



MULCH MASTER

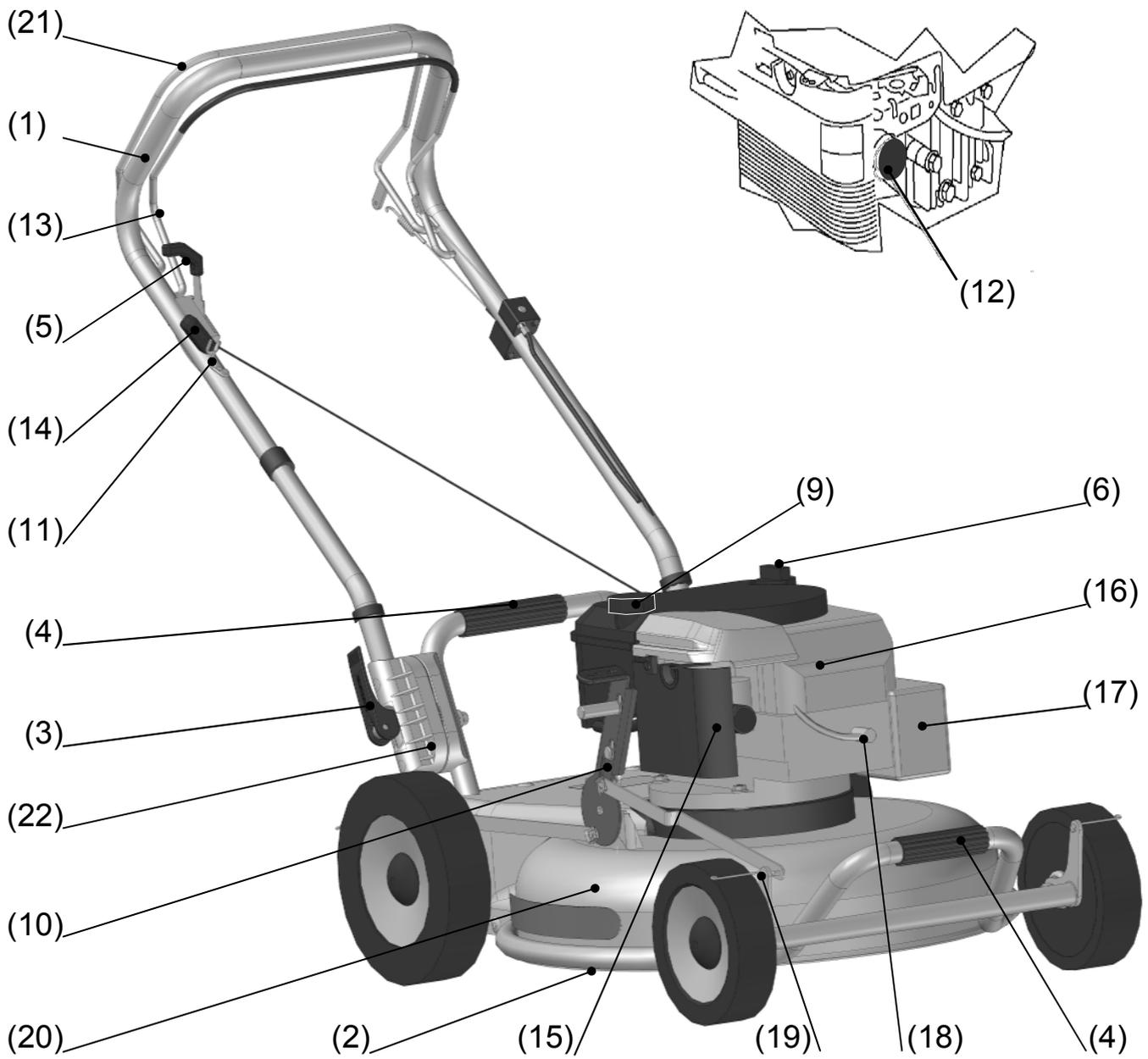
HM46 / HM46A / PM53A



DE	Betriebsanleitung
GB	Operation Manual
FR	Notice d'utilisation
IT	Istruzioni per l'uso

ES	Manual de instrucciones
NL	Gebruiksaanwijzing
DK	Brugsanvisning
SE	Bruksanvisning

<p>01</p>	<p>02</p>	<p>03</p>	
<p>04</p>	<p>05</p>	<p>06</p>	
<p>07</p>	<p>08</p>	<p>09</p>	
<p>10</p> <p>OPEN</p>			<p>CLOSE</p>



