2 to 6 cm** (2-3 inches) with a travel speed of 3 to 8 kph (3-5 mph).
- As far as **speed** is concerned: - **the slower the better!** The longer the chaff remains in the housing, the more it is cut and crushed, meaning that it will rot down more quickly
- Higher temperatures can arise in the **gearbox** sector and energy transmission components. Provided your machine is being used as intended, this is normal.
- **Always check the entire operating area**, be **watchful**, listen for any usual **noises** (see Chapter 7).

Notes on the shredding bars

The degree of crushing is also determined by the removable shredding bars mounted in the body of the mulcher. Please bear in mind the following:

- **Using the shredding bar** = better crushing = greater energy requirement = lower throughput.
- Shredding bar completely removed = inferior crushing = reduced energy requirement = higher throughput.
- So adapt the operation and the number to meet your needs. We **recommend** that for normal requirements you should use **the bar**.



Illustration 14: Shredding bars

Mulching - starting and finishing



Bear in mind the safety notes in Chapter 2.5!

To start the mulcher proceed as follows:

- Drive onto the area to be mulched and lower the flail mulcher slowly and carefully into the operating position.
- Check the machine's settings (support roller / sensing wheels, parallel with ground?).
- Then set the tractor P.T.O speed to that of the mulcher as indicated on the gearbox.
- Engage the PTO drive at low engine speed, wait until the rotor turns and then increase it to the full rated speed).
- Start the tractor moving to commence mulching.
- Stop before work comes to an end, reduce engine speed and switch off the PTO drive.
- Wait until the flail mulcher has come to a complete standstill.

6 Cleaning, servicing and maintenance



Bear in mind the safety notes in Chapter 2.6!

Regular cleaning, servicing and maintenance is crucial for the life, operability and performance of your mulcher. These tasks lie exclusively within the operator's area of responsibility and are explained in the following chapters in the form of servicing schedules and other descriptions. Please **note the following** as far as cleaning, servicing and maintenance are concerned:

Müthing GmbH & Co. KG Soest will not accept any guarantee claims or liability for damage caused by improper cleaning, servicing or maintenance.

- Take account of the information on **time intervals** ⌚ included in the following comments. This information is provided based on “normal” use. Adjust the time intervals according to your use and operating conditions. Draw up an **individual maintenance plan**.
- Bear in mind the information on **individual authorisation** ✂. Not all tasks need to be carried out by a **qualified technician** or a **specialised workshop**, most of the work referred to can be carried out by **competent persons** with technical knowledge of agricultural machinery.
- Replacement parts and worn parts must meet the manufacturer's specifications, this is guaranteed in the case of **original parts**. Müthing GmbH & Co. KG will only accept liability and guarantee claims, if original parts are used.
- Always carry out a **test run** after repairs and maintenance, check that the parts function perfectly, and be aware of any noises and vibrations.

Abbreviations

In the following chapters the symbols and abbreviations below are used in relation to intervals and personal authorisation:

⌚ - followed by time interval, op.hrs. operating hours, ✂ - followed by details of personal qualifications: tcp – technically competent person, qt – qualified technician / specialised workshop

6.1 General checks

Check for completeness - ⌚ after delivery + every 30 op. hrs. - ✂ cp

Is the **delivery** of the mulcher **complete**, has all **safety equipment** been supplied along with the hydraulic hoses and parts (see Chapter 1), is it undamaged? Is the machine mountable and can it be **used as intended**? If not, then contact us immediately.

Check on speed range and PTO shaft - ⌚ after delivery - ✂ cp

The **speed range** (540 or 1,000 rpm, see sticker) must match that of your tractor. Speeds that don't match can cause serious **damage**. Arrange for our authorised dealer to change it if necessary.

An approved **PTO drive** with the necessary protective features is available.

Check warning symbols - ⌚ after delivery + every 30 op. hrs. - ✂ cp

Do all the **warning symbols** referred to in Chapter 2.2 **exist and are they legible**? If not, please reorder and stick at the same positions.

