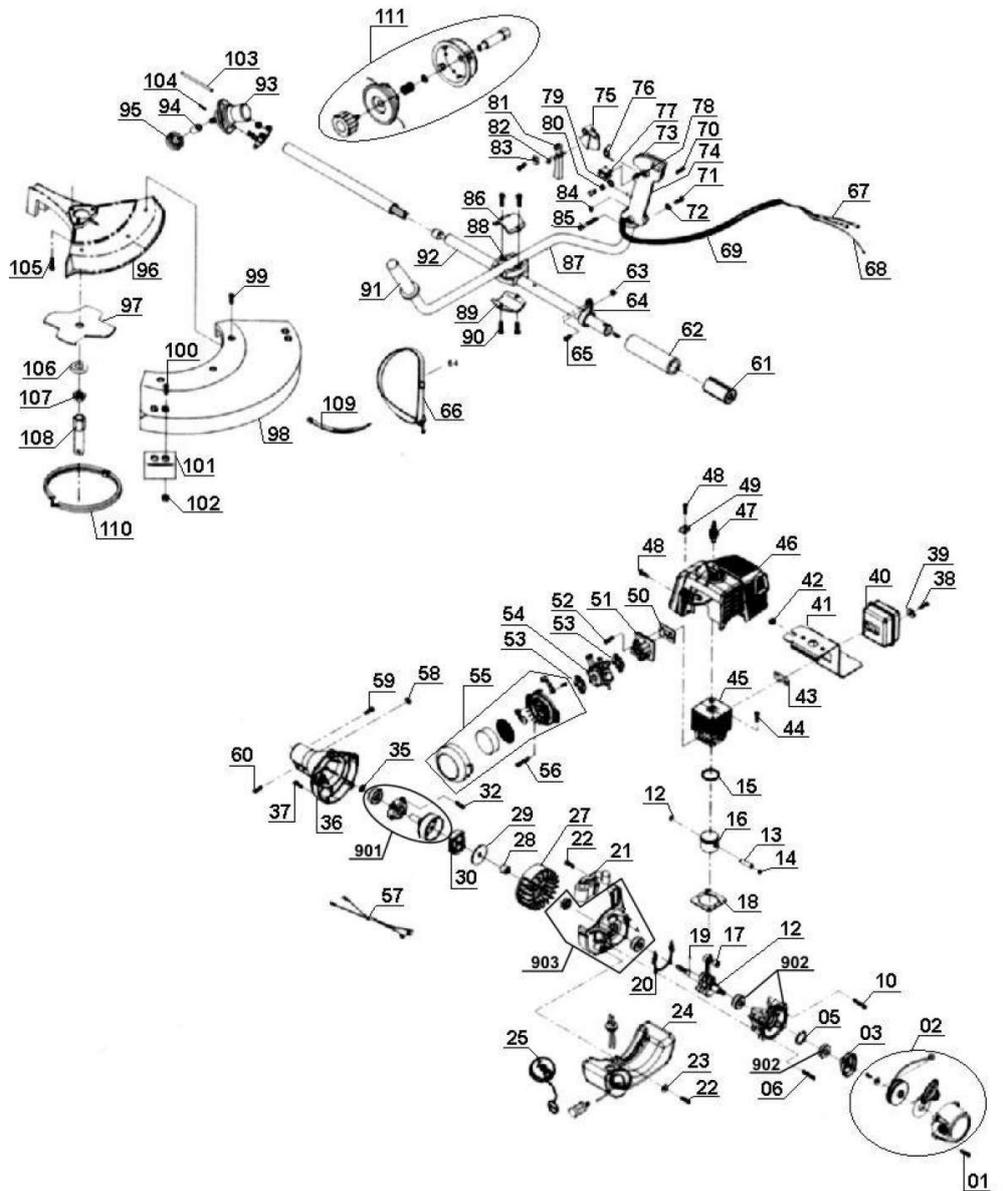


SBC 28; Ex; UK
Petrol Scythe

Artikel-Nr.: 3401711
Ident-Nr.: 01026



Komponenten / Ersatzteile

Position	Artikel-Nr.	Beschreibung	Position	Artikel-Nr.	Beschreibung
1	340171001001	SCREW	21	340171001021	IGNITION
2	340171001002	HOUSING, STARTER	24	340171001024	fuel tank
3	340171001003	Mitnehmer	25	340171001025	tank cap
12	340171001012	rod	27	340171001027	FLYWHEEL
15	340171001015	RING, PISTON	28	340171001028	SPACER
16	340171001016	PISTON	40	340171001040	muffler
17	340171001017	BEARING	45	340171001045	CYLINDER
18	340171001018	WASHER	46	340171001046	ENGINE HOUSING

Komponenten / Ersatzteile

Position	Artikel-Nr.	Beschreibung
47	340171001047	SPARK PLUG
48	340171001048	SCREW
53	340171001053	GASKET
54	340171001054	CARBURETOR
55	340171001055	BOX, AIR FILTER
61	340171001061	PRECAUTION COVER
66	340171001066	HARNESS
76	340171001076	SPRING
77	340171001077	SWITCH
90	340171001090	SCREW
91	340171001091	GRIP, HANDLE
92	340171001092	tube
93	340171001093	GEAR HOUSING ASSY
94	340171001094	SPLINE SLEEVE
95	340171001095	COLLAR
96	340171001096	protection cover - inner
97	3405163	blade MS24/MSB24/BMST24/MSB32/MSB28
98	340171001098	protection cover - outer
99	340171001099	SCREW
100	340171001100	SCREW
101	340171001101	KIT, KNIFE
102	340171001102	NUT
105	340171001105	SCREW
106	340171001106	FLANGE, SPINDLE
107	340171001107	NUT
108	340171001108	SLEEVE
111	340171001111	STRINGHEAD ASSY mit Aufnahme
901	340171001901	drum
902	340171001902	crank case I
903	340171001903	crank case II