No.	Description	No.	Description
1	Handle bar	12	Fuel injection primer (PM)
2	Frame	13	Engine brake bar
3	Eccentric lever	14	Starter coil handle
4	Grip protector	15	Air filter
5	Speed lever (PM)	16	Engine cooling intake
6	Oil infill spout/dipstick	17	Shielded exhaust pipe/muffler
7	Mark for maximum oil level, MAX	18	Spark plug cap
8	Mark for minimum oil level, MIN	19	Grass deflector on all wheels
9	Fuel tank filler cap	20	Blade guard (cutter housing)
10	Cut height adjustment lever	21	Clutch lever for wheel drive (HM46A/PM)
11	Cable holder for starter handle/starter coil	22	Handle bar height adjustment

Model Specifications		HM46	HM46A	PM53A
Dimensions (max.) (L x W x H) (mm)				
Packed for transport		820 x 530 x 430		840 x 590 x 430
Ready for operation		1260 x 530 x 1040		1330 x 520 x 1,060
Weight (dry weight kg)		max. 29.5	max. 35.0	40.3
Cutting device		Special mulching blade with turbodisc		
Cutting width (mm)		460		530
Cutting height adjustment (mm) in set positions	T (Transport)	30		35
	1	35		40
	2	45		50
	3	55		60
	4	65		70
Height adjustment (mm) Handle bar in steps (mm)		from 0 to 1,040		
Work area noise level		94 dB	96 dB	97 dB
		Tested acc. to EN 836/A2:2001-10 and EN ISO 3744 1995-11		Tested acc. to EN 836/A2:2001-10 and EN ISO 3744 1995-11

General Specifications

Locking torque for blade mounting (Nm)	20		
Driving speed (km/h)	–	3.2	1st gear 2.8 2nd gear 3.2
Recommended fuel	Unleaded regular petrol or alternative or unleaded premium petrol		
Recommended oil	SAE 30 (grade: SF or SG) Fill only to MAX!		

Engine Specifications

Manufacturer	Briggs & Stratton		
Displacement (cc)	190		190
Horsepower (3,600 RPM kW)	3.7 – Ready Start	4.0 – Ready Start	4.4 OHV – Easy Start
Operating RPM	3000 U/min +/- 100		
Spark plug type	RJ 19 LM or BR 2 LM		RC 12 JC
Start mechanism	Pull coil starter		
Safety device	Engine brake		
Air filter type	Paper filter		Paper filter with PVC prefilter
Oil capacity	0.5		0.6
Fuel capacity (l)	1.5		1.5

	Page
Functions	II
Detailed View	III
Technical Data	1
Table of Contents	2
1 Introduction	3
2 Important Information	3
3 Use	3
Designated Use	3
Improper Use	4
4 Icons	4
Examples of Warning Icons	4
Examples of Extra Icons	4
Warning Symbols on the Mower	5
Basic Safety Instructions	5
Prior to Start-up	5
During Start-up	6
Operation	6
5 Description	7
Setting Grip Handle	7
Hanging Starter Coil	7
Adding Oil	8
Adding Fuel	8
Setting Cutting Height	9
Preparing for Starting Engine	9
Starting Engine	9
Cutting Method	11
Optimising Mowing	11
Stopping Operation	11
Parking	11
Storing	11
6 Maintenance and Care	12
After Mowing/Before Parking and/or Storing	12
Maintenance and Care Intervals	13
Draining/Changing Oil	13
Draining Oil with Hand Pump	13
Draining Oil without Hand Pump	13
Sharpening Blade	14
Obtaining Replacement Parts	14
Opening/Closing Gear Box Cover	14
Cleaning Air Filter	14
7 Resuming Operation	14
Resuming Operation after Parking	14
Resuming Operation after Storing	14
8 Recycling	15
9 Troubleshooting	15
10 Warranty Terms	16
EC Declaration of Conformity	IV

1 Introduction

Dear Customer,
we thank you for the trust you invested in us with the purchase of our quality product. We wish you much success in the use of your mower.

Please become familiar with this operation manual before using your mower for the first time.

The operation manual informs you how to operate the mower properly and safely and guides you step-by-step through all procedures.

2 Important Information

All products from MWS Cutting Tools are developed and manufactured under strict quality control for long-term and problem-free usage.

This ensures the following:

- superb quality and long life,
- simple and safe operation,
- functional design,
- optimised for intended use.

This product from MWS Cutting Tools complies with recognised technological specifications and bears the CE seal of approval.

Please read this operation manual carefully from beginning to end, in order to familiarise yourself with your mower and avoid errors and hazards. Other existing hazards are referred to in the operation manual at appropriate places. Please also observe the warning labels on the mower itself.

3 Use

Designated Use

The mower is designated for the following use:

- Type PM mowers: for private and commercial use.
- Type HM mowers: only for private use! They are best suited for regular mowing of yards and small gardens.