Check plate, chain and rubber guards - ⌚ after every operation - ✂ cp

The front swing guards / protective chains and the rear rubber guards **provide protection from projected debris or stones** because of the high torque of the flails.

These safety devices only provide appropriate protection if they are **complete** and not **buckled or damaged**.

Check them after every use, and replace damaged, worn or missing parts immediately. You will find notes on this in Chapter 6.2.

6.2 Servicing and maintenance procedures

Cleaning and preserving - ⌚ each time it is used - ✂ cp

Clean your mulcher each time after use to remove any plant residues or dirt adhering to it. And then park it in a dismantled state in an **approved washing area** and **hose** it down thoroughly. If you are using a **high pressure hose**, take care that you **don't spray directly** on the **bearings**. This can cause lubricant to get flushed out.

After drying, spray the flail mulcher with a suitable preservative to protect it against rust and lubricate all grease points directly to expel any water that has penetrated (near the bearings for example).

Test and replace all flails as necessary - ⌚ after every use - ✂ cp / qt

Check the condition of all flails, **worn or damaged flails** must be exchanged immediately to ensure smooth operation. The flail mulcher must also be raised to appropriate level to carry this out.

When working on a raised machine always use suitable supports, load-bearing devices and lifting tackle. Don't stand or lie under suspended loads! If you are in any doubt, have the work carried out by a specialised workshop.

If flails, other tools and mountings are worn or damaged replace them immediately. Failure to do so may risk injury being caused by ejected parts!



Defective and irregularly changed flails can unbalance the rotor and damage the machine. Change damaged or worn flails immediately, if necessary changing the whole set and ensure by checking the opposite side of the rotor that they are equally balanced.

Only use flails supplied by Mühling GmbH & Co. KG Soest as described in Chapter 1.3. . Use of other makes or home-made parts will invalidate any liability or guarantee claims.

Use working gloves and suitable tools when changing knives (sharp blades).

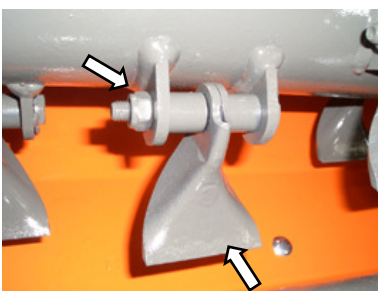


Illustration 16: Tool with fastening elements

To change **flails** proceed as follows:

- Heben Sie das auf geeignete Abstützungen, sichern sie es gegen Herunterfallen. Raise the flail mulcher and secure it against falling down by using suitable supports.
- Entfernen Sie an den überstehenden Gewinden der Befestigungsschrauben den Rost mit Hilfe einer Drahtbürste, verwenden Sie Rostlösemittel um das Abdrehen der Muttern zu vereinfachen. Remove the rust from the protruding threads of the fastening bolts with a wire brush, using rust solvent to facilitate removing the nuts.
- Lösen Sie jeweils die selbstsichernde Mutter, sichern Sie dabei die Schraube auf der Gegenseite mit einem weiteren Schlüssel, achten Sie beim Herausziehen der Schraube darauf, dass das Werkzeug nicht herunterfällt. Release the self-locking nuts, while holding the screw on the opposite side with another spanner and taking care not to let that the flail drop while you are withdrawing the bolts .
- Verwenden Sie beim Wechsel stets ein (siehe Kapitel 1.3), eine sowie eine . Always use a **new tool** when changing (see Chapter 1.3), a **new bolt** and a **new self-locking nut**.
- Die Schraube so in den Werkzeughalter einführen, dass der Schraubenkopf in die Aufnahme passt und sich nicht mehr drehen kann. Introduce the bolt into the mounting so that the bolt head fits into the socket and can no longer turn.
- Montieren Sie das neue Werkzeug, achten Sie dabei auf die richtige Anordnung der Zwischenscheiben. Mount the new flail, taking care that the bolts, nuts and washers are in the correct order. Prüfen Sie stets, ob alle Muttern gut festgezogen sind. Always check to ensure that all the nuts are tight.
- Diesen Vorgang für die übrigen Werkzeuge entsprechend wiederholen, bei Bedarf den Rotor von Hand weiterdrehen um an jedes Werkzeug gelangen zu können. Repeat this procedure with the remaining flails, turning the rotor by hand as necessary to access each flail.
- Das Gerät vorsichtig unter Beachtung der Sicherheitshinweise auf den Boden absetzen. Lower the machine carefully to the ground, while observing the safety instructions.
- Nach einer Zeit von etwa 2 bis 3 Bh den festen Sitz aller Muttern nochmals prüfen. After about two or three hours operating time re-check all nuts to ensure that they are firm.