GB Operating Instructions
2 in 1 brush cutter with grass trimmer spool



Art.-No.: 173556

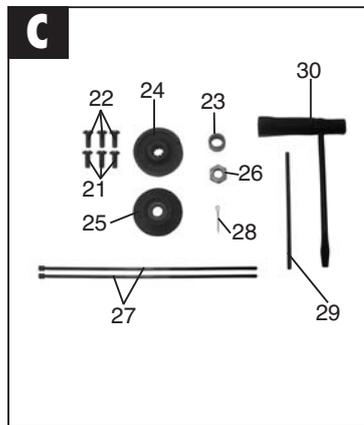
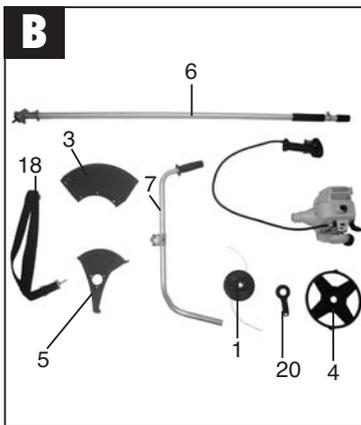
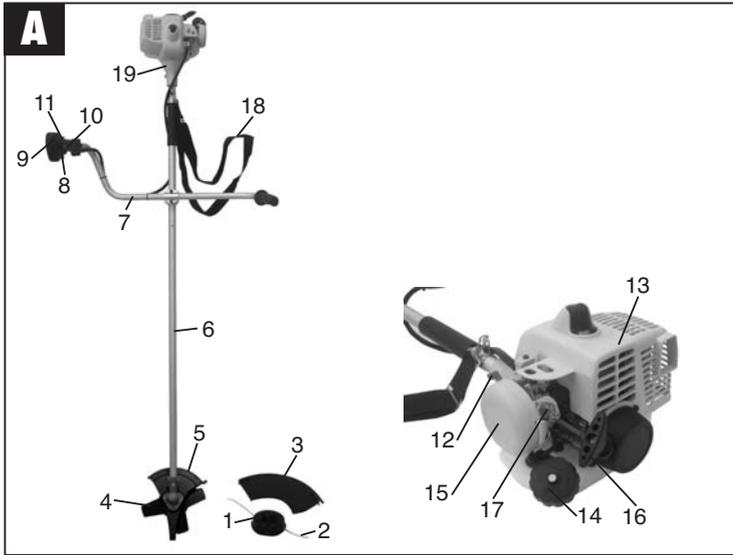
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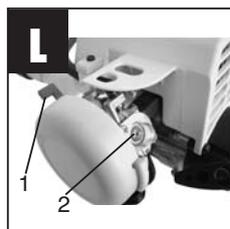
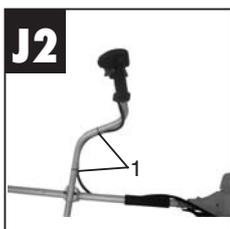
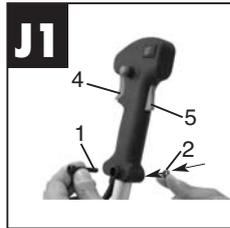
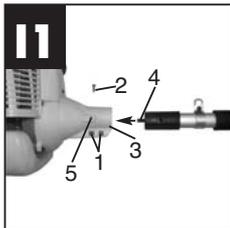
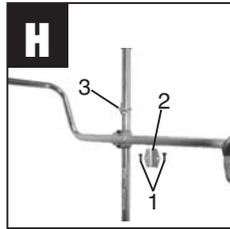
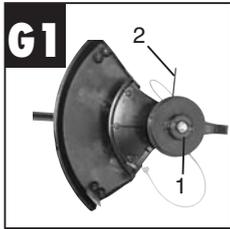
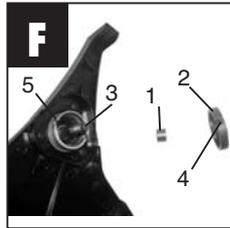
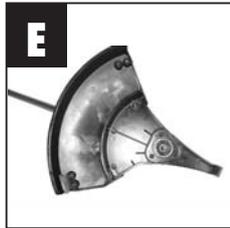
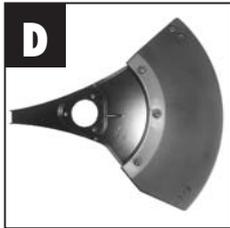
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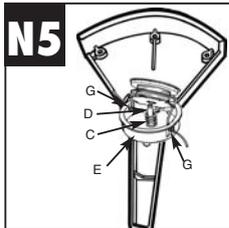
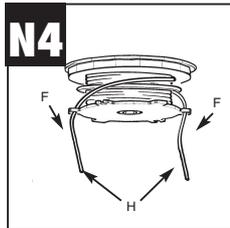
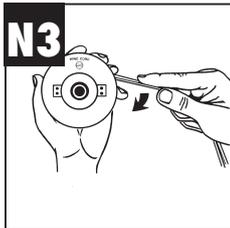
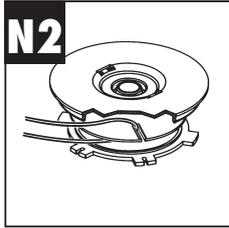
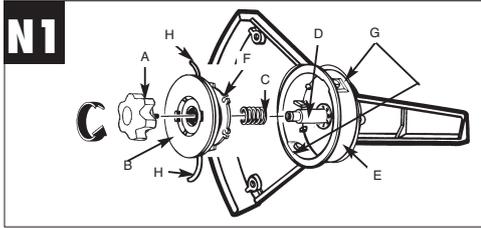
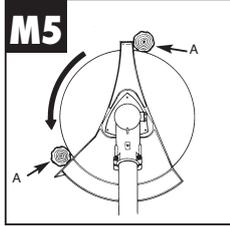
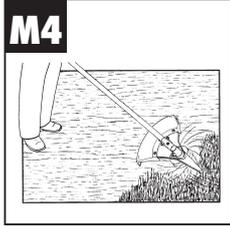
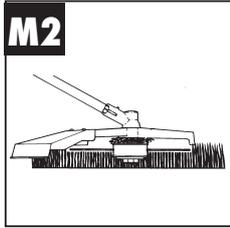
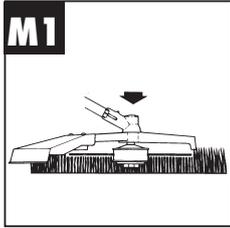