Any other usage of this mower is considered improper!

Proper usage entails the observance of this operation manual, all warning labels on the mower itself and the operation manual from the engine manufacturer. MWS Cutting Tools assumes no liability for damage to persons or property arising from improper or negligent operation.

Improper Use

The mower may NOT be used:

- if safety devices are defective or have been manipulated,
- if irregularities occur while the engine is running, or you suspect that safety has been compromised,
- by persons who have not read and understood this operation manual,
- by children and youth under 16 years of age, by persons under the influence of alcohol or drugs and persons whose alertness is limited (by medications or other substances).

4 Icons

Please observe these warnings without fail, and abide by the prescribed procedures or prohibitions.

A warning instruction warns you before the occurrence of a hazard and contains suggestions for protecting yourself from harm.

Signal words indicate the kind of hazard; icons highlight them visually.

Observe the prescribed measures for protecting the operator or personal property from harm.

Examples of Warning Icons



WARNING!

Danger of explosion!

Petrol is highly flammable and petrol vapours can easily explode.

Turn off the engine. Refuel only in open spaces. Keep a 5-metre radius from fire or open flame. No smoking.



CAUTION!

Blade can cause injury. The blade is very sharp. Always wear safety gloves.



ATTENTION!

Property damage hazard. Check oil level before use. Operating the mower without oil causes engine damage.

Examples of Extra Icons

Additional instructions for complying with environmental protective measures or other useful information and tips are indicated as follows:



NOTE:

Useful information and tips.



Environmental Protection

Instructions for compliance with environmental protective measures.

Warning Symbols on the Mower

Observe all warning labels on the mower itself. They are found in highly visible locations on the exterior covers. Replace any worn-out labels.

Meaning of warning labels:



1. **WARNING!**

Read the operation manual before starting and heed all warnings.



2. **WARNING!**

Unauthorised persons prohibited from access and use. No persons other than the operator are permitted in the work area. Keep away from animals.



3. **WARNING!**

Shut off engine and remove spark plug cap before working on cutter. Tilt the mower forward from the rear to conduct maintenance work. Wait until the blade comes to a complete stop. A rotating cutter is extremely dangerous. The cutter may continue to rotate after shutting off the engine.



4. **WARNING!**

Keep hands and feet clear of the cutting tool. Never place hands or feet under the protective cover. Extremely dangerous!

Basic Safety Instructions

These safety instructions apply universally to the use, care and maintenance of the mower. They should always be observed and are only generally listed here.

Prior to Start-up

Please observe each time before starting up:

- Read the operation manual (also for the engine) and keep in an accessible place.
- Check your mower for damages or leaks around the tank and the engine.
- Check the fuel and oil levels and add appropriate amounts and grades as needed. Add fuel only in open spaces. Never smoke while refuelling. Keep fuel and oil only in approved containers. Ensure that filler caps for fuel and oil are tightly closed before starting the engine.
- Never exceed the MAX capacity for oil. Check the oil level regularly. It should always be above MIN. Change the oil after every 25 operating hours.
- Do not refuel:
 - While the engine is running.
 - While the engine is warm.
- Adjust the cutting height before starting the engine.

Check the following items before the first mowing:

- The cutter is tightly fastened.
- The handlebar and connections are tight.
- The cables and controls are functioning properly.

During Start-up

Always wear appropriate shoes/boots with sufficient tread. The cutting tool runs at a high speed and can throw foreign objects such as stones or branches out from the mower. Protect yourself with appropriate work attire.

Always begin mowing on an open surface, not in high grass. Start the engine only when the mower is securely stationary and the blade can rotate freely.

Do NOT start:

- In enclosed areas, because a running engine produces carbon monoxide, a poisonous, odourless, colourless gas.
- If you are not standing behind the grip handle facing the direction of travel.
- If the starter coil is not in the cable holder hanging on the grip handle.
- If the mower is not stationary.
- If there is discernible damage to the mower or safety equipment is defective.
- If persons or animals are in the hazard area (approx. a 5-metre radius).
- If fuel was spilled next to or on the mower during fuelling; thoroughly clean up the spill prior to starting to avoid possible ignition.
- If brightness/daylight is insufficient to allow safe working conditions.

Please observe all community ordinances regarding permissible operating times for private use.

Further operating times apply to commercial use.

Operation

Never modify the engine's factory settings. The RPM is preset by the manufacturer and may not be altered.

Prior to mowing, clear the area to be mowed of any stones, wood, glass, wire and other foreign objects that could harm you or the cutting tool.

Operation is permitted only if the grip handle is locked tightly in position. This is the only way you can safely move the mower and remain a safe distance from the rotating blade.