Flail change variants, changing rotor - ✖ qt

(if an option, see Chapter 1.3)

If your mulcher has been equipped with **scoop flails**, it is a simple task to have them changed for **tungsten carbide flails**. If you do so, you must always change the **complete set**.

Tighten bolts - ⌚ after delivery + every 30 op. hrs. - ✖ cp

Are all nuts and bolts properly tightened? Please check the following torques stated below when tightening.

Thread diameter	Initial torques M in Nm				
	5.6	6.9	8.8	10.9	12.9
M5	2,8	5	6	8,5	10
M6	4,7	8,5	10	14	17
M8	12	21	25	35	41
M10	23	41	49	69	83
M12	40	72	86	120	145
M14	64	115	135	190	230
M16	100	180	210	295	355
M18	135	245	290	405	485
M20	190	345	410	580	690
M22	260	465	550	780	930
M24	330	600	710	1000	1200
M27	500	890	1050	1500	1800
M30	670	1200	1450	2000	2400

Check / tighten drive belt - ⌚ after 1st use + every 30 op. hrs. - ✖ cp

The drive belt on your mulcher serves to **transmit power**. The elasticity of the individual belts **reduces** and evens out **sudden peak loads**. It also constitutes a relatively **cheap fracture point** if the rotor is blocked. For drive belts to work at their best and not wear excessively it is important to **set their tension at an optimum level**.

New drive belts often stretch the first time they are used, so you should check them frequently. The signs of **insufficient belt tension** are smoke and odour (burnt rubber).



Illustration 18: V-belt drive



If you become aware of smoke or odour around the belt drive, switch off immediately because of the fire risk. Carry out fire prevention measures, let the drive belt cool down, then re-tension or change.

You can carry out a **quick check** as follows **without removing the casing**:

Switch off the engine, remove the ignition key and wait until the rotor has come to a complete standstill.

Push a flat object (such as a carpenter's rule) through the **test slot (1)** on the casing, press with the flat side against the drive belt with a pressure of about 50 N / 5 kg (strong arm pressure). If the drive belt is set correctly it should be possible to press it inwards about **10 mm**.

