

225 HBV EPA Version

Operator's manual



Read the operator's manual carefully and make sure that you understand the contents before using the blower.

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WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Maintenance, replacement, or repair of the emission control devices and systems may be performed by any nonroad engine repair establishment or individual.

INTRODUCTION

Husqvarna AB has a policy of continuous product development and therefore reserves the right to modify the design and appearance of products without prior notice.

This operator's manual describes in detail how to use and service the blower and how to carry out regular maintenance. It also describes which measures should be taken to achieve maximum safety while operating the blower, how the safety devices work and how they should be serviced.

Note! The section of the manual that deals with safety, must be read and understood by all persons who come in contact with the blower.

This operator's manual has been written for those who need guidance when it comes to fault tracing, thorough servicing and carrying out corrective maintenance of the blower.

There are warning symbols on the blower. These are illustrated on page 3. Should any of the warning symbols on the blower become disfigured or worn, new ones should be ordered and fitted to the blower as soon as possible. Note that some of the warning symbols are molded in certain components of the blower.

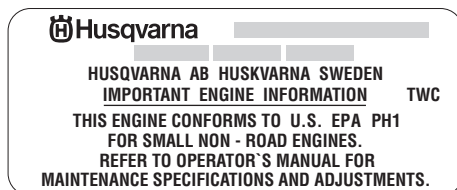
The blower is used for blowing away or vacuuming up leaves and other debris on the ground. When operating the blower, the operator must stand with both feet firmly on the ground.



WARNING!

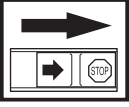
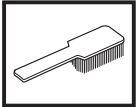






Under no circumstances may the design of the machine be modified without the permission of the manufacturer. Always use genuine accessories. Non-authorized modifications and/or accessories can result in serious personal injury or the death of the operator or others.



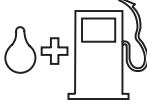


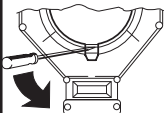

Your warranty does not cover damage or liability caused by the use of non-authorized accessories or replacement parts.



This decal certifies that the product has been approved in accordance with American exhaust emission requirements EPA PH1.

KEY TO SYMBOLS

Symbol	Description	Location	
		Blower	Operator's manual
	Checks and/or maintenance shall be carried out after having switched off the engine. The stop switch must be set to the STOP position.		X
	Cleaning at regular intervals is required.		X
	Approved protect goggles or visor must be worn.		X
	Approved protect goggles or visor and ear protection must be worn.	X	X
	WARNING! The blower can be dangerous! Careless or improper use can cause serious, even fatal injury.	X	X
	Read the operator's manual carefully and make sure that you understand the contents before using the blower.	X	X
	WARNING! Make sure that the inspection cover is locked in the closed position or that the vacuum tube is mounted on the blower. Never touch the impeller.	X	X
	WARNING! The blower may throw objects at high velocity that can ricochet and hit the operator. This may cause serious eye damage.	X	X

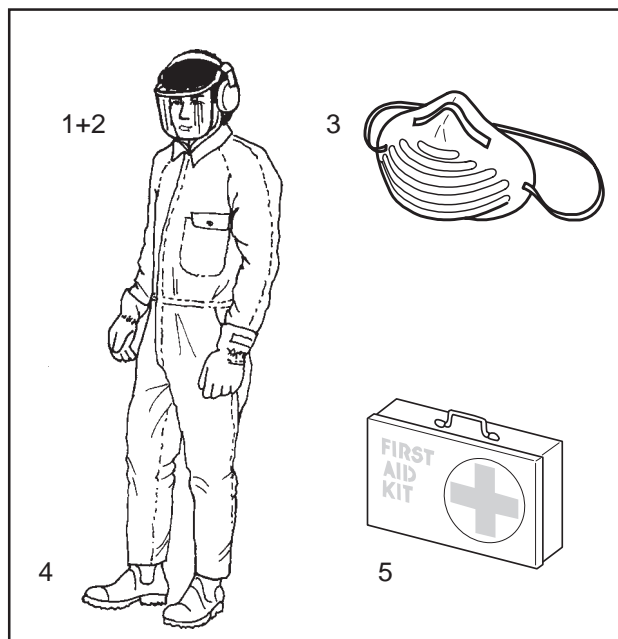
Symbol	Description	Location	
		Blower	Operator's manual
	The blower operator must make sure that no bystanders or animals come nearer than 10 metres. Whenever several operators are working in the same work area, they should maintain a safe distance of at least 10 metres from one another.	X	X
	Choke.		X
	Refueling.		X
	Stop switch.		X
	The manufacturer's warrantee for this product meets safety requirements according to: •The Machine Directive •The EMC Directive •The Low Voltage Directive	X	X
	Instructions on how to open the inspection cover.		X
	Noise pressure level measured at 15 metres distance according to ANSI B175.2-1996.		X
Other symbols/decals on the machine refer to special certification requirements for certain markets.			

SAFETY INSTRUCTIONS

Personal safety equipment

Persons who use the blower shall wear the following safety equipment:

1. Approved ear protection.
2. Approved eye protection.
3. Face mask when operating the blower in dusty environments.
4. Boots or work shoes with a non-slip sole.
5. First-aid kit.



Personal safety

The following instructions apply to persons operating the blower:

1. The operator shall have read and understood the contents of this manual.
2. Do not wear loose clothing, scarves or neck chains or let long hair hang loose, since these can be drawn into rotating parts of the blower and cause injury.
3. Do not operate the blower while under the influence of alcohol, drugs or when you are tired.
4. Do not allow minors to operate the blower.

Fuel safety



WARNING!
The fuel used to run the blower has the following dangerous characteristics:

1. Volatile liquid, its vapor and exhaust fumes are poisonous.
2. Direct contact can cause skin irritation.
3. It is extremely combustible.

Muffler

The muffler is designed to give the lowest possible noise level and to direct the engine's exhaust fumes away from the operator. Muffler fitted with catalytic converter is also designed to reduce harmful exhaust components.



WARNING!
The exhaust fumes from the engine are hot and may contain sparks which can start a fire. Never start the machine indoors or near combustible material!



WARNING!
Mufflers fitted with catalytic converters become extremely hot during use and after stopping. This also applies at idling speeds. Contact can result in burns to the skin. Be observant to the risk of fire!

Special safety instructions apply to the type of fuel used for the blower. These instructions are specified under "Fuel handling" on pages 11 and 12.

SAFETY INSTRUCTIONS

Safety equipment



WARNING!
The blower must never be used if any of the safety devices or guards are missing, damaged or not in working order.

The blower is equipped with a number of safety devices and guards for the prevention of accidents. These are described in the general description of the blower on page 8.

The safety devices and guards also require regular inspection and maintenance. These measures and the interval at which they should be carried out are specified under "Maintenance" on pages 23 and 24.