Always mow across inclined surfaces, as this is much safer. Inclined surfaces such as hillsides at greater than 20° grade should not be mowed. Mowing over loose surfaces or paths increased the risk of impact from stones. Always turn off the engine when travelling across such surfaces. Restart the engine only after reaching the work area.

The exhaust pipe presents a burning hazard. Temperatures can reach up to 80°C. Keep fuel, oil, grass, leaves and other flammable or easily ignitable materials a safe distance from the exhaust pipe and engine.

Never transport the mower while the engine is running.

Remove the cutting tool blocks only when the engine is inactive and the spark plug cap is removed.

Park the mower in buildings/enclosed areas only after the engine has cooled.

Keep the air intake for engine cooling clean.

Shut off the engine immediately:

- If you must leave the mower.
- If you are distracted by other events and your alertness is impaired.
- If the mower runs rough after blocking the blade (vibration or irregular idling).
- If you perceive unusual noises coming from the engine of the cutting tool.
- If the safety equipment does not function normally.

In these cases it is necessary to have the mower checked at your garage in order to ensure further safe operation.

5 Description

Setting Grip Handle

01 (see p. II)

1. Park the mower on an even surface.
2. Adjust the handle bar (1) to your height and lock it in place (see 4). Keep an eye on the cables as you unfold it, so that they do not get pinched.
3. Lock the handle bar by pressing the eccentric lever (3) on the bar (eccentric lever grips should point up).

Hanging Starter Coil

02 (see p. II)

Hang the cable for the starter coil (14) in the available cable holder (11) on the handle bar (1).

Adding Oil



ATTENTION!

Checking the oil level accurately is possible only when the mower is parked on as level a surface as possible. Deviations up to 3% incline are within an acceptable range. Change the oil after very 25 hours of operation in order to avoid engine damage.

Use only oil recommended by the engine manufacturer.



Environmental Protection

Be careful when handling fuel and oil to make sure nothing ends up in the environment.

Recycle residual fuel and used oil responsibly.

Proceed as follows to add oil:

1. Pour **500 ml** (for **HM** models) or **600 ml** (for **PM** models) of oil into the infill spout using a funnel.
2. Replace the oil fill cap on the infill spout.
3. Remove the oil fill cap from the infill spout (6) again and check the level on the dipstick (6). The oil level should be close to MAX (7). A correct oil level should always fall between MAX (7) and MIN (8).
4. Replace the infill spout cap (6) and hand-tighten it. Note the notches in the infill spout.

Adding Fuel



WARNING!

Danger of explosion! Petrol is highly flammable and petrol vapours can easily explode! Turn off the engine. Refuel only in open spaces. Keep a 5-metre radius from fire or open flame. No smoking. Never refuel when the engine is warm.

1. Park the mower on a somewhat level surface. Let the engine cool before refuelling.
2. Remove heavy soil around the filler cap (9) before opening. Open the filler cap (9).
3. Add unleaded regular fuel (91 octane) using a safety spout or a funnel. Maintain the maximum fuel capacity recommended by the engine manufacturer.
4. Make sure that there is sufficient air to allow dissipation of fuel fumes.

Always keep away from shaken/foaming fuel. Do not mix oil with fuel. Close the filler cap by hand-tightening it.

03

Set the cutting height with the adjustment lever (10).

Raising cutting height: Pull the locking lever (10.1) on the adjustment lever (10) toward you. Pull the adjustment lever (10) back. Lock the desired cutting height in place.

Lowering cutting height: Pull the locking lever (10.1) on the adjustment lever (10) toward you and push it forward. Lock the desired cutting height in place.

Setting the adjustment lever (10) completely forward (10.2) is only for transporting the mower (T) and is not permitted for mowing.

Set the cutting height according to the indicator on the mower.

Preparing for Starting Engine



WARNING!

Injury hazard! Start the mower only when you are standing behind the grip handle.

The starter coil handle (14) is easily reachable from this position. If the starter coil handle is still coiled in the engine, requiring you to stand beside the mower to start it, your feet are in danger of injury because they are in the cutting rotation zone. Starting the engine only while standing behind the grip handle protects you from foot injury from a running engine.

Park the mower on a level surface.

Avoid areas:

- With high grass (hindering blade rotation).
- With gravel, dust, and broken surfaces.

The cutting tool produces strong air movement.

Starting Engine

Easy-Start Engine **05** (see p. II) (for Type PM53A)

For a cold start, depress the rubber fuel injection primer (12) once. After about 2 seconds, depress the primer once more. The primer should be depressed only 2 or 3 times for a cold start. If the engine is warm, starting is usually possible without depressing the primer. Do not depress the primer (12) unnecessarily; each depression injects fuel into the carburettor intake. Flooding the engine may prevent ignition. In temperatures below 10°C, however, it may be necessary to pump the primer up to 5 times.