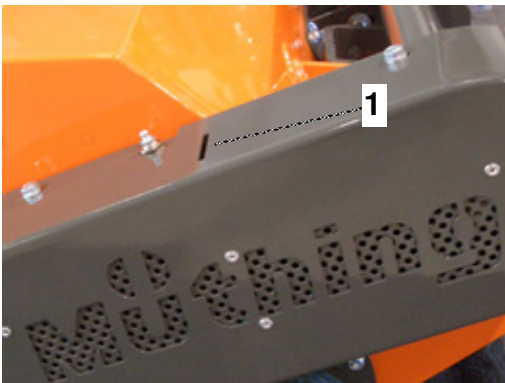


Illustration 20: test slot

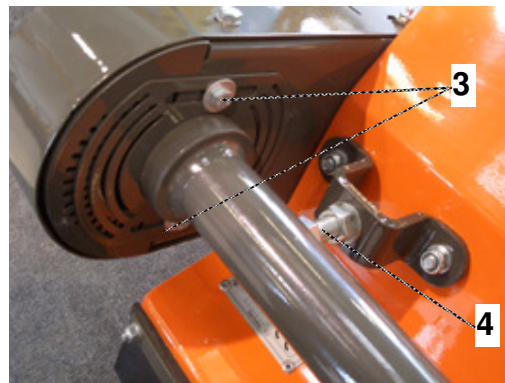


Illustration 22 Drive belt tensioning devices



Illustration 24 Drive belt tensioning devices



To **check and tension the belt after removing the casing** you should proceed as follows:

- Switch off the engine, remove the ignition key and wait until the rotor has come to a complete standstill.
- Dismantle the casing.
- Check the belt tension by pressing with your hand (50 N / 5 kg), strong arm pressure). If the drive belt is set correctly it should be possible to press it inwards about **10 mm**. If the belt is too loose or too tight it must be adjusted.
- Undo the gearbox **screws (2)** on the gearbox mounting and the drive pulley **screws (3)** on the outer side plate, to adjust gearbox and shaft.
- Turn the **clamping screw (4)** (or on some machines the tensioning screws also) in the appropriate direction to tension or slacken the belts.
- Then gently tighten the screws on the gearbox and the drive pulley.
- Now check that the drive belts are absolutely flush.
- To do so lay a spirit level (see Illustration) on both discs, this must contact both discs simultaneously at four points.
- Arrange the discs if necessary by pushing the gear strand together.
- Finally, tighten the screws on the gearbox and the drive pulley, and replace the casing.
- After running for half an hour recheck the belt tension and after one or two hours running check that the fixing bolts are tight.



Illustration 26: pulley discs running in parallel

Change drive belts - ⚙ if worn - ✖ tcp

Worn or abraded drive belts must be **changed** immediately Always change the **complete** set because of their different stretching characteristics. This is the only way to achieve optimum power transmission! To **change the drive belts** please proceed as follows:

- Dismantle the casing.
- Undo the clamping screws (with some machines the tensioning screws also) to slacken the belts.
- Undo the gearbox screws on the gearbox mounting and the drive pulley **screws** on the outer side plate, to adjust gearbox and shaft.
- Remove the drive belts using suitable levers (no sharp edges). Continue turning the belt by hand to make it easier to peel off.
- Mount the new drive belts and tension them using the clamping screws.
- Check the belt tension by pressing with your hand (50 N / 5 kg), strong arm pressure). If the drive belt is set correctly it should be possible to press it inwards about **10 mm**, If the belt is too loose or too tight it must be adjusted.
- Then gently tighten the screws on the gearbox and the drive pulley.
- To do so lay a spirit level on both discs, this must contact both discs simultaneously at four points.
- Arrange the discs if necessary by pushing the gear strand together.
- Finally, tighten the screws on the gearbox and the drive pulley, and replace the casing.
- After running for half an hour recheck the belt tension and after one or two hours running check that the fixing bolts are tight.

Change swing guards - ☺ if worn - ✖ tcp

The front swing guards **provide protection from debris or stones projected** because of the high torque of the flails. These safety devices only provide proper protection if they are **complete** and not **buckled** or **damaged**.