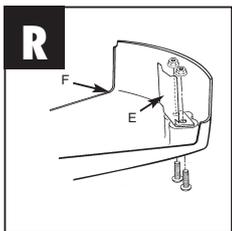
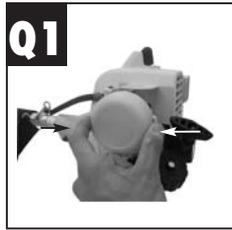
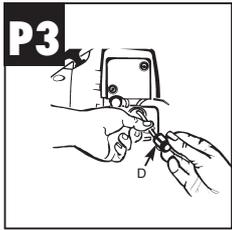
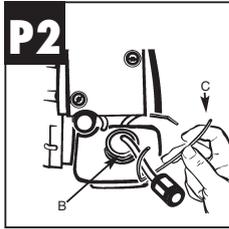
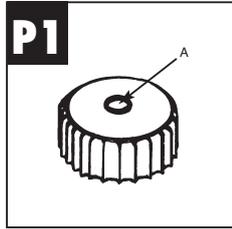
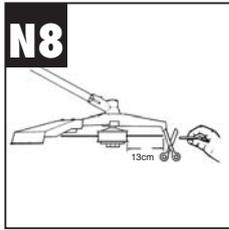
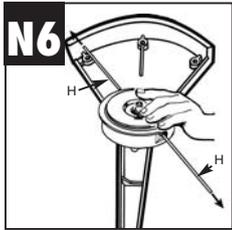
Ⓢ Please read these instructions carefully before installing and operating the petrol motor scythe!











CAUTION · PLEASE READ

For safety reasons, it is imperative that you read these operating instructions before using the appliance. Serious injuries could result if these instructions are not followed. You must therefore dedicate a few minutes to studying your new petrol scythe and its instructions before each use.

- 10  Wear gloves in order to protect hands.
- 11  Wear rubber boots or strong shoes

GENERAL SAFETY REGULATIONS

Meaning of the safety symbols used

- 1  Read the operating instructions before you operate the machine.
- 2  Wear helmet, ear muffs and goggles!
- 3  Keep other people out of the danger area!
- 4  Important! Hazard!
- 5  Arrows show the correct handle position – this must not be changed!
- 6  Important! Hot surface!
- 7  Guaranteed sound power level conforming to EU Directive 2000/14/EC
- 8  Hazard due to objects being thrown out!
- 9  5500 min⁻¹ Maximum speed!

Safety instructions for hand-operated petrol power scythe

Note

1. Read the directions with due care. Familiarize yourself with the settings and proper operation of the machine.
2. Never allow children or other persons who are not familiar with the operating instructions to use the petrol power scythe. Contact your local governmental agency for information regarding minimum age requirements for operating the petrol power scythe.
3. Never mow in the direct vicinity of persons - especially children - or animals.

Warning:

Maintain a safety distance of 15m. If approached, switch off the appliance immediately.

Always keep in mind that the machine operator or user is responsible for accidents involving other persons and/or their property.

Preliminary measures

1. Always wear sturdy, non-slip footwear and long trousers when mowing. Never mow barefoot or in sandals.
2. Check the grounds on which the machine will be used and remove all objects that could be caught up and violently flung out.
3. Warning: Petrol is highly flammable! Therefore:
 - Only store petrol in containers designed to hold petroleum-based liquids.
 - Only refuel out in the open and do not smoke during the refueling process.
 - Always refuel before starting the engine. Do not open fuel tank cap and do not refuel when the engine is running or when the scythe is hot.
 - If petrol has overflowed, do not under any circumstances attempt to start the engine. Instead, remove the machine from the affected area. Avoid starting the engine until the petrol

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fumes have completely evaporated.

- For safety reasons, the petrol tank and other tank closures must be replaced if they are damaged.

4. Replace defective mufflers.
5. Before using the scythe, visually inspect it to ensure that the blade, mounting bolts and the entire cutting apparatus are in good working order (i.e. not worn out or damaged). To prevent any imbalance, replace worn out or damaged blades and mounting bolts as a set only (if applicable).

1. Handling

1. **Wear close fitting, tough work clothing** that will provide protection, such as long slacks or trousers, safety work shoes, heavy duty work gloves, hard hat, a safety face shield, or safety glasses for eye protection and a good grade of ear plugs or other sound barriers for hearing protection.
2. **Store in a safe place.** Open fuel cap slowly to release any pressure which may have formed in fuel tank. To prevent a fire hazard, move at least 10 feet (3 meters) from fueling area before starting.
3. **Turn unit off** before setting it down.
4. **Always hold unit firmly with both hands**, the thumb and fingers encircling the handles.
5. **Keep all screws and fasteners tight.** Never operate your equipment when it is improperly adjusted or not completely and securely assembled.
6. **Keep handles dry**, clean and free of fuel mixture.
7. **Keep stringhead as close to ground as practical.** Avoid hitting small objects with stringhead. When cutting on a slope, stand below stringhead. NEVER cut or trim on a hill or slope, etc. if there is the slightest chance of slipping, sliding or losing firm footing.
8. **Check area you will be trimming for debris** that may be struck or thrown during operation.
9. **Keep all parts of your body and clothing away from stringhead** when starting or running engine. Before starting engine, make sure stringhead will not come in contact with any obstacle.
10. **Stop engine** before examining cutting line.
11. **Store equipment away from possible flammable materials**, such as gas-powered water heaters, clothes dryers, or oil-fired

furnaces, portable heaters, etc.

12. **Always keep** the debris shield, stringhead, and engine free of debris build-up.
13. **Operation of equipment** should always be restricted to mature and properly instructed individuals.

SAFETY WHEN HANDLING THE BLADE

1. FOLLOW ALL WARNINGS and instructions for using the machine and for installing the blade.
2. **The blade may suddenly jump away out of control if it comes up against objects which it cannot cut through. This may result in the amputation of arms or legs.** Keep onlookers and animals at least 15 m away from where you are working. If the machine strikes a foreign body, stop the engine immediately and bring the blade to a standstill. Check the blade for signs of damage. **Always** replace the blade if it is bent or torn.
3. **THE BLADE WILL THROW UP OBJECTS AT HIGH SPEED:** This may cause blinding or injuries. Always wear eye, face and leg protection. Remove all objects from the working area before using the blade. Keep other people and animals at least 15 m away from the machine in all directions.
4. **Check your machine and other equipment carefully for signs of damage.** Do not use the machine unless all the blade mountings have been installed correctly.
5. **THE BLADE WILL SLOW DOWN AND STOP IF YOU RELEASE THE THROTTLE VALVE** (gas lever). While it is slowing down, the blade can still cut you or onlookers. Before you carry out any work on the blade, switch off the engine and make sure that the blade has stopped.
6. **DANGER ZONE WITH A DIAMETER OF 15 METERS.** Onlookers may suffer blindness or injuries. Keep onlookers and animals at least 15 m away from where you are working.