Ready-Start Engines (for Types HM46 and HM46A)

No additional preparations are necessary.

Stand behind the mower and pull the engine brake bar (13) to the handle bar (1) with one hand; with the other hand grasp the starter coil handle (14) hanging in the cable holder (11).

Starting Engine**06** (see p. II)**NOTE:**

Starting with the starter coil is possible only when the engine brake bar is retracted; otherwise the engine brake prevents ignition.

With the engine brake bar (13), pull the starter coil handle (14) swiftly with equally strong arm movements, and hold onto it even after the engine has started.

Once the engine starts, slowly return the starter coil handle (14) to the cable holder (11). If the engine does not immediately start, repeat the attempt.

Do not begin mowing immediately after starting the engine; rather, allow it to warm up for about 2 minutes.

**ATTENTION!**

Too many attempts to start the engine will flood it. This allows too much fuel into the cylinder chamber, and the spark plug will not ignite anymore. If you are unable to start the engine after multiple attempts, the cause should be determined. Please also check your engine documentation.

**NOTE:**

If the engine becomes flooded after multiple attempts to start it, proceed as follows:

- 1. Remove the spark plug cap.**
- 2. Unscrew the spark plug.**
- 3. Pull the starter coil several times to dry out the cylinder chamber.**
- 4. Dry off the spark plug and screw it back in tightly.**
- 5. Replace the spark plug cap.**
- 6. Start the engine.**

Model HM46A/PM53A (with wheel drive) 06

If you would like to use the mower's self-propelled feature, pull the clutch lever for the wheel drive (21) toward the handle bar; otherwise, you can push the mower by hand without engaging the clutch.

Model PM53A 08 (see p. II)

To select the drive speed, move the speed lever (5) to the desired position (slow/1st gear: I; fast/2nd gear: II). Move the speed lever only when the wheel drive is disengaged (clutch lever (21) is not pulled). Otherwise, operate as described for Model HM46A.

Cutting Method

The grass is chopped into very fine pieces by a special blade, breaking up its structure.

These clippings are then pressed back down into the surface through the topsoil.

The clippings decay in a very short time and thereby supply the ground with nutrients.

This allows mowing grass regardless of the weather without impairing the results.

Benefits:

- No clipping removal.
- No composting.
- At least 50% time savings.
- At least 50% savings in watering.
- Outstanding cut with no remaining missed areas on the topsoil.

Optimising Mowing

You will get the smoothest results if you observe the following:

- Set the cutting height according to the indicator on the mower or as instructed in this operation manual.
- Mow at maximum grass height of 120 mm.

Grass standing higher than 120 mm may leave uncut or uneven areas and may also clog the mower and stop the engine.

Mowing wet grass inevitably results in piles of clippings left on the lawn after shutting off the mower, regardless of the height of the mown area. These should be removed after mowing.

Stopping Operation

07 (see p. II)



WARNING!

Injury hazard from continuing blade rotation!

The blade continues to rotate after the engine has been shut off (for about 2 seconds). Do not place your hands under the blade guard immediately after shutting off the engine.

Release the engine brake bar (13) to stop the engine. Wait for the blade to stop turning.

Conduct the following maintenance and care measures before parking/storing the mower.

Parking

Short-term storage of mower (up to 4 weeks) is considered "parking".

Storing

"Storing" is considered long-term non-use of the mower for more than 4 weeks, e.g. over the winter.

6 Maintenance and Care



ATTENTION!

Perform all maintenance and care procedures only when the engine is shut off and the cutting tool is stationary. Be sure also to heed the instructions from the engine manufacturer when performing maintenance and care procedures. Do not spray the engine down. Pull the spark plug cap.



Tip the mower only after the cutting tool has come to a stop.



ATTENTION! The engine is warm after use. Touch only the fuel tank cap when checking the level.

Always tip the mower toward the back **04**. Check the fuel tank level in advance. The fuel tank must not be filled to capacity, otherwise fuel will run out.

Park the mower securely on an **even** surface. Place the height adjustment lever in the transport position; then release the eccentric lever on the handle bar and fold the handle bar forward completely. Grasp the handle on the carrier and pull the mower upright.

After Mowing/Before Parking and/or Storing



Wear gloves to protect your hands when working around the blade.



Thoroughly clean the mower after use. Do not use a pressure washer for cleaning. Remove clipping residue by hand using only a brush or scraper.



Park the mower under a covered area. Petrol can remain in the fuel tank.

The mower should not be parked in the sun and not inside a residence, because of the emission of petrol fumes.

Let the engine cool outdoors before parking.