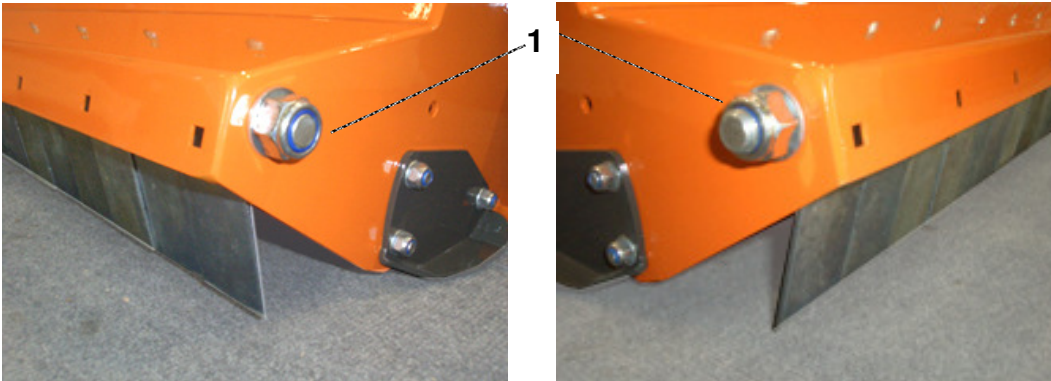


Illustration 28: changing swing guards

To **change the swing guards** please proceed as follows:

- After lowering the mulcher, uncouple it from the tractor and bring it into a horizontal position.
- Undo the **retaining screws (2)** for the mounting on both sides.
- Slowly remove the retaining screw, remembering that swing guards will fall to the ground.
- Replace the damaged swing guards for new ones.
- Thread the new ones on to them individually while inserting the plate guard.
- Replace the **retaining screws (1)** at both ends, not forgetting the washer.

Changing rubber guards - ⚠ if worn - ✖ tcp

The rear rubber guard **provides protection from debris or stones projected** because of the high torque of the flails. This safety device only provides proper protection if it is undamaged and properly fastened.



Illustration 30: rubber guard

To **change the rubber guard** please proceed as follows:

- After lowering the mulcher, uncouple it from the tractor and bring it into a horizontal position.
- Undo the retaining screws on the holding bar, and remove these along with rubber guard that is being changed.
- Position a new original rubber guard so that the fastening holes match the tapholes.
- Position the holding bar and screw on the rubber guard, making sure that the screws are tight.

6.3 Lubricating chart

Grease rotor and backup rollervbearings - ⌚ every 4 op. hrs. - ✖ tcp

Grease the rotor- and back-up roller bearings on both sides (via the grease nipple) with normal lithium lubricating grease. The grease must be seen to emerge when you lubricate the back-up roller bearings – Give the rotor bearings 4 to 5 squirts on each side.