WHAT NOT TO DO

1. **DO NOT USE ANY OTHER FUEL** than that recommended in your manual. Always follow instructions in the Fuel and Lubrication section of this manual. Never use gasoline unless it is properly mixed with 2-cycle engine lubricant. Permanent damage to engine will result, voiding manufacturer's warranty.
2. **DO NOT SMOKE** while refueling or operating equipment.
3. **DO NOT OPERATE UNIT WITHOUT A MUFFLER** and properly installed muffler shield.

4. DO NOT TOUCH or let your hands or body come in contact with the muffler. Hold unit with thumbs and fingers encircling the handles.
5. DO NOT OPERATE UNIT IN AWKWARD POSITIONS, off balance, outstretched arms, or one-handed. Always use two hands when operating unit with thumbs and fingers encircling the handles.
6. DO NOT RAISE STRINGHEAD above ground level while unit is operating. Injury to operator could result.
7. DO NOT USE UNIT FOR ANY PURPOSES OTHER than trimming lawn or garden areas.
8. DO NOT OPERATE UNIT FOR PROLONGED PERIODS. Rest periodically.
9. DO NOT OPERATE UNIT WHILE UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.
10. DO NOT OPERATE UNIT UNLESS DEBRIS SHIELD AND/OR GUARD IS INSTALLED AND IN GOOD CONDITION.
11. DO NOT ADD, REMOVE OR ALTER ANY COMPONENTS OF THIS PRODUCT. Doing so could cause personal injury and/or damage the unit voiding the manufacturer's warranty.
12. DO NOT operate your unit near or around flammable liquids or gases whether in or out of doors. An explosion and/or fire may result.
13. DO NOT USE ANY OTHER CUTTING TOOLS. For your own safety only use the accessories and additional equipment specified in the operating manual or recommended or specified by the manufacturer. The use of tools or accessories other than those recommended in the operating manual or catalog may place you in danger of personal injury.

2. Layout and items supplied (Fig. A, B and C)

A/1, B/1	Cutting head
A/2	Cutting line
A/3, B/3	Outer guard hood
A/4, B/4	Cutting blade
A/5, B/5	Inner guard hood
A/6, B/6	Long handle with drive shaft
A/7, B/7	"Bike" handle
A/8	Throttle lever in the right-hand handle
A/9	Engine switch "off" and "on"
A/10	Throttle lever "lock"
A/11	Throttle lever "release"
A/12	Levers for "Choke" - "Half throttle" - "Full throttle"
A/13	Housing for engine cooling and starter
A/14	Petrol tank

A/15	Air filter cover
A/16	Handle for cable pull start
A/17	Petrol accumulation button
A/18, B/18	Carrying strap
A/19	Retainer screw for long handle with drive shaft
B 20	Tool for cutting head and cutting wire
C/21	3 M5 screws for inner guard hood
C/22	3 M6 screws for outer guard hood
C/23	Spacer sleeve
C/24	Carrier plate for cutting head or cutting blade
C/25	Pressure plate for cutting blade assembly
C/26	Fastening nut for cutting blade
C/27	2xCable tie
C/28	Safety split pin
C/29	Retainer pin for carrier plate
C/30	Key for spark plug and fastening nut

SAFETY DEVICES

It is imperative that the GUARD HOOD is assembled in order to prevent injuries to the operator due to objects catapulted by the machine. In addition, the integrated blade in the guard hood automatically cuts the cutting line to the optimum length.

3. Proper operation

The petrol power scythe is intended for private use, i.e. for use in home and gardening environments. The operating instructions as supplied by the manufacturer must be kept and referred to in order to ensure that the petrol power scythe is properly used and maintained. The instructions contain valuable information on operating, maintenance and servicing conditions.

Important! Due to the high risk of bodily injury to the user, the petrol power scythe must not be used to carry out the following work: to clean (suck up) dirt and debris off walkways, or to chop up tree or hedge clippings. Moreover, the petrol power scythe may not be used to level out high areas such as molehills.

For safety reasons, the petrol power scythe may not be used as a drive unit for other work tools or toolkits of any kind.

4. Assembling the components

Some parts of the power scythe come disassembled. For quick and easy assembly, read and follow the instructions below.

Important! You will need the following additional tools (not supplied) for assembly, and also for maintenance work:

- a screwdriver
- an Allen key

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- a torque wrench size 25
- a 1 liter measuring jug (oil / petrol resistant)
- a petrol can (5 liter)
- a funnel (suitable for the tank's petrol filler neck)
- household wipes (to wipe up oil / petrol residue; dispose of these at the petrol filling station)
- 2-stroke oil (available at the petrol filling station)
- replacement safety split pins as in Fig. C/28

Assembly Instructions**Assembly of the long handle**

Mount the inner guard hood (Fig. B/5) and the outer guard hood (Fig. B/3) using the three M6 screws (Fig. C/22) as shown in Fig. D. Mount the guard hoods on the long handle (Fig. B/6) using the three M5 screws (Fig. C/21), as shown in Fig. E.

Push the distance spacer (Fig. F/1) onto the locating pin of the drive shaft (Fig. F/3). Push the carrier plate (Fig. F/2) onto the locating pin and, in doing so, make sure that the cut-out (Fig. F/4) on the carrier plate coincides with the cut-out on the long handle (Fig. F/5).

Important: You can align the two cut-outs by turning the carrier plate.

Important: You must now decide which type of work you want to undertake with the power scythe first (cutting with the cutting head or using the cutting blade), and then carry out the appropriate assembly work.

Assembly of the cutting head

Now put the retainer pin (Fig. G1/2) into the cut-out hole and screw the cutting head (Fig. G1/1) onto the locating pin of the drive shaft by turning it in counter-clockwise direction (**Important: Left-hand screw-thread!**).

Tighten the cutting head by hand, holding the drive shaft in place with the retainer pin.