For safety reasons, worn-out or damaged mower parts must be replaced before further use.

If you sense vibrations during engine operation, consult your dealer. Do not attempt to eliminate the vibrations yourself.

Keep the locking torque at 20 Nm for mounting the cutting tool. The use of torque wrench is mandatory.

For safety reasons, owner-executed additions, modifications to the mower or provisional repairs are prohibited. Only original replacement parts may be used. Please consult your dealer.

Maintenance and Care Intervals

Procedure	Interval
Check oil level and add as needed	Before every use After the first 2 hours of operation Every 5 engine operating hours
Check tightness of all fastened parts.	Before every use
Change oil	After the first 5 hours of operation Every 25 hours of operation
Clean the air filter	Every 25 hours of operation (blow clean only with air)
Check/clean spark plug	Every 100 hours of operation
Clean the air intake grate	Every 25 hours of operation
Sharpen or replace the blade	Every 25 hours of operation
Clean the mower	After each use Every 25 hours of operation Before parking/storing

The maintenance/care intervals should be shortened if the mower is frequently operated in extreme temperatures or in dusty environments.

Draining/Changing oil

Changing the oil should ideally take place while the engine is warm, because the used oil and all residue more easily drains from the engine. Oil should be changed only through the infill spout (6).



Watch out for the cutting tool!

The exhaust pipe may remain very hot after stopping the engine. Injury hazard!

Draining Oil with Hand Pump

The oil can be pumped out using a standard hand pump. If necessary, go to your nearest service station or your dealer (see engine service list). Please heed your engine manufacturer's operation manual.

Draining Oil without Hand Pump

Pull the spark plug cap off the spark plug. Raise the mower off the ground. Place next to the mower an appropriate container the height of the infill spout for catching the used oil. Open the oil infill spout and tip the mower to the side until all the oil has run out of the engine.



Protect the environment.

Recycle used oil responsibly by delivering it to a service station, who will accept it at no charge. Oil that ends up in the environment causes damage to the water table.

Sharpening Blade



WARNING!

A cutting tool (blade) that produces vibrations must be replaced without fail. Do not attempt to true the blade yourself, as you may get it out of balance. This can cause an accident and create the hazard of further damage to the mower.

Blade grinding is rarely necessary, since the blade is manufactured from a specially hardened steel. If it becomes necessary to resharpen your blade, please bring it to us or to a dealer in your area.

Obtaining Replacement Parts



ATTENTION!

Accident hazard from using damaged parts!

For safety reasons, worn or damaged parts must be replaced. Only original replacement parts may be used.

Opening/Closing Gear Box Cover

The instructions on the maintenance label on the mower **10** should be observed when opening or closing the gear box cover on models with wheel drive. The fasteners should be reusable if handled correctly.

Cleaning Air Filter

Please heed your engine manufacturer's operation manual.

7 Resuming Operation

Resuming Operation after Parking

Before starting the engine, check:

- the oil level (make sure the mower is level),
- the amount of fuel in the tank,
- whether the cutting tool is fastened securely and runs centrally,
- whether the grip handle and other mechanical connections are tight.

More instructions on page 9: "Setting Cutting Height".

Resuming Operation after Storing

As on page 8: "Adding Fuel".

Before starting the engine, check:

- Whether the cutting tool is fastened securely and runs centrally (with the spark plug cap off!).
- Whether the grip handle and other mechanical connections are tight.

Perform any necessary maintenance, such as:

- Changing the oil.
- Sharpening the blade.

To do this, please observe the instructions for maintenance and care.

8 Recycling



Please observe all environmental codes and avail yourself of all opportunities to recycle. Recycle parts according to regulations.

Plastic parts: Sorted by recycling process (look for the Green Dot); otherwise dispose of as rubbish