Safety while operating the blower

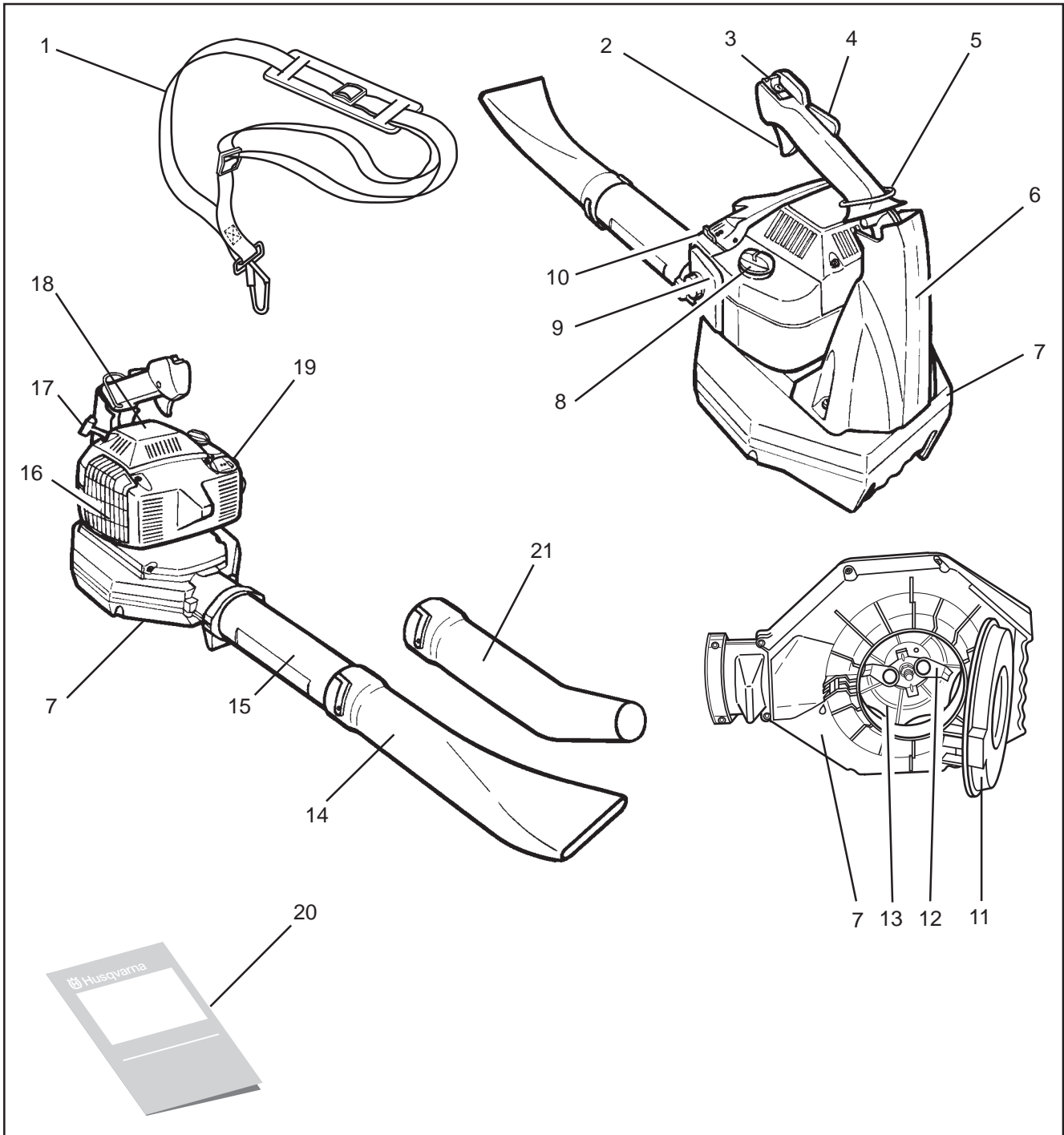
1. Do not allow bystanders or animals to be in the work area, i.e. 10 metres from the operator.
2. The blower may throw objects at high velocity that can ricochet and hit the operator. This may cause serious eye damage.
3. Never point the blower nozzle toward people or animals.
4. Stop the engine before fitting or dismantling accessories or other components.
5. Never operate the blower if any of the guards is missing.
6. Never operate the blower in poorly ventilated spaces where exhaust fumes might otherwise be inhaled.
7. Stop the engine before refueling.
8. The catalytic muffler is extremely hot while the blower is running and after it has stopped. The same applies when the blower is running at idling speed. Be aware of the danger of fire, especially while operating the blower near combustible materials and/or where combustible fumes are present.
9. Be careful, particularly if left hand operation is applied. Avoid any direct body contact with the exhaust outlet area.
10. Do not operate the blower while standing on a ladder or a stand.

Other safety measures

1. Operate the blower only at reasonable hours, i.e. not early in the morning or late at night when people might be disturbed. Comply with times listed in local ordinances. Usual recommendations are 9:00 a.m. to 5:00 p.m. Monday through Saturday.
2. Operate the blower at the lowest possible throttle setting to do the job.
3. Check the condition of the blower before operation, especially the muffler, air intake and air filter.
4. Use a rake or a broom to loosen ground debris before blowing.
5. Under dusty conditions, slightly spray the work area with a hose or use a mister attachment when water is available.
6. Conserve water by using blowers instead of hoses for many lawn and garden applications, including areas such as roof gutters, screens, patios and gardens etc.
7. Watch out for children, pets, open windows or freshly washed cars, and blow debris safely away.
8. Use the full nozzle extension so the air stream can work close to the ground.
9. After using the blower, clean up and dispose of debris in trash receptacles

DESCRIPTION

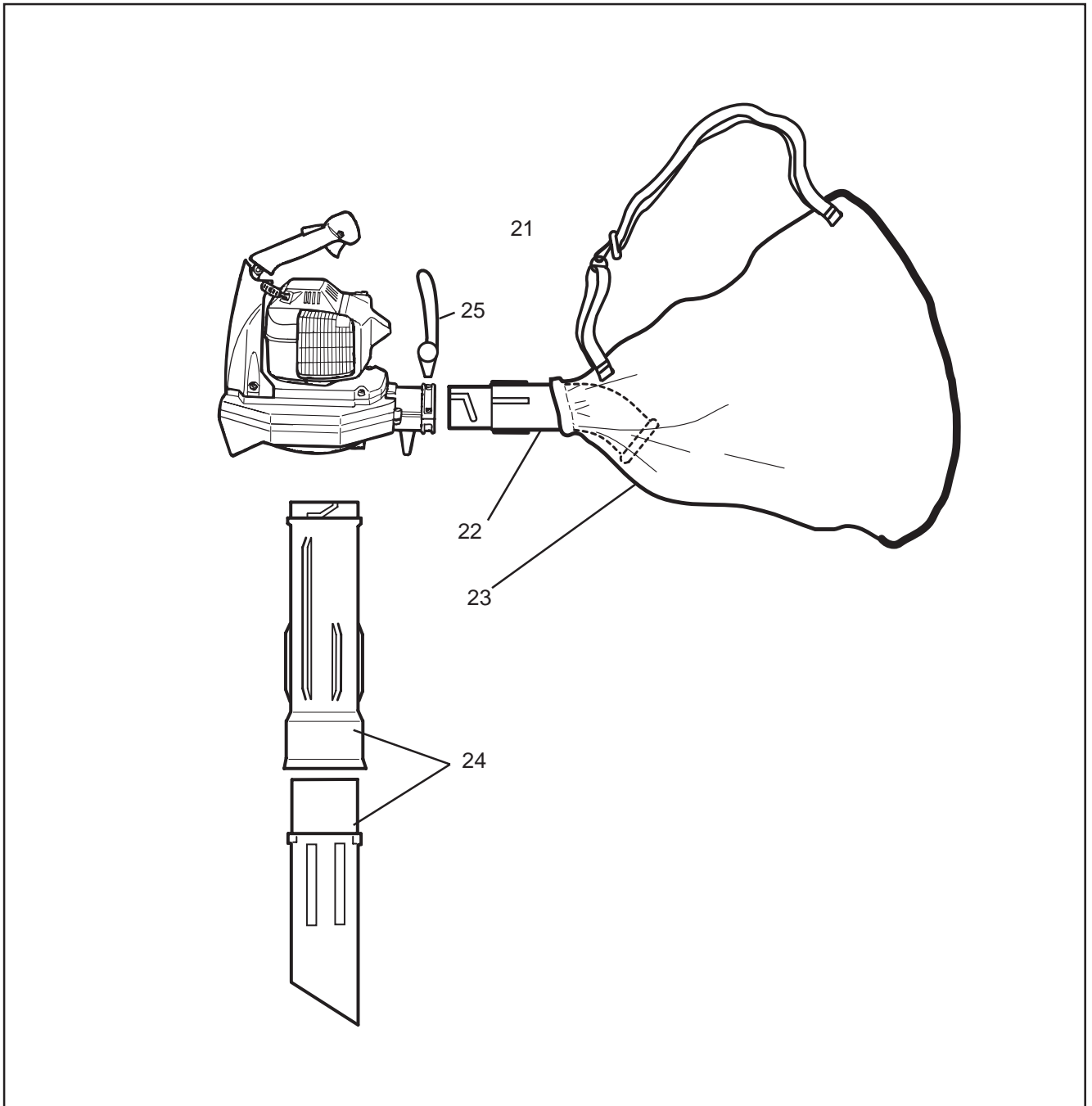
The blower



1. Shoulder strap
2. Throttle trigger
3. Stop switch
4. Throttle lock
5. Shoulder strap ring
6. Anti-vibration system (inside the housing)
7. Fan housing
8. Fuel cap
9. Air filter
10. Choke
11. Inspection cover
12. Cutters
13. Fan impeller
14. Nozzle
15. Blower tube
16. Muffler
17. Start handle
18. Starter device
19. Carburetor adjustment screws
20. Operator's manual
21. High velocity nozzle.