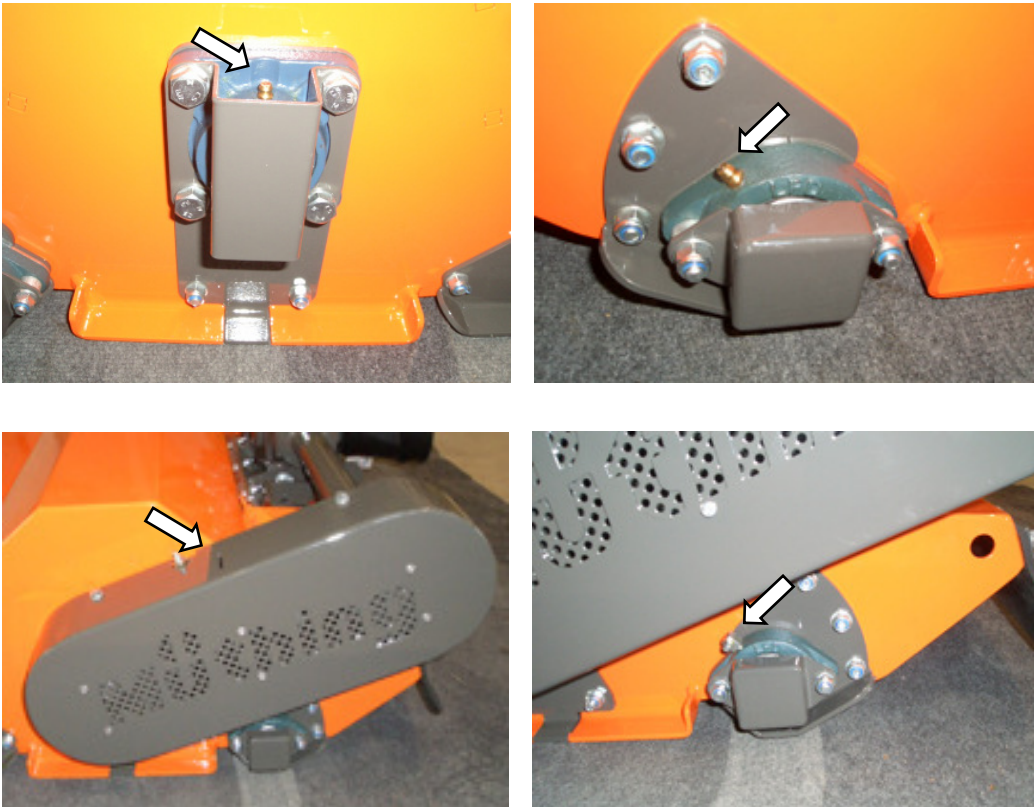


Illustration 32: Lubrication points on rotor and backup roller bearings

Grease sensing wheels (if applicable) - ⌚ every 8 op. hrs. - ✖ tcp

Grease the bearings of the sensing wheels via the **lubrication** with normal **lithium lubrication grease**. The grease must **visibly extrude during lubrication**.

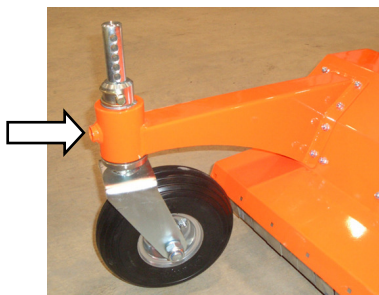


Illustration 34: rubber wheels lubrication points

Check oil level and top up - ⌚ every 30 op. hrs. - ✖ tcp

Gearbox oil to be used: **SAE 90 EP** or **SAE 140**

The **gearbox** of your mulcher runs in an **oil bath** within the housing.

Because of the maintenance free bearing oil is unnecessary in the extension shaft.

The flail mulcher has been designed so that the oil within the gearbox must be **half filled**. This can be verified via the **oil-filling plug (1)**.



Too little oil can cause damage from overheating and/or running dry. Too much oil can also cause damage to the gearbox.

The **oil filler plug and drain plug (1)** is on the side of the gearbox housing.



Illustration 36: Gearbox



Illustration 38: Gearbox

To **check the oil level / top up**, please proceed as follows:

- Park the mulcher on a horizontal surface (supporting with support leg if available), uncouple it (see Chapter 4) and place it in a horizontal position.
- Place a container underneath the oil-level check plug / oil drain plug and unscrew it / remove it.
- If the oil level is too high, it will run off into the available container, if it is too low, top it up as necessary.
- Replace the oil check / filling plug and screw it up tight; dispose of the excess oil in line with current regulations.

Change gearbox oil - ⌚ after 30 op. hrs. then every 200 op. hrs. - ✂ top

Gearbox oil to be used: **SAE 90 EP** or **SAE 140**

Please carry out a **gearbox oil change** as follows:

- Park the mulcher on a horizontal surface (supporting with support leg or optional support wheels), uncouple it (see Chapter 4) and place it in a horizontal position.
- Place a container underneath the gearbox to catch any leaking oil and unscrew / remove the oil level check / drain plug. Then extract the oil completely from the gearbox.
- Pour in the gearbox oil carefully using a funnel.
- Wait until the surplus oil has flowed into the container.
- Replace the oil check / filling plug and screw it up tight; dispose of the old oil and excess oil in line with current regulations.