Metal parts: Scrap recycling

Electrical wires: Electrical appliance scrap or coloured metal scrap

Used oil: Deliver to a service station for recycling

9 Troubleshooting

	Problem	Cause/Solution
Engine does not start	Insufficient fuel	Add fuel; check for adequate venting
	Poor quality or dirty fuel; clogged carburettor	Fill with clean fuel or filter existing contents; clean carburettor
	Air filter clogged/oily	Change air filter
	No spark emitting from the spark plug electrode	Clean spark plug (or replace as needed); check for proper spark gap and adjust as needed; check ignition cable and system (service required!)
	Engine flooded	Dry out cylinder chamber by starting without spark plug (see p. 10)
	Engine brake is interrupting ignition	Adjust engine brake cable (service required!)
	Blade is obstructed, cannot rotate freely	Use open surface for starting, not in high grass
	Mowing deck clogged	Remove residue (pull off spark plug cap first!)
Poor engine performance	Blade is obstructed, cannot rotate freely (clogged)	Remove residue (without spark plug cap!); watch cutting and grass height
	Air filter dirty (engine is not getting enough air)	Clean/replace air filter
	Carburettor setting incorrect	Adjust carburettor (service required!)
	Blade dull	Sharpen blade (service required!)
	Spark plug not screwed in tightly	Retighten spark plug to seal gasket
	Mowing deck clogged	Remove residue (pull off spark plug cap first!)
Uneven cut	Blade not sharp enough	Sharpen blade (service required!)
	RPM too low	Check RPM (service required!)
	Incorrect cutting height	Lower cutting height
Wheel drive does not engage	Clutch level not retracted	Pull clutch level to engage wheel drive
	No propulsion even with clutch lever retracted	Turn knurled nut in direct of arrow B (shorten bowden cable) 09
	Speed lever not locked into position	Set speed lever in locked position (1 st or 2 nd gear) 08
	Drive belt slipped off pulley	Open gear box cover 10 ; replace belt on pulley (the drive is constantly spring-tensioned)
	Wheel blocked	Clipping residue in wheel (service required!)
Wheel drive does not disengage	Clutch lever retracted	Release clutch lever
	Drive continues despite released clutch lever	Turn knurled nut in direct of arrow A (lengthen bowden cable) 09
Mower vibrates	Blade unbalanced	True up blade
	Crank shaft damaged	Have serviced without fail

10 Warranty Terms

MWS Cutting Tools Ltd. & Co, located at Asbacher Str. 5, 98574 Schmalkalden, Germany (hereafter "MWS") hereby guarantees the end-user that its **MULCHMASTER** walking mower is manufactured according to the latest engineering standards and is free of defects and workmanship for its intended use. In accordance with this guarantee MWS will relieve the end-user of any costs related to the elimination of defects in materials and workmanship through an MWS-contracted dealer or MWS itself (claim) under the following conditions:

1

The warranty period begins on the date of purchase - a completed warranty card, dealer stamp and dealer invoice.

2

The warranty period ends after 24 months from the date of delivery to the end-user (purchase) has passed. Exceptions to the are MWS power equipment that is used for public or commercial purposes, even if only temporarily. In such cases the warranty expires after 12 months. Engines installed on the equipment are excluded from this warranty. For these, the manufacturer's conditions apply as shown below.

Engine Warranty Periods (according to information supplied by each manufacturer)

Type	Consumer Use	Commercial USE
Briggs & Stratton „Quantum“ and „Kool Bore Intek“ series	2 years	3 months

Problems that MWS itself or its contract dealers are notified of after expiration of the warranty period have no basis for a warranty claim. Each warranty claim is subject to a limitation of 6 months after discovery of the problem.

3

The manufacturer is not responsible for damages to the equipment or subsequent damages to persons or property that arise due to inappropriate use; no warranty claims can be validated. Deficiencies and subsequent repairs are handled by our customer service department. Further claims beyond the warranty are excluded. There is no guarantee of replacement.

4

The following are excluded from the warranty:

- Maintenance and cleaning labour.
- Installation of non-OEM parts.
- User-serviced repairs and self-performed modifications.
- Alterations in construction.
- Normal wear and tear, as well as wear due to inappropriate use (overuse) such as filters, spark plugs, wheels, friction surfaces, blades and turbodiscs, cutter housings, bent support frames, welded and attached parts broken off due to improper operation and transport and other consumable parts, as well as accessories not belonging to the model.
- Paint damage from use.

5

The service provider is responsible for any damage caused in transport, i.e. the carrier or shipper, not the manufacturer.

6

MWS reserves the right to repair defective parts or replace them. Replaced parts become the property of MWS without compensation. The MWS contract dealer used to eliminate the problem does not have the authority to make binding declarations in the name of MWS.

7

MWS reserve the right to refuse fulfilment of warranty claims if and insofar as:

- a) the MWS contract dealer engaged by the end-user for eliminating the problem has not correctly filed a completed warranty work order
- b) Improper handling not in keeping with the operation manual, particularly overuse of the purchased item by the end-user, has led to the occurrence of damage to the item due to defects in materials and workmanship
- c) The end-user has not observed important instructions in the operation manual, particularly safety instructions
- d) The purchased item has been in some way overhauled, modified, or outfitted with parts or accessories that do not belong to the equipment expressed approved or recommended by MWS, or parts other than original replacement parts have been used in maintenance or repair of the purchased item.

8

In addition to claims arising from this warranty, the end-user has other legal guarantees and rights arising from the sales contract with the dealer that are not limited by this warranty.