DESCRIPTION

Accessories



21. Vacuum device with collection components consisting of items 22 - 25 below.

22. Vacuum bag tube.

23. Collection bag.

24. Vacuum tube in two sections.

25. Auxiliary handle.

DESCRIPTION

Safety equipment

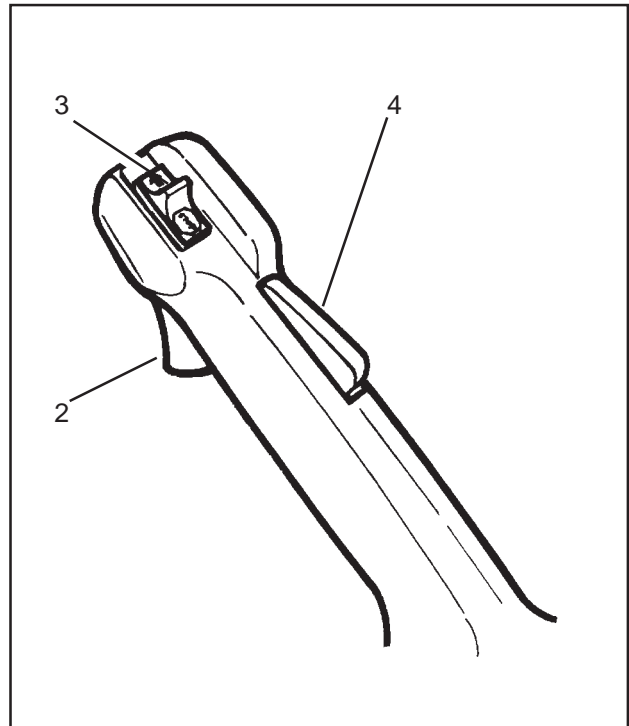
The following equipment on the blower is designed for protecting personnel and materials. These components should receive special attention whenever you operate, inspect and service the blower.

Stop switch (3)

The stop switch is used to stop the engine.

Throttle lock (4)

The throttle lock prevents inadvertent activation of the throttle. When the throttle lock is pressed into the handle (when gripping the handle) the throttle trigger (2) is disengaged. When the operator releases his/her grip on the handle, both the throttle trigger and the throttle lock are reset to their original settings by means of two spring systems which work independently of one another.



Anti-vibration system (6)

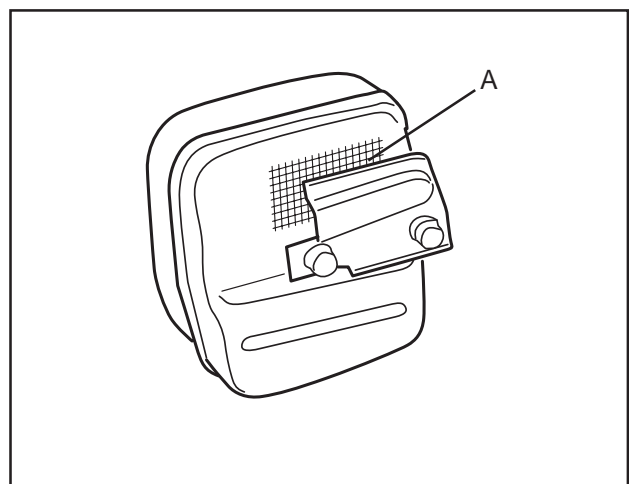
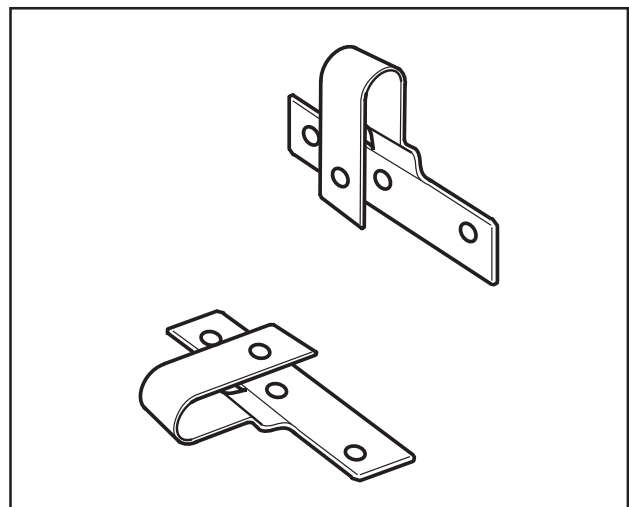
The anti-vibration system is designed to dampen vibrations transmitted from the engine to the handle. The anti-vibration system consists of spring-type mountings, from which the engine is suspended.

Muffler(16)

The muffler is designed to give the lowest possible noise level and to direct the engine's exhaust fumes away from the operator. Muffler fitted with catalytic converter is also designed to reduce harmful exhaust components.

The engine exhaust fumes are hot and can contain sparks, which may cause fire if they come in contact with dry or combustible material.

Some blower models, esp. those sold in countries where the climate is dry, are equipped with spark-arresting mesh (A). This mesh must be cleaned or replaced at specific intervals. Check if your blower muffler has mesh of this type.



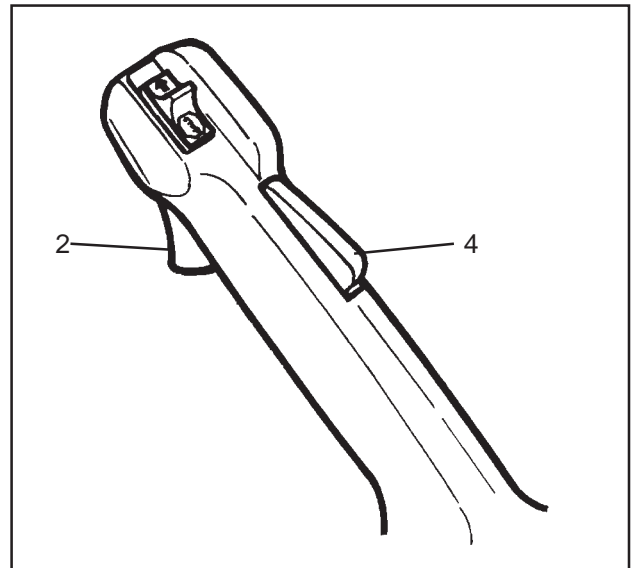
WARNING!
The muffler is extremely hot while the engine is running and after it has stopped. DO NOT TOUCH THE MUFFLER IF IT IS HOT! This can cause severe burns.

DESCRIPTION

Other equipment

Throttle trigger (2)

The speed and the output of the engine are regulated by the throttle trigger. The throttle lock (4) must be pressed down before the trigger will actuate the throttle.



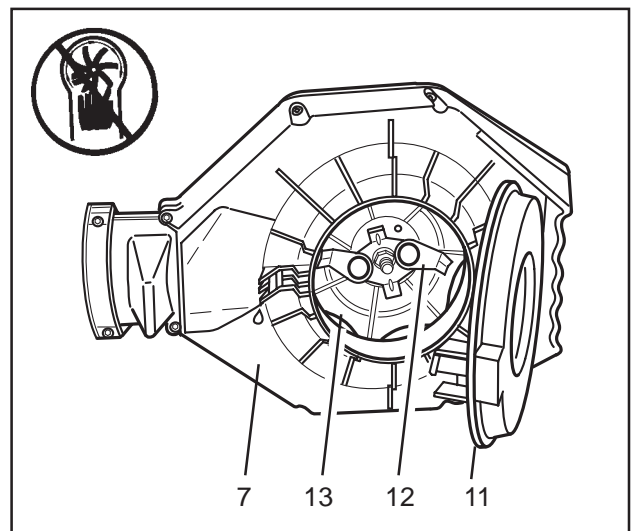
Fan casing (7)

The blower fan casing (7) together with the impeller (13) provide high performance air discharge.

Inspection cover (11)

An inspection cover is located on the underside of the fan casing. Removal of this cover allows access for cleaning and inspecting the impeller. The inspection cover can only be opened by means of tools.

If the vacuum tube is used, it must be fitted to the opening in the inspection cover as shown on page 16.



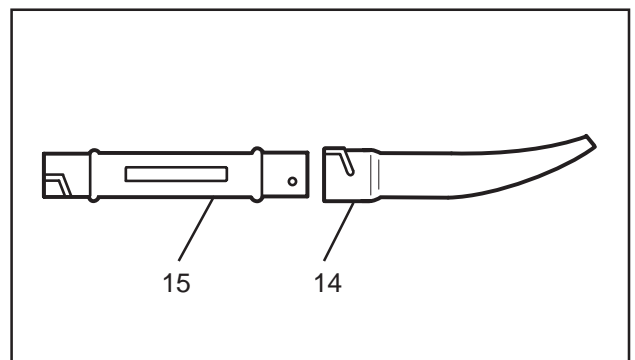
WARNING!
Never start the blower if the inspection cover is not closed, is damaged or cannot be closed. (Exception: When the vacuum tube is fitted).