Assembly of the cutting blade

Place the cutting blade (Fig. G2/1) on the carrier plate in such a way that the center of the cutting blade is situated precisely on the guide circle on the carrier plate.

Place the pressure plate (Fig. G2/2) on the cutting blade ensuring that the flat side points to the cutting blade.

Tightly screw the fastening nuts (Fig. G2/3) on the locating pin by turning them in counter-clockwise direction (**Important: Left-hand screw-thread!**)

Place the retainer pin, as described in the assembly of the cutting head, in the appropriate cut-out hole and use the key (Fig. C/30).

Assembly of the "bike" handle

Unscrew both of the lower screws (Fig. H/1) on the pre-assembled "bike" handle and place them on the long handle, as shown in Fig. H, between the fastening hooks for the retaining belt (Fig. H/3) and the safety label. Now secure the clamping plate (Fig. H/2) to the "bike" handle using the lower screws and tightly screw these to the long handle.

Important: Final alignment is best carried out after assembling the drive motor.

Assembling the assembled long handle with the drive motor

Unscrew the connecting screws (Fig. I1/1 + I1/2) from the handle of the drive motor. Position the long handle in relation to the handle of the drive motor as shown in Fig. I1. Now push the long handle into the handle in such a way that the alignment opening (Fig. I1/3) and the rectangular side of the drive shaft (Fig. I1/4) engage in the appropriate mountings in the interior of the handle.

Note: This procedure is made easier by turning slightly to the right and left. The threaded hole of the long handle must be situated directly underneath the hole (Fig. I1/5), so that the connecting screw can be tightened. Tighten the two fixing screws for the long handle (Fig. I1/1) again.

Assembly of the engine control handle

Unscrew the screw (Fig. J1/1) from the handle. Using sufficient force, push the handle onto the free end of the "bike" handle in such a way that the throttle control operating lever (Fig. J1/4) points to the guard hoods on the long handle. Turn the handle until the hole for the screw coincides with the hole on the "bike" handle.

Secure the handle to the "bike" handle using the screw and the nut (Fig. J1/2). Secure the control cable of the handle using the cable ties (Fig. C27) so that the position illustrated (Fig. J2/1) is achieved.

Important: Do not tighten the cable ties fully at this point. After the engine has been started for the first time, push the throttle handle through (Fig. J1/4) and then loose your hold on it. If you now push the throttle handle again, it is blocked by the safety lever (Fig. J1/5). When pressing the throttle control, the speed of the engine must not rise to the point of the safety stop.

Up to this point, the engine must only be in idle mode. Check the position of the cable ties for the purposes of this function before tightening them fully.

5. Setting the cutting height

Shoulder strap:

1. Slip the shoulder strap (Fig. A/18) over the left shoulder.
2. Hook the locking hook into eye B (Fig. H/3).
3. Set the length of the shoulder strap in such a way that the cutting head or the cutting blade runs parallel to the ground. In order to establish the optimum length of the shoulder strap, you should then make a few swinging movements without starting the engine (Fig. I/2).

Warning: Always use the shoulder strap when using the appliance. Attach the strap as soon as you have started the engine and the engine is running in idle mode. Switch off the engine before you take off the shoulder strap.

Important: Remove the shoulder strap from the appliance before you start the engine.

6. Starting up

Fuel and oil:

1. The engine of the power scythe is a 2-stroke engine. For operation, it requires a mixture of normal unleaded petrol and 2-stroke oil in a ratio of 1:40 (see fuel mixture table).
2. It is advisable to mix a maximum of 5 liters of petrol/oil mixture, since this quantity will give you approx. 12-15 operational hours and an older petrol/oil mixture does not guarantee the optimum level of lubrication.
3. Pour 125ccm of oil into a measuring jug and then pour this oil into the 5 liter petrol can. Then re-close the petrol can. Shake the petrol can vigorously in order to mix the petrol and the oil.
4. Pour approx. 0,5 liters of the petrol/oil mixture into the measuring jug and then pour this into the petrol tank using a suitable funnel (Fig. K).

Warning: Never use pure petrol for your appliance. Otherwise there is a danger of causing permanent damage to the engine and as a result the manufacturer's guarantee would not apply. Do not use any petrol/oil mixture which has been kept for longer than 90 days.

Warning: Only use a petrol/oil mixture in a mixing ratio of 1:40. Do not change the mixing ratio of your own accord even if some types of 2-stroke oil recommend a different mixing ratio. If insufficient lubrication causes damage to the engine, the manufacturer's guarantee does not apply.

Fuel mixture table:

Petrol	2-stroke oil
5 liters	125 ccm
40 to	1

● Starting the engine:

Important: You must first read the instructions for starting the engine from a cold and a warm state, and then carry out the appropriate start procedure. Place the appliance on a hard, level surface, hold it by the handle with one hand and pull the starting handle on the tension cable with the other hand. **Important:** In order to keep the load on the engine as small as possible during start-up and warm-up, cut the excess cutting line back to 13cm (Fig. N8).

● STARTING THE ENGINE FROM A COLD STATE

1. Set the ignition switch to the "RUN (I)" position (Fig. O/1).
2. Secure the throttle lever: Press the "Lock off" switch (Fig. O/3) downward. Then, at the same time, press the throttle lever (Fig. O/4) and the locking switch (Fig. O/2) at the same time. The throttle lever locks into place on full throttle.
3. The appliance has a choke, which can be set in 3 positions: "CHOKE" ←, "START" ↘ and "RUN ↓". Set the choke lever to "CHOKE" (Fig. L/1).
4. For starting purposes, spray fuel into the carburetor. Press the pad ten times (Fig. L/2).
5. Pull the starting cable out by a short amount, until you feel resistance (approx. 10cm). For a strong ignition spark, a smooth, sharp pull is required. Pull the starting cable four times quickly and forcefully.
6. Set the choke lever to "START" ↘.
7. Pull the starting cable four times again, whilst the throttle lever is set to full throttle.
8. If the engine starts, leave the lever on "START" ↘ for 10 seconds.
9. Set the choke lever to "RUN ↓".
10. If the engine does not start up, repeat steps 1 to 9.

PLEASE NOTE: If the engine does not start up even after several attempts, read the section "Engine Troubleshooting".