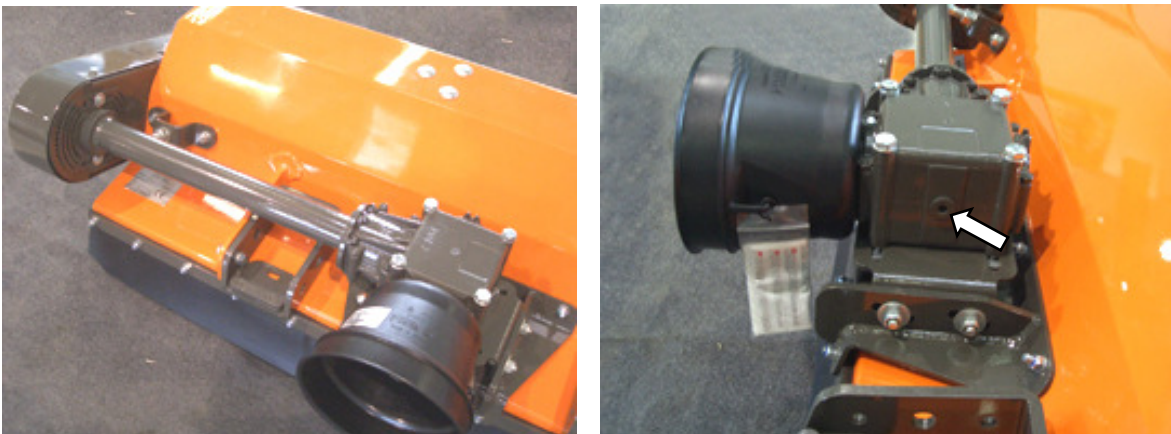


Illustration 40: oil check, drain and filling plugs on the gearbox

7 Malfunction chart

Fault	Cause	Solution
The mulcher emits excessive vibration and noise	Cutting flails damaged or excessively worn.	Change the worn cutting flails including mounting nut and bolt in pairs or as a complete set.
	Jammed cutting tool on the rotor.	Clean cutting tool mounting.
	One or more cutting flails broken or missing.	Replace cutting flails.
	Wire or other material wrapped round the rotor.	Remove debris.
	Unbalanced rotor.	Check the weighting and rebalance as necessary.
	Rotor bearing or rotor shaft damaged or worn	Replace the bearing or shaft.
Machine and / or cut substandard	The mulcher is not parallel with the ground.	Adjust the roller/wheels until the mulcher is sitting correctly.
	Cutting flails worn.	Change the worn cutting flails including mounting nut and bolt.
	Rotor speed too low.	Increase rotor speed.
	Driving speed too high.	Drive more slowly
	Drive belt too slack.	Check drive belt tension and if necessary retighten.
	Drive belts worn.	Replace complete set of drive belts.
	Cutting height too low.	Lower support roller/wheels and /or adjust top linkage.
	Cutting height too high.	Lower the support roller/wheels and /or adjust the toplinkage.
Rotor does not turn	Rotor is blocked by an obstruction.	Carefully remove the obstruction.
	Gearbox incorrectly mounted – freewheel disengages	Change gearbox or have it remounted
Drive shaft turns but not rotor	Drive belts torn.	Replace complete set of drive belts.
Support roller is stiff or stuck	Support roller bearing dirty or damaged.	Replace bearing and grease new bearing well until grease starts to exude.
	Running dry, no grease.	Re-grease bearing until grease starts to exude.

Fault	Cause	Solution
Drive belt problems (too much belt wear, belts overheat, start to smoke, reduction in power transmission)	Drive belt too slack.	Check drive belt tension and retighten as necessary
	Drive belt pulleys out of alignment.	Check alignment and adjust as necessary
	Cutting height too low.	Lower support roller/wheels.
Gearbox runs hot	Oil level too low	Top up oil
	Oil too old	Carry out oil change
	Rotor / mulcher struggles to cope	Drive more slowly and/or set back-up roller lower
Oil loss from gearbox or extension shaft	Sealing rings damaged or worn.	Replace sealing rings.
Excessive cutting tool wear.	Cutting height too low.	Lower support roller/wheels and /or adjust top linkage.
	Flails not original	Use original Müthing cutting flails.
Drive elements fractured	Mulcher started too quickly or damaged by debris	Replace the damaged item and take more care with the mulcher in future.