Cutters (12)

Two cutters are fastened to the impeller. The cutters are there to mulch leaves and other debris, that have been vacuumed, before they enter the fan inlet.

Nozzle (14) and blower tube (15)

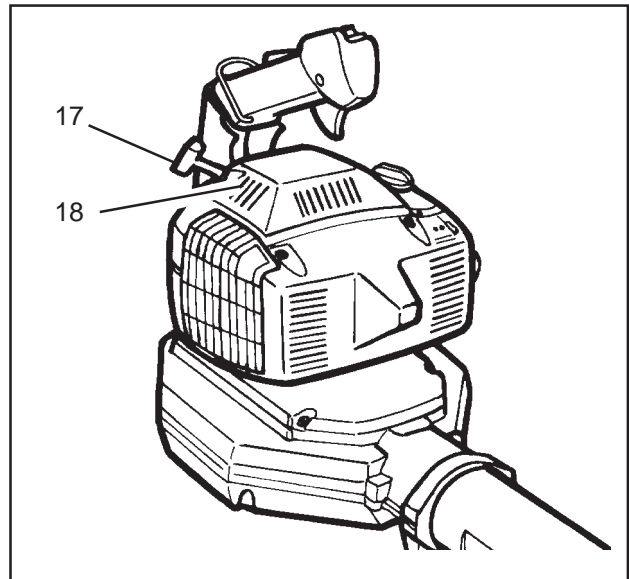
The nozzle and the blower tube have a bayonet mount for connection to the blower. Air is channeled through the blower tube to the nozzle, where the air discharge velocity increases and the air stream discharge pattern is formed to provide best performance.



DESCRIPTION

Starter device (18) and starter handle (17)

The starter device is located at the top on the engine shrouding and engages in the crank shaft only when the starter handle is pulled.

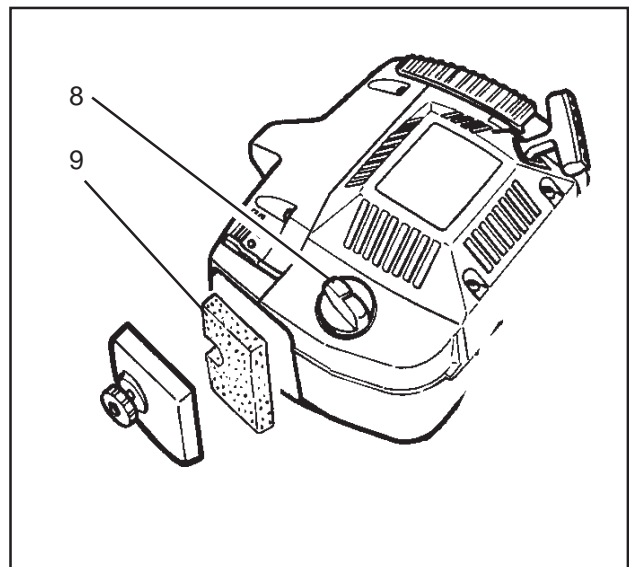


Fuel cap (8)

The fuel cap (14) is located at the top of the engine shrouding and has a gasket, which prevents fuel from leaking out.

Air filter (9)

The air filter consists of foam-rubber filter medium, integrated in a plastic casing. The air filter should be cleaned at specific intervals. Otherwise, the power blower will consume too much fuel, the performance will be reduced and an oily deposit may form on the spark plug electrodes.



Choke (10)

The choke is located at the top of the engine shrouding and should be used every time the engine is cold-started. The choke is de-activated automatically when the throttle trigger is pressed.

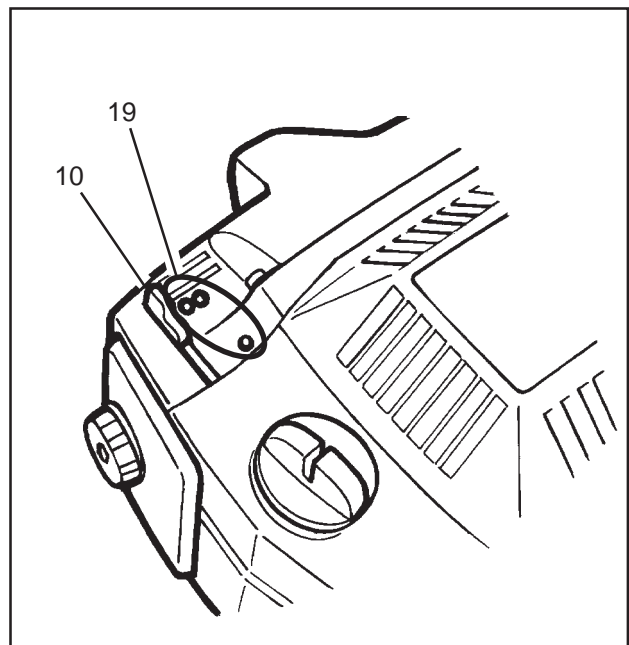
Adjusting the carburetor (19)

There are three adjusting screws for adjusting the carburetor:

- Low speed jet
- High speed jet
- Adjustment screw for idling

Adjusting the carburetor involves adapting the engine to local operating conditions, e.g. climate, altitude, gasoline and type of two-stroke engine oil used.

For details about carburetor adjustment, see page 18.



FUEL HANDLING

Fuel mixture

NOTE!

The machine is fitted with a two-stroke engine and must always be run on a mixture of gasoline and two-stroke oil. It is important to measure the quantity of oil accurately, to ensure the correct mixture ratio. Small discrepancies in the amount of oil have a great bearing on the proportions of the fuel mixture when mixing small amounts of fuel.



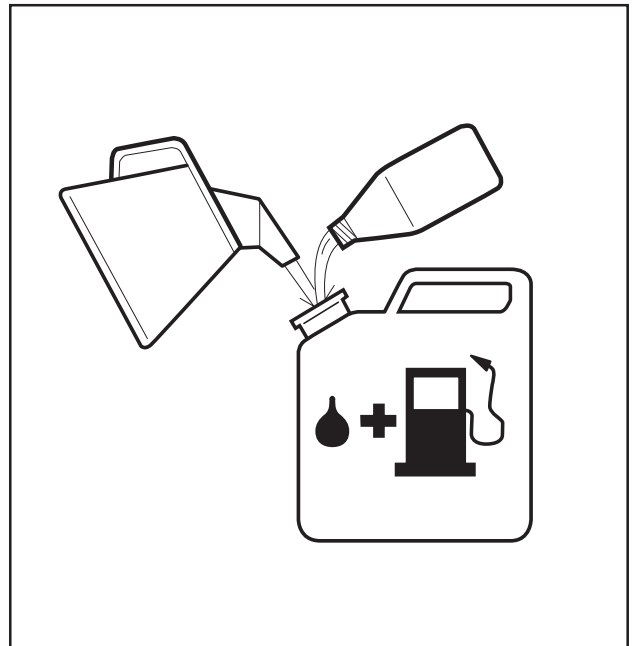
WARNING!
Allow adequate ventilation while handling fuel.

Gasoline

NOTE!

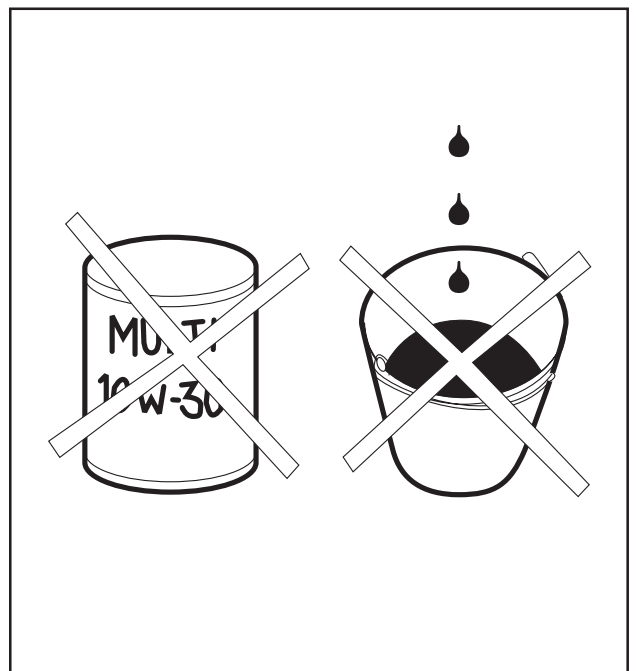
Always use an oil-mixed quality gasoline (at least 87 octane). If your machine is equipped with a catalytic converter, (see "technical data") an unleaded, oil mixed quality gasoline should always be used. A leaded gasoline will destroy the catalytic converter.