DE	EG-Konformitätserklärung
GB	EC Declaration of Conformity
FR	Déclaration de Conformité CE
IT	Dichiarazione di Conformità CE

ES	Declaración de Conformidad CE
NL	EG-conformiteitsverklaring
DK	EU Konformitetserklæring
SE	EU Konformietsforklaring

Wir • We • Nous • Noi • Nosotros • Wij • Vi • Vi

MWS Schneidwerkzeuge GmbH & Co. KG
An der Asbacher Str. 5, D-98574 Schmalkalden

erklären, dass die Maschine • declare that the machine • déclarons que la machine • dichiariamo che la macchina • declaramos que la máquina • verklaren dat de machine • da stroje todistamme, että • förklarar, att maskinen

Rasenmäher, handgeführt mit Verbrennungsmotor

Lawn mower, walk behind with combustion engine
Tondeuse à conducteur à pied à moteur combustion
Falciatrice manuale per prati con motore a combustione interna
Cortacésped conducir de la mano con motor de combustión
Grasmaaimachine, met de hand bediend met verbrandingsmotor
Plæneklipper, håndstyret med forbrændingsmotor
Handdriven græsklippare med förbränningsmotor

Typ • Type • Type • Tipo • Tipo • Type • Type • Typ:

HM46, HM46A, PM53A

mit folgenden EG-Richtlinien übereinstimmt • conforms to the specifications of the following EC directives • est conforme aux spécifications des directives CE suivantes • è conforme alle seguenti direttive CE • es conforma con las especificaciones prestados de las directivas CE • met volgende EG-richtlijnen overeenstemt • stemmer overens med følgende EU-direktiver • stämmer överens med följande EU-riktlinjer

98/37/EG, 2000/14/EG, 2005/88/EG

Angewandtes Konformitätsverfahren • Conformity assessment procedure • Procédure appliquée pour l'évaluation de la conformité • Procedura di conformità applicata • Procedimiento efectuado para la evaluación de la conformidad • Toegepaste conformiteitmethode • Anvendte overensstemmelsesmetoder • Använt konformitetsförfarande:

Anhang VI

Geprüft durch • Tested by • Examinée par • Esaminato da • Provado por • Getest door • Kontrolleret af • Testad av:

TÜV Thüringen Anlagentechnik GmbH, Ichtershäuser Str. 32, D-99310 Arnstadt
GAF – Gesellschaft für Akustik und Fahrzeugmeßwesen mbH, Lessingstr. 4, D-08058 Zwickau

	HM46	HM4A	PM5A
Schnittbreite • Cutting width • Largeur de coupe • Larghezza di taglio • Anchura de corte • Maaibreedte • Skærebredde • Klippbredd	46 cm	46 cm	53 cm
Drehzahl • R. P. M. • Vitesse • N. giri • R. P. M. • Toerental • Varvtal • Kierrosluku	3.000 1/min	3.000 1/min	3.000 1/min
1.	94 dB (A)	95 dB (A)	96 dB (A)
2.	96 dB (A)	96 dB (A)	97 dB (A)
3.	2,4 m/s ²	2,4 m/s ²	2,4 m/s ²

- Gemessener Schalleistungspegel • Measured sound power level • Niveau de puissance acoustique mesuré • Livello di potenza acustica rilevato • Nivel de potencia acústica detectado • Gemeten geluidsniveau • Målt støjniveau • Uppmätt bullernivå
- Garantierter Schalleistungspegel • Guaranteed sound power level • Niveau de puissance acoustique garanti • Livello di potenza acustica garantito • Nivel de potencia acústica garantizado • Gewaarwordg geluidsniveau • Garanteret støjniveau • Garanterad bullernivå
- Vibrationswert am oberen Führungsholm • Vibration level on the handle bar • Niveau de vibrations sur le guidon • Valore delle vibrazioni sul manico • Nivel de las vibraciones en la barra guiada • Vibratiewaarde aan de handgreep • Værdi for vibrationer på håndtaget • Vibrationsvärde vid handtaget

Schmalkalden, 01.01.2008

H. Tröger (Geschäftsführer)

MWS Schneidwerkzeuge GmbH & Co. KG
An der Asbacher Straße 5
D-98574 Schmalkalden

Telefon (0 36 83) 642-0
Telefax (0 36 83) 64 22 02
e-Mail: info@mws-sm.com
Web: www.mulchmaster.de

Kann ohne Vorankündigung geändert werden • Subject to modifications without notice • Sujet à des modifications sans aucun préavis • Soggetto a modifiche senza preavviso • Sujeto a modificaciones sin previo aviso • Kan zonder kennisgeving wijzigingen ondergaan • Ret til ændringer forbeholdes • Kan utsättas för modifieringar utan att detta meddelas

© Januar 2008 MWS Schneidwerkzeuge GmbH & Co. KG