PLEASE NOTE: Always pull the starting cable out in a straight line. If it is pulled out at an angle, then friction will occur on the eye. As a result of this friction, the cable will become frayed and will wear away faster. Always hold the starter handle when the cable retracts. Never allow the cable to snap back when it has been pulled out. This would fray or wear

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the cable and also damage the starter unit.

● **STARTING THE ENGINE FROM A WARM STATE**

1. Set the ignition switch to the "RUN (I)" position (Fig. O/1).
2. Set the choke lever to the "START" position.
3. Lock the throttle lever as described under Point 2 of "Starting the engine from a cold state".
4. Pull the starter cable quickly, until the engine starts up. However, do not pull the cable more than 6 times. Hold down the throttle lever FULLY, until the engine is running quietly.
5. If the engine does not want to start, set the choke to "RUN ↓" and pull 5 more times on the starter cable. However, should the engine not start, then it is probably fully-pumped with petrol. Wait 5 minutes and then try it again with the choke set to "RUN ↓" and with a fully depressed throttle lever.

● **TO STOP ENGINE**

Release throttle trigger. Let engine return to idle. Push and hold ignition stop switch until engine stops (Fig. O/1).

Trimming Instructions

● **ADDITIONAL SAFETY PRECAUTIONS**

Before operating your unit, review ALL SAFETY PRECAUTIONS in this manual.

⚠ **WARNING / CAUTION**

1. IF UNFAMILIAR WITH TRIMMING techniques, practice the procedures with ENGINE in "OFF" position.
2. ALWAYS CLEAR WORK area of debris such as cans, bottles, rocks, etc. Striking objects can cause serious injury to operator or bystanders and also damage equipment. If an object is accidentally hit, immediately TURN ENGINE OFF and examine equipment. Never operate unit with damaged or defective equipment.
3. ALWAYS TRIM OR CUT AT HIGH ENGINE SPEEDS. Do not run engine slowly at start or during trimming operations.
4. DO NOT use equipment for purposes other than trimming or mowing weeds.
5. NEVER raise stringhead above knee height during operation.
6. DO NOT operate unit with other people or animals in the immediate vicinity. Allow a minimum of 50 feet (15 meters) between operator and other people and animals when trimming or mowing.

Allow a distance of 100 feet (30 meters) between operator and other people and animals when SCALPING with stringhead cutter.

7. IF OPERATING UNIT ON A SLOPE, stand below the cutting attachment. DO NOT OPERATE on a slope or hilly incline if there is the slightest chance of slipping or losing your footing.

● **STRINGHEAD LINE RELEASE**

⚠ **WARNING:** DO NOT use steel wire or plastic-coated steel wire of any kind with your stringhead. Serious operator injury can result.

To release fresh line, run engine at full throttle and "bump" stringhead against lawn. Line will automatically release. The knife in debris shield will trim excess line (Fig. M1).

⚠ **CAUTION:** Periodically remove weed wrap to prevent overheating the drive shaft. Weed wrap occurs when strands of weed become entangled around the shaft beneath the debris shield (Fig. M2). This condition prevents the shaft from being properly cooled. Remove weed wrap with screwdriver or similar

● **TRIMMING PROCEDURES**

When properly equipped with a debris shield and stringhead, your unit will trim unsightly weeds and tall grass in those hard-to-reach areas - along fences, walls, foundations and around trees. It can also be used for scalping to remove vegetation down to the ground for easier preparation of a garden or to clean out a particular area.

NOTE: Even with care, trimming around foundations, brick or stone walls, curves, etc., will result in above normal string wear.

TRIMMING / MOWING

Swing trimmer with a sickle-like motion from side to side. Do not tilt the stringhead during the procedure. Test area to be trimmed for proper cutting height. Keep stringhead at same level for even depth of cut (Fig. M3).

CLOSER TRIMMING

Position trimmer straight ahead with a slight tilt so bottom of stringhead is above ground level and string contact occurs at proper cutting point. Always cut away from operator. Do not pull trimmer in toward operator.

FENCE / FOUNDATION TRIMMING

Approach trimming around chain link fences, picket fences, rock walls and foundations slowly to cut close without whipping string against the barrier. If the string comes in contact with rock, brick walls, or foundations, it will break or fray. If string snags fencing, it will snap off.

TRIMMING AROUND TREES

Trim around tree trunks with a slow approach so string does not contact bark. Walk around the tree trimming from left to right. Approach grass or weeds with the tip of the string and tilt stringhead slightly forward.

⚠ WARNING: Use extreme caution when **SCALPING**. Keep a distance of 100 feet (30 meters) between operator, other people and animals during these operations.

SCALPING

Scalping refers to removal of all vegetation down to the ground. To do this, tilt the stringhead to about a 30 degree angle to the left. By adjusting the handle you will have better control during this operation. Do not attempt this procedure if there is any chance flying debris could injure operator, other people or cause damage to property. (Fig. M4)

Cutting with blades

WARNING: Before you use this machine with a blade, check that it has been fitted correctly. Follow all the instructions set out in the section entitled "Safety instructions for undergrowth/grass cutting blades" in this operating manual.

CUTTING WITH BLADES

Whenever you are cutting with a blade you must wear eye protection and protective clothing. Always use the shoulder strap when working with the blade.

**WORKING WITH WEED-CUTTING BLADES
MOWING WEEDS**

Mowing means moving the blade in a horizontal curve from one side to the other. This is very effective for grass-like weeds and small undergrowth. It is not suitable for cutting large, tough weeds or woody vegetation (Fig. I2).

CAUTION: Do not use weed-cutting blades for cutting scrub or young trees.

SAWING

The SBC 28 is not designed for sawing.

JAMMING

Very thick vegetation, such as young trees or thick scrub may jam the blade and bring it to a standstill. Prevent the blade from jamming by anticipating the direction in which the scrub leans and cut it from the opposite side.

If the blade jams while cutting, switch off the engine immediately. Hold the machine level so that the blade does not jump or break while you push the young tree away from the cut to free the blade.

TO PREVENT RECOIL

When using metal cutting tools (grass blades, thicket knives) there is a risk that the machine will recoil if the tool strikes a solid object (tree trunk, branch, tree stump, stone or the like). In this case the machine will jump backwards in the opposite direction to which the tool is rotating. This may lead to a loss of control of the tool and risk of injury to the user and onlookers.

Do not use metal cutting tools near fences, metal posts, boundary stones or foundations.