- **This engine is certified to operate on unleaded gasoline.**
- The lowest recommended octane rating is 87. If you run the engine on lower octane rating than 87 so-called "knocking" can occur. This leads to an increased engine temperature, which can result in a serious engine breakdown.
- When working at continuous high revs a higher octane rating is recommended.



Two-stroke oil

- For the best performance, use HUSQVARNA two-stroke oil, which has been specially developed for Husqvarna two-stroke engines. Mixing ratio: 1:50 (2%).
- If HUSQVARNA two-stroke oil is not available, you may use another two-stroke oil of good quality that is intended for air-cooled engines. Contact your dealer when selecting an oil.
- Never use two-stroke oil intended for water-cooled marine outboard motors, so-called outboard oil.
- Never use oil intended for four-stroke engines.



FUEL HANDLING

Mixture

- Always mix gasoline and oil in a clean container intended for fuel.
- Always start by filling half the quantity of gasoline required. Then add the entire oil quantity. Mix (shake) the fuel mixture. Fill the remaining quantity of gasoline.
- Mix (shake) the fuel mixture carefully before filling in the machine's fuel tank.
- Do not mix more than max. one month's supply of fuel.
- If the machine is not used for a long period of time, the fuel tank should be emptied and cleaned.
- **This engine is certified to operate on unleaded gasoline.**



WARNING!
The catalytic converter muffler gets very hot during and after use. This also applies during idling. Be aware of the fire hazard, especially when handling the saw near flammable substances or vapours.

Fuelling



WARNING!
The following precautions reduce the risk of fire:
Do not smoke or place any sources of heat in the vicinity of the fuel. Never refuel when the engine is running. Always stop the engine and let it cool for a few minutes before refuelling. Open the fuel cap slowly when fuelling so that any over pressure is released slowly. Tighten the fuel cap carefully after refuelling. Always move the machine from the fuelling place before starting.

- Clean around the fuel cap. Contamination in the tank can disrupt operations.
- Ensure that the fuel is well mixed by shaking the container before filling the tank.

Gasoline	Oil
Lit.	Lit.
5	0,10
10	0,20
15	0,30
20	0,40

2%(1:50)

Min. 3 m (10 ft)

STARTING AND STOPPING



WARNING!
Never start the blower if the inspection cover is not closed, is damaged or cannot be closed. (Exception: When the vacuum tube is fitted).

Starting a cold engine

A cold engine should be started in the following manner:

1. Move the stop switch to the start position.
2. Set the choke to the choke position. Setting the chock will automatically set the throttle damper to the start throttle position.

IMPORTANT!

Do not pull out the starter cord completely and do not release the starter handle from the fully pulled out position. Doing so will damage the starter

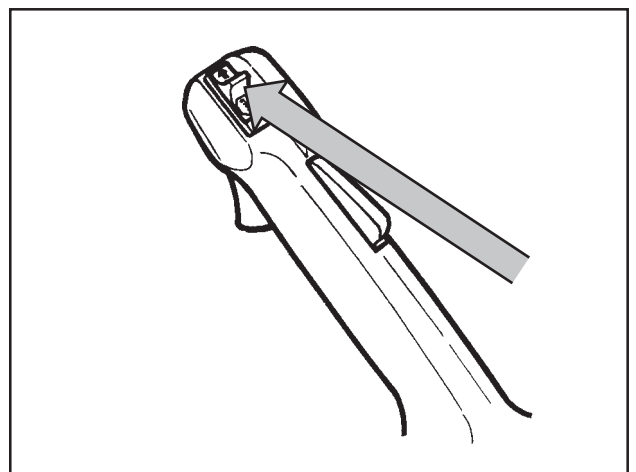
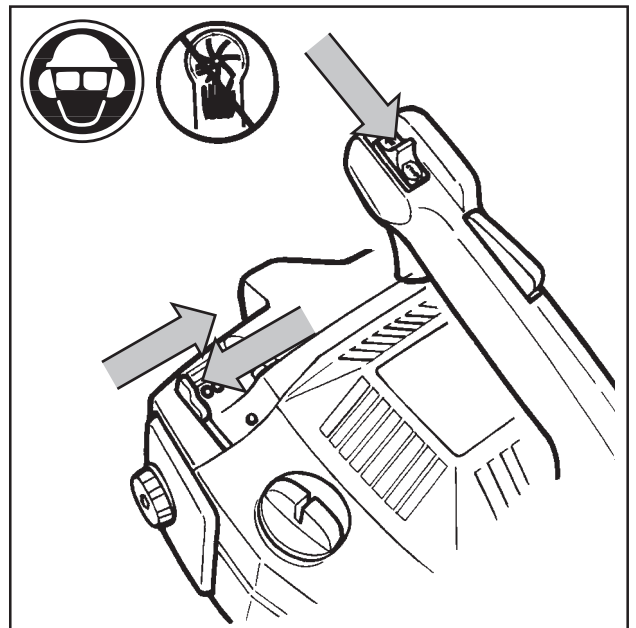
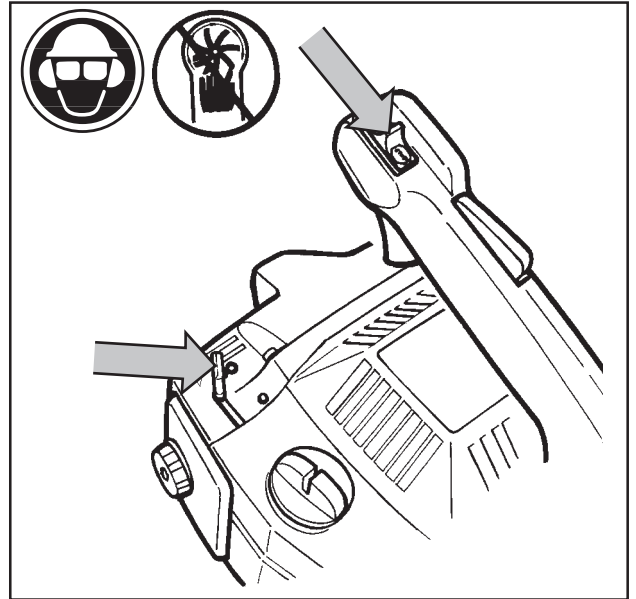
3. Press the blower against the ground and pull the starter handle slowly until resistance is felt (when the starter pawls engage). Then pull it with quick, vigorous movements.
4. Move the choke control back immediately when the engine ignites and proceed according to item 3 above.
5. When the motor starts, rapidly give it full throttle. The throttle latch will then automatically disengage.

Starting a warm engine

A warm engine can be started in the same manner as a cold engine, but with the following exception: Set the throttle to the start position by first **moving the choke forward, and then back again**. The choke should not be used when the engine is warm.

Stopping

The engine is stopped by switching off the ignition. Move the stop switch to the stop position..



USING THE BLOWER

To blow away debris on the ground

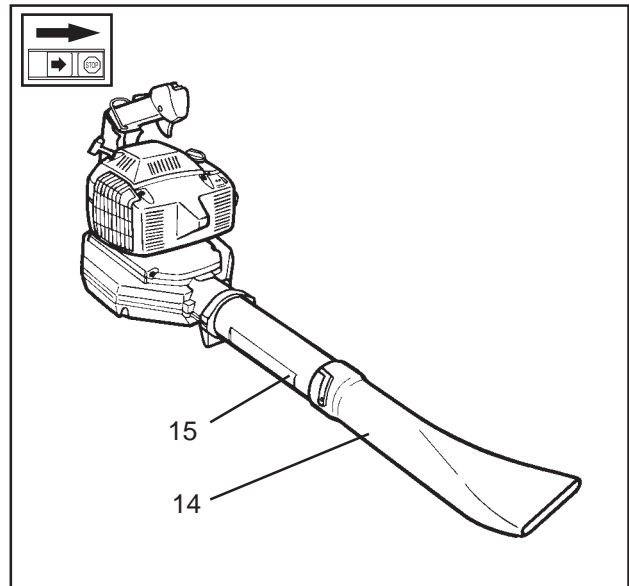
Fitting the blower tube and nozzle on the blower



WARNING!
When fitting the blower tube and nozzle, the engine must be switched off and the stop switch must be in the stop position.