8 Additional options

8.1 Rubber front wheels, can be swivelled through 360°

To **improve alignment to the ground** and make it easier to **work in cramped conditions**, the machine can be equipped with height-adjustable rubber front wheels.

The wheels are positioned in front of the mulcher housing and are used **together with the track idler**. The centres of rotation on the wheel forks have grease nipples and must be lubricated at the maintenance intervals.



Illustration 42

8.2 Other types of flail

A different type of rotor and flail can be fitted on the mulcher as an option.

This is a rotor with **tungsten carbide shackle flails**.

The shackle flails are better at avoiding debris and consequential damage. They are politically recommended for use on stony soils.



9 Guarantee

Müthing Mulchers are manufactured with great care, using modern production methods and are subject to numerous checks. Consequently Müthing issues a guarantee as part of its General Terms and Conditions in line with the following statement (extract from General Terms and Conditions):

- The rights of the customer with regard to product defects are laid down by law. If the customer is not a consumer (Article 13 German Civil Code) these rights are restricted by the provisions of clauses 2 – 8 below.
- Discrepancies or changes lying within the bounds of relevant technical standards shall not constitute a defect. The same applies to standard commercial, and technically unavoidable discrepancies where they do not impair the utility of the goods for use in accordance with the contract.
- If a particular quality of the item is agreed a departure from this only constitutes a negligible defect if the suitability of the item for the contractually agreed use is not impaired or only to a negligible extent. In this case compensation claims or withdrawal from the contract as a result of the defect are ruled out.
- The right of the customer to subsequent performance is restricted to a repair of the item if this is reasonable for the customer, especially if this can remedy the defect in a similar fashion to resupplying the item.
- The customer can only claim that subsequent performance has failed if at least two attempts at subsequent performance have been unsuccessful and at least 3 weeks have elapsed since the complaint.
- The period of grace set by the customer shall be deemed unreasonable if it is less than three weeks counting from the date on which we were notified of the period of grace. Periods of grace must be set in writing.
- We shall only be liable for losses incurred by the customer as a result of defects to the supplied item in cases of simple negligence up to the level of a typical average loss. This shall not apply to losses involving loss of life, physical injury or damage to health.
- With the exception of claims referred to in Article 478 German Civil Code [=BGB] all rights of the customer arising from the defect shall be statute barred within 1 year of delivery. This shall not apply to instances of intent and gross negligence, nor to compensation claims involving loss of life, physical injury or damage to health. Nor shall it apply if an item supplied or mounted by us is used as a building. In instances of Clauses 2 and 3 the statutory period of limitation shall apply.
- Supplying an item other than the due item or a quantity other than the due quantity shall constitute a defect.

EC – Compliance declaration

pursuant to EC Guideline Machines 98/37/EC, Appendix IIA

Product: Flail mulcher

Type: MU-C/HUS

For mulching grass and light vegetation and for chopping organic crop residues (maximum finger-thick) above ground.

Manufacturer: Müthing GmbH & Co. KG Soest

Address: Am Silberg 23 - D 59459 Soest

We confirm that the above product conforms to the following guidelines and standards:

98/37 EC

Safety of machinery, Machine guideline

EN 12100 - Part 1

Safety of machinery –
terminology, methodology

EN 745

Agricultural machinery - rotary mowers and
flail mowers - safety

EN 13524

Machinery for use on roadways - Safety
requirements

EN 349

EN 12100 - Part 2

Safety of machinery –
technical guidelines

EN 1553

Agricultural machinery - self-propelled,
mounted, semi-mounted and towed
agricultural machines - General safety
requirements

EN 294

EN 982

Soest, 03/04/2009

Dr. Michael Müthing, Director