The safety blade is designed to reduce recoil if the blade strikes a hard, solid object. To cut thick stalks, place it in position (A), see Fig. M5, to prevent recoil.

Maintenance (Fig N1)

- A. KNOB
- B. SPOOL
- C. SPRING
- D. SPINDLE
- E. HOUSING
- F. SLOTS
- G. EYELETS
- H. CUTTER LINE

● REPLACING CUTTER LINE

1. Turn knob (A) **COUNTERCLOCKWISE** and remove (Fig. N1). User knob spanner supplied.
2. Remove spool (B) and spring (C) from spindle (D).
3. Remove any remaining cutter line (H).
4. Double a 14' (4.3m) length of .080" (2mm) cutter line. Place the looped center in one of the slots of the spool divider (Fig. N2).
5. Wind cutter line clockwise as shown in illustration (Fig. N3), keeping tension, with each half separated by the spool divider. Wind to within 6" (15cm) of the ends.
6. Lock each end of line into a slot (F) on opposite sides of the spool (Fig. N4).

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7. Install the spring (C) over the spindle (D). Insert each end of the line through an eyelet (G) in the housing (E) (Fig. N5).
8. Lower the spool into the housing (E) while feeding the line through the eyelets (G). Ensure the spring seats itself into the spool (Fig. N5).
9. Once the spool is in place, apply pressure on the spool compressing the spring. Pull each end of the line (H) sharply to unlock the line from the slots (Fig. N6).
10. Continue to apply pressure to the spool until the knob can be threaded CLOCKWISE onto the spindle. Tighten the knob securely by hand only (Fig. N7).
11. Trim the excess line to approximately 5" (13cm). This will minimize load on engine during starting and warm-up (Fig. N8).

● **AIR FILTER**

⚠ Caution: Never work without an air filter. Make sure it is always clean. If it is damaged then it must be replaced with a new filter.

Empty the petrol tank and pour the fuel into a suitable jerry can. Open the petrol tank slowly so that any potential pressure can be released.

Cleaning the air filter: (Fig. Q1/Q2)

1. Remove the air filter cover (Fig. Q1) by pushing it together sideways a little and remove the filter element (Fig. Q2).
2. Wash the filter in soapy water. **DO NOT USE ANY PETROL!**
3. Air-dry the filter.
4. Refit the filter and attach the air filter cover again.
PLEASE NOTE: Replace the filter if it is worn away, torn or damaged, or if it can no longer be cleaned.

● **FUEL CAP / FUEL FILTER**

⚠ Caution: Remove fuel from unit and store in approved container before starting this procedure. Open fuel cap slowly to release any pressure which may have formed in fuel tank.

NOTE: Keep vent (A) on fuel cap clean of debris (Fig.P1/A).

1. Lift fuel line and filter (B) out of tank. A steel wire (C) with a hook or a paper clip works well (Fig. P2).
2. Pull off with a twisting motion (Fig. P3).
3. Check the petrol filter for damage and clean it by

blowing it out with air. Replace the petrol filter (Fig. P3/D) if it is damaged.

NOTE: Never operate the trimmer without the fuel filter. Internal engine damage could result!

● **CARBURETOR ADJUSTMENT**

The carburetor was pre-set at the factory for optimum performance. If further adjustments are necessary, please take your unit to the nearest Authorized Service Center.

● **SPARK PLUG**

1. Spark plug gap = .025" (.635mm).
2. Torque to 105 to 130 inch pounds (12 to 15 N·m). Connect spark plug boot.

● **DEBRIS SHIELD KNIFE SHARPENING**

1. Remove cutter knife (E) from debris shield (F) (Fig. R).
2. Place knife in a bench vise. Sharpen knife using a flat file, being careful to maintain the angle of cutting edge. File in one direction only.

● **STORING A UNIT**

⚠ Warning: Failure to follow these steps may cause varnish to form in the carburetor and difficult starting or permanent damage following storage.

1. Perform all the general maintenance recommended in the Maintenance Section of your User Manual.
2. Clean exterior of engine, drive shaft assembly, debris shield and stringhead.
3. Drain fuel from the fuel tank.
4. After fuel is drained, start engine.
5. Run engine at idle until unit stops. This will purge the carburetor of fuel.
6. Allow engine to cool (approx. 5 minutes).
7. Using a spark plug wrench, remove the spark plug.
8. Pour 1 teaspoon of clean 2-cycle oil into the combustion chamber. Pull starter rope slowly several times to coat internal components. Replace spark plug.
9. Store unit in a cool, dry place away from any source of ignition such as an oil burner, water heater, etc.
10. Do not transport and store the trimmer with the blade fitted unless the supplied transport guard is also fitted.

● **REMOVING A UNIT FROM STORAGE**

1. Remove spark plug.
2. Pull starter rope briskly to clear excess oil from combustion chamber.
3. Clean and gap spark plug or install a new spark plug with proper gap.
4. Prepare unit for operation.
5. Fill fuel tank with proper fuel / oil mixture. See Fuel and Lubrication Section.

TECHNICAL SPECIFICATIONS

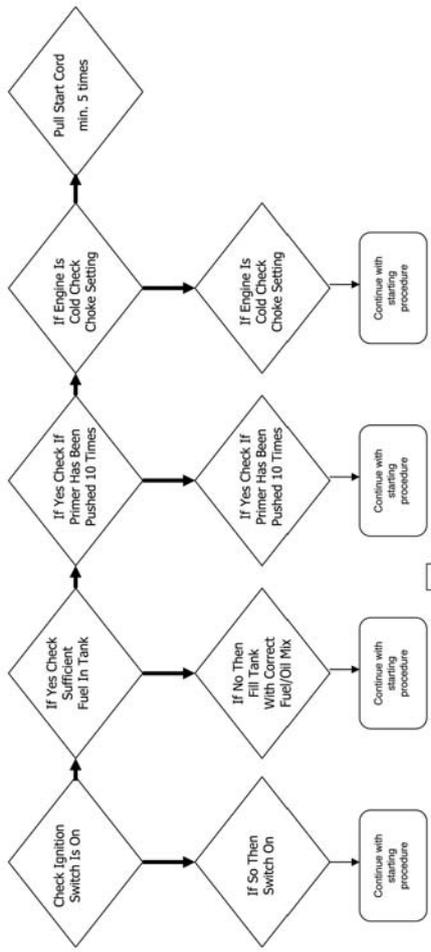
Engine type:	Air cooled 2-stroke engine, cylinder hard-chromium plated
Displacement	28 cm ³
Power:	0.75 kW / 1 HP
Dry weight	5.8 kg
Fuel capacity	520 ccm
Guide bar length	147 cm
Cutting width with twin line	43 cm
Line diameter	2.5 mm
Cutting width with cutting blade	23 cm
Cutting blade	4 teeth
Handle	"Bike" handle
Ignition	Electronic
Spark plug	Champion RDJ 8J
Drive	Centrifugal clutch
LPA sound pressure level	103 dB(A)
LWA sound power level	113 dB(A)
Vibration	11.41 m/s ²
max. RPM with twin line	8500 min ⁻¹
max. RPM with cutting blade	11,000 min ⁻¹
Idle speed	3050 ± 350 min ⁻¹
Petrol consumption	620 g/kWh