The blower tube and nozzle have a bayonet mount. Fit them in the following manner:

1. Press the blower tube (15) against the blower air outlet and turn it 90 degrees until a snap is heard.
2. Fit the nozzle (14) onto the tube (15), and turn it 90 degrees until a snap is heard.



Blowing

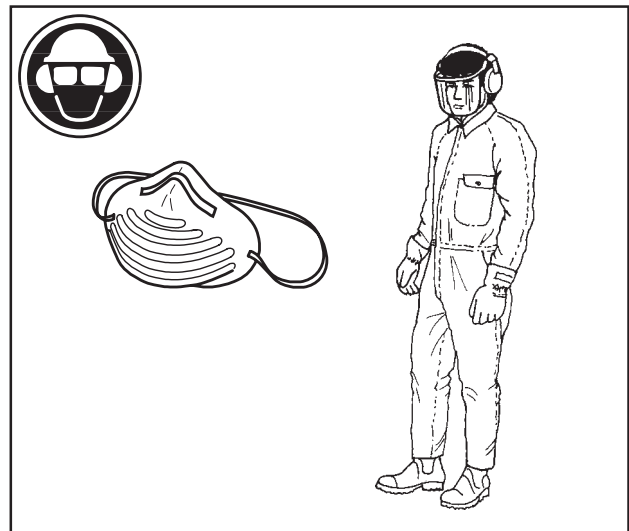
Before you begin blowing, put on the required safety equipment.



WARNING!
When working with the blower, wear the required protecting equipment:

1. Hearing protection.
2. Eye protection.
3. Face mask in dusty environments.

When operating the blower, the blower must be secured to the shoulder strap. The strap should be worn over the shoulder as shown in the adjacent figure.



USING THE BLOWER



WARNING!

Never point the blower nozzle at people or animals. The high-velocity air stream can contain particles that may cause serious injury, especially if the blower has previously been used for vacuuming.

Be careful, particularly if left hand operation is applied. Avoid any direct body contact with the exhaust outlet area.



WARNING!

Never start the blower if the inspection cover is not closed, is damaged or cannot be closed. (Exception: When the vacuum tube is fitted).



WARNING!

Do not operate the blower while standing on a ladder or a stand.

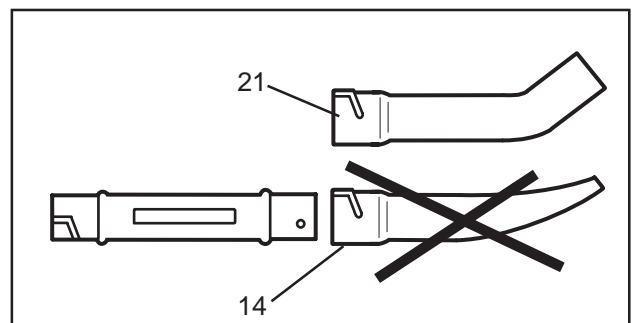
Start the blower as described on page 13. Work according to the following instructions:

1. Never blow air toward fixed objects such as walls, large rocks, automobiles and fences.
2. When working inside corners, blow from the corner and inward toward the centre of the work area. Otherwise, debris can fly up in your face and cause eye injury.
3. Never point the blower nozzle at delicate plants.

High-velocity nozzle (21)

The high-velocity nozzle is an accessory of the blower and is not included in the standard supply.

When blowing with greater accuracy and high air stream concentration is necessary, substitute the standard nozzle (14) with the high-velocity nozzle (21).



USING THE BLOWER

To vacuum debris from the ground

The vacuuming device is an accessory and is not included in the standard supply.

Fitting the collection bag with the various vacuum tubes



WARNING!
When fitting the tubes to the blower, the engine must be switched off and the stop switch must be in the stop position.

1. Open the collection bag. Insert the collection bag tube from inside the bag to fit in the vacuum inlet opening of the bag as illustrated in the adjacent figure. Close the zipper on the bag.
2. Press the collection bag tube on the blower, turn it 1/4 of a turn until a snap is heard. The section of the tube that is covered by the collection bag must be arranged with its outlet pointing downwards. Attach the carrying strap to the harness ring.
3. Open the cover at the underside of the blower, using a screw driver to disengage the locking piece in the square opening.
4. Press the vacuum tube in the large opening at the underside of the blower and turn it 45 degrees until the bayonet mount locks.
5. Push the lower vacuum tube onto the upper tube as shown in the adjacent figure.
6. Fit the auxiliary handle as described in the separate instructions.

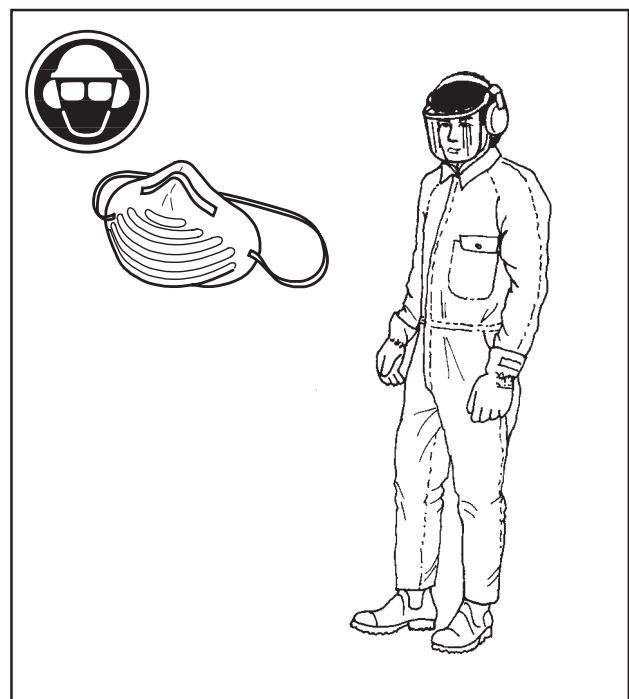
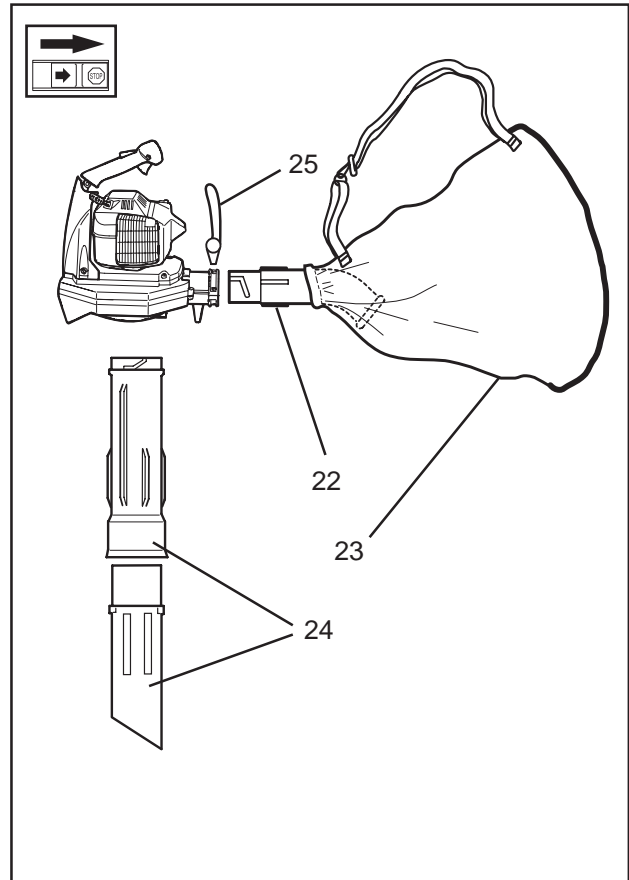
Vacuuming

Before vacuuming, put on the required safety equipment.



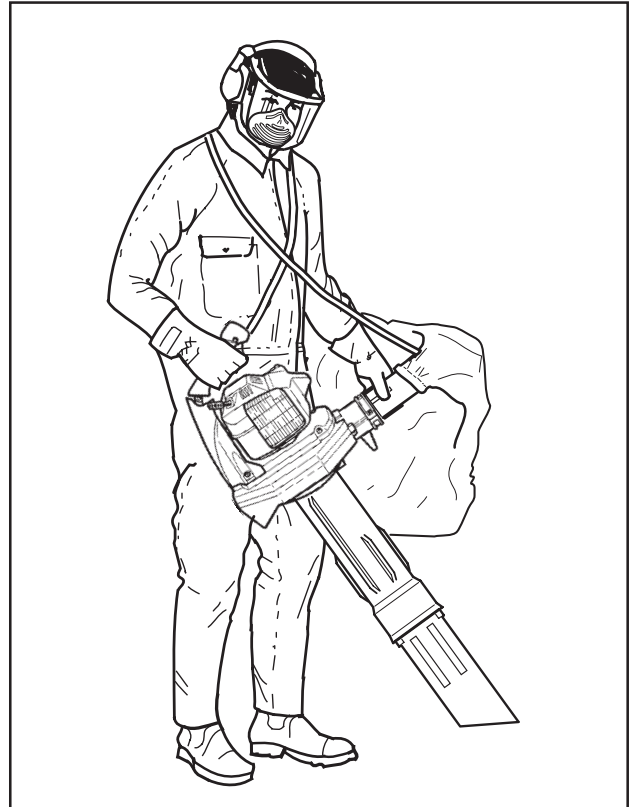
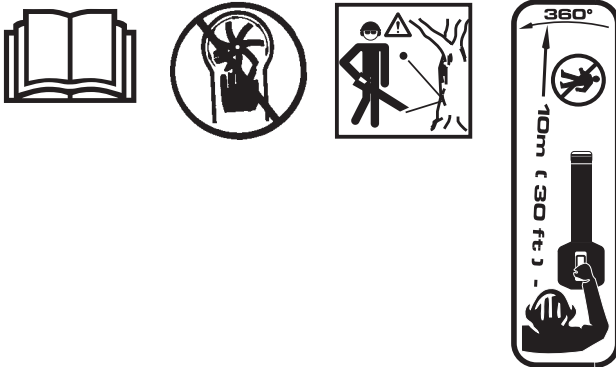
WARNING!
When working with the blower, wear the required protecting equipment.

1. Hearing protection.
2. Eye protection.
3. Face mask in dusty environments.



USING THE BLOWER

When operating the blower, the blower and collection bag must be secured in the shoulder strap. The strap should be worn over the shoulder as shown in the adjacent figure.



WARNING!
Always check that the collection bag is intact and the zipper is closed before starting the blower. Never use a damaged bag. There is risk of injury due to flying debris.

Be careful, particularly if left hand operation is applied. Avoid any direct body contact with the exhaust outlet area.



WARNING!
Never start the blower if the inspection cover is not closed, is damaged or cannot be closed. (Exception: When the vacuum tube is fitted).



WARNING!
Do not operate the blower while standing on a ladder or a stand.

Start the blower as described on page 13. Work according to the following instructions:

1. Do not vacuum large solid objects that can damage the fan, such as wood, cans (tins) or lengths of string or ribbon.
2. Do not let the vacuum tube strike the ground.
3. The bag can be emptied after having opened the zipper on the side.

MAINTENANCE

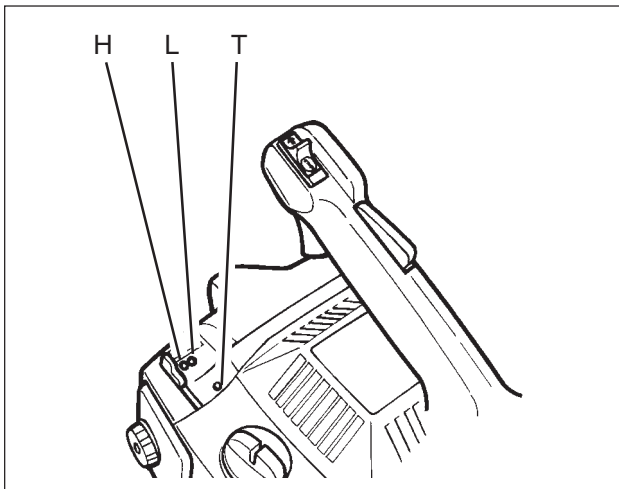
Carburetor

The carburetor has been carefully preset at the factory. However, additional adjustment may be required due to climate, altitude, gasoline and type of two-stroke engine oil used. The instructions below describe how carburetor adjustment should be carried out.

The carburetor governs the engine speed via the throttle. Air and fuel are mixed in the carburetor. The air/fuel mixture is adjustable. To utilize the blower's maximum output, the settings must be correct.

The carburetor has three means of adjustment:

- H = High speed jet
- L = Low speed jet
- T = Adjustment screw for idling



Function

The fuel quantity required in relation to the air flow, provided by the opening in the throttle, is adjusted by the L and H jets. If they are screwed clockwise, the air/fuel mixture becomes leaner (less fuel) and if they are screwed counterclockwise, the mixture becomes richer (more fuel). A leaner mixture gives rise to a higher engine speed and a richer mixture gives rise to a lower engine speed.

The T screw regulates the idling speed. Turning the T screw clockwise will increase the idling speed; turning it counterclockwise will lower the idling speed.

Basic (factory) settings

The carburetor is preset to the basic settings when the blower is tested at the factory. These basic settings are the following:

- The H screw has been turned counterclockwise to its end position against the stop.
- The L screw has been turned counterclockwise to its end position against the stop.

The recommended idling speed is 3000 rpm.

Adjustment

NOTE!
Do not remove the stops in the H and L jets. If these stops are removed, the blower will no longer satisfy the environmental requirements established by the California Air Resources Board.

Low speed jet, L

1. Check that the blower tube (15) and the nozzle (14) are mounted on the blower.
2. Turn the H and L adjustment screws fully counterclockwise so that they rest against the stop.
3. Start the blower engine, see page 13, and alternate letting it run at idling speed and at half throttle for 1-2 minutes to warm up. If the engine will not run at idling speed, turn the T screw clockwise until it does.
4. Set the T screw to the setting, at which the engine runs precisely at idling speed, but not faster.
5. Make a fine adjustment, turning the L screw so that the engine will run at max. idling speed. Then turn the L screw max 1/4 of a turn counterclockwise.
6. Then turn the T screw to increase the engine speed, if necessary.

NOTE!
When setting the H jet, the max. permissible full-throttle interval is 10 seconds, after which the engine must run at idling speed for at least 10 seconds.

High speed jet, H

1. Start the blower as described on page 13 and alternate letting it run at idling speed and at half throttle for 1-2 minutes to warm up.
2. Give the engine full throttle and adjust the H screw until the engine runs at maximum speed.
3. Turn the H screw 1/8 of a turn counterclockwise (less than 1/8 of a turn if the stop restricts this adjustment).

MAINTENANCE

Muffler

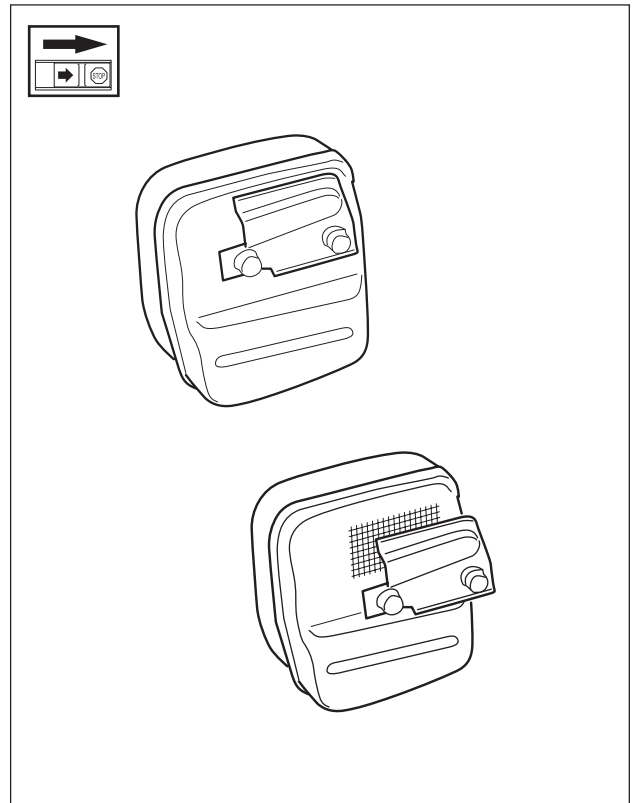
NOTE!