GB**Trouble shooting the engine**

PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
Unit won't start or starts but will not run.	Incorrect starting procedures.	Follow instructions in the User Manual.
	Incorrect carburetor mixture adjustment setting.	Have carburetor adjusted by an Authorized Service Center.
	Fouled spark plug	Clean / gap or replace plug.
	Fuel filter plugged.	Replace fuel filter.
Unit starts, but engine has low power.	Incorrect lever position on choke.	Move to RUN position.
	Dirty air filter.	Remove, clean and reinstall filter.
	Incorrect carburetor mixture adjustment setting.	Have carburetor adjusted by an Authorized Service Center.
Engine hesitates.	Incorrect carburetor mixture adjustment setting.	Have carburetor adjusted by an Authorized Service Center.
No power under load.	Incorrectly gapped spark plug.	Clean / gap or replace plug.
Runs erratically.		
Smokes excessively. (after approx. 1 min. in full throttle position)	Incorrect carburetor mixture adjustment setting.	Have carburetor adjusted by an Authorized Service Center.
	Incorrect fuel mixture.	Use properly mixed fuel (40:1 mixture).



Petrol Engine Starting Procedure / Check List



If after trying all of the above procedures your petrol garden product still does not start please take it to your nearest HSS Hire Shop where they will check the item and arrange to take the necessary steps to resolve the problem

ISC GmbH
Eschenstraße 6
D-94405 Landau/Isar

Certificate of conformity



- D** erklårt folgende Konformität gemäß EU-Richtlinie und Normen für Artikel
- GB** declares conformity with the EU Directive and standards marked below for the article
- F** déclare la conformité suivante selon la directive CE et les normes concernant l'article
- NL** verklaart de volgende conformiteit in overeenstemming met de EU-richtlijn en normen voor het artikel
- E** declara la siguiente conformidad a tenor de la directiva y normas de la UE para el artículo
- P** declara a seguinte conformidade de acordo com a directiva CE e normas para o artigo
- S** förklarar följande överensstämmelse enl. EU-direktiv och standarder för artikeln
- FIN** ilmoittaa seuraavaa Euroopan unionin direktiivien ja normien mukaista yhdenmukaisuutta tuotteelle
- DK** erklærer herved følgende samsvar med EU-direktiv og standarder for artikkel
- RUS** заявляет о соответствии товара следующим директивам и нормам ЕС
- HR** izjavljuje sljedeću usklađenost s odredbama i normama EU za artikl.
- RO** declară următoarea conformitate cu linia directoare CE și normele valabile pentru articolul.

- TR** ürün ile ilgili olarak AB Yönetmelikleri ve Normları gereğince aşağıdaki uygunluk açığına masını sunar.
- GR** δηλώνει την ακόλουθη συμφωνία σύμφωνα με την Οδηγία ΕΕ και τα πρότυπα για το προϊόν
- I** dichiara la seguente conformità secondo la direttiva UE e le norme per l'articolo
- SK** atesterer følgende overensstemmelse i henhold til EU-direktiv og standarder for produkt
- CZ** prohlašuje následující shodu podle směrnice EU a norem pro výrobek.
- H** a következő konformitást jelenti ki a termékerek vonatkozó EU-irányvonalak és normák szerint
- SL** pojasnjuje sledečo skladnost po smernici EU in normah za artikel.
- PL** deklaruje zgodność wymienionego poniżej artykułu z następującymi normami na podstawie dyrektywy WE.
- SK** vydváňa nasledujúce prehlásenie o zhode podľa smernice EÚ a noriem pre výrobok.
- BG** декларира следното съответствие съгласно директивите и нормите на ЕС за продукта.
- UKR** заявляє про відповідність згідно з Директивою ЄС та стандартами, чинними для даного товару

2 in 1 brush cutter with grass trimmer spool SBC 28

- | | |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
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| <input type="checkbox"/> 73/23/EWG_93/68/EEC | <input type="checkbox"/> R&TTED 1999/5/EG |
| <input type="checkbox"/> 97/23/EG | <input checked="" type="checkbox"/> 2000/14/EG: $L_{WM} = 110 \text{ dB}$; $L_{WA} = 113 \text{ dB}$
$P = 0,75 \text{ kW}$; $L \text{ Ø} = 43 \text{ cm}$ |
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EN ISO 11806; EN ISO 14982; CISPR 12; KBV V

Landau/Isar, den 14.11.2005

Wechsungartner
Leiter QS Konzern

Wimmer
Techn. Supervisor

Art.-Nr.: 34.017.11 L-Nr.: 01015 Archivierung: 3401710-12-4160270
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Warranty Certificate

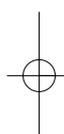
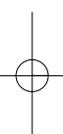
The product described in these instructions comes with a 2 year warranty covering defects. This 2-year warranty period begins with the passing of risk or when the customer receives the product. Please retain receipt as proof of purchase. For warranty claims to be accepted, the product has to receive the correct maintenance and be put to the proper use as described in the operating instructions.

Your statutory rights of warranty are naturally unaffected during these 2 years.
This warranty applies in Germany, or in the respective country of the manufacturer's main regional sales partner, as a supplement to local regulations. Please note the details for contacting the customer service center responsible for your region or the service address listed below.

Sovereign Customer Helpline 0044 (0) 151 649 1500

Contact for Warranty repairs: HSS plc Tel: 0845 728 2828

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EH 11/2005