Some mufflers are fitted with a catalytic converter. See "Technical data" to see whether your clearing saw is fitted with a catalytic converter.

The muffler is designed to dampen the noise level and to direct the exhaust fumes away from the user. The exhaust fumes are hot and can contain sparks, which can result in fire if the exhaust fumes are directed towards a dry and inflammable material. Some mufflers are equipped with a special spark arrest screen. If your machine is fitted with this type of screen it should be cleaned regularly. This is done using a wire brush. On mufflers without a catalytic converter the screen should be cleaned weekly, or replaced if necessary. On mufflers fitted with a catalytic converter the screen should be checked and cleaned monthly. **If the screen is damaged it should be replaced.** If the screen is frequently blocked, this can be a sign that the function of the catalytic converter is impaired. Contact your dealer to inspect the muffler. A blocked screen will cause the engine to overheat resulting in damage to the cylinder and piston. Also see under "Maintenance".

NOTE!

Never use a machine with a defective muffler.



Cooling system

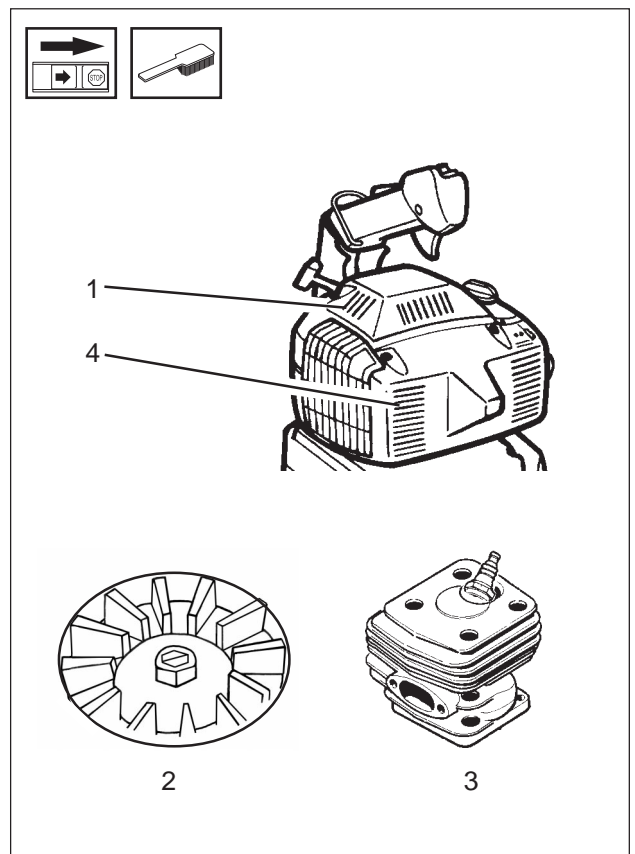
The engine is equipped with a cooling system for maintaining the right operating temperature.

The cooling system consists of the following components:

1. Air intake on the starter device.
2. Fan blades on the flywheel.
3. Cooling fins on the cylinder.
4. Cylinder cowling (guides cooling air flow against cylinder surfaces).

Clean the cooling system by brushing once a week, or more often, if necessary.

A dirty or blocked cooling system will cause the blower to overheat and this will damage the cylinder and piston.



MAINTENANCE

Air filter

The air filter (A) must be cleaned regularly to remove dust and dirt. This will prevent:

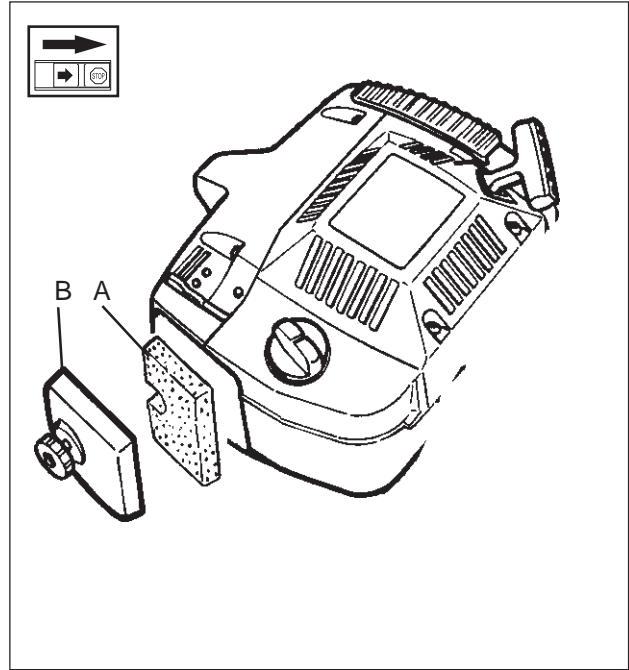
- Carburetor malfunctions
- Starting problems
- Reduced performance
- Unnecessary wear on engine parts
- Abnormal fuel consumption
- Elevated content of harmful exhaust fumes

Clean the filter after 25 hours of operation or more often if the air is exceptionally dusty in the work area.

To clean the air filter

Dismantle the air filter cover (B) and remove the filter medium. Wash it clean in a solution of soap and warm water. Make sure that the filter is dry before reassembling.

An air filter, which has been used for some time, cannot be cleaned completely. Therefore, the filter must be replaced by a new one at regular intervals. A faulty filter must always be replaced.



Spark plug

The condition of the spark plug is influenced by:

- An incorrectly adjusted carburetor.
- Wrong fuel mixture (too much oil in the gasoline).
- Poor quality gasoline and/or oil.
- A dirty air filter.

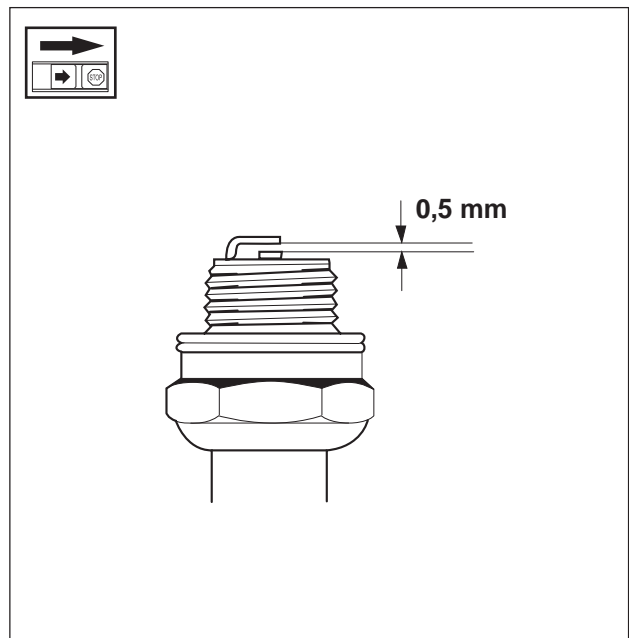
These factors cause deposits on the spark plug electrodes, which may result in malfunction and difficulty starting the blower.

If the engine is low on power, difficult to start or runs poorly at idling speed, always check the spark plug first.

The spark plug is accessible under the cylinder shrouding, which can be removed by unscrewing four screws.

If the spark plug is clogged, clean it and check the electrode gap. Re-adjust if necessary. The correct gap is 0.5 mm (0.020"). The spark plug should be replaced after about one month of operation or earlier if the electrodes are badly eroded.

NOTE! Always use the recommended type of spark plug! See under "Technical data". An incorrect spark plug can severely damage the piston/cylinder.

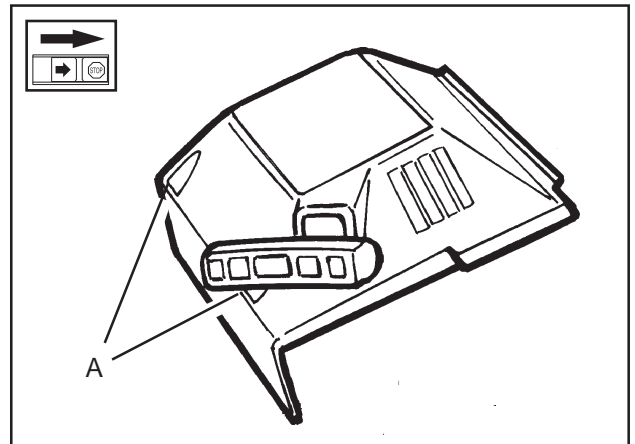


MAINTENANCE

Starter device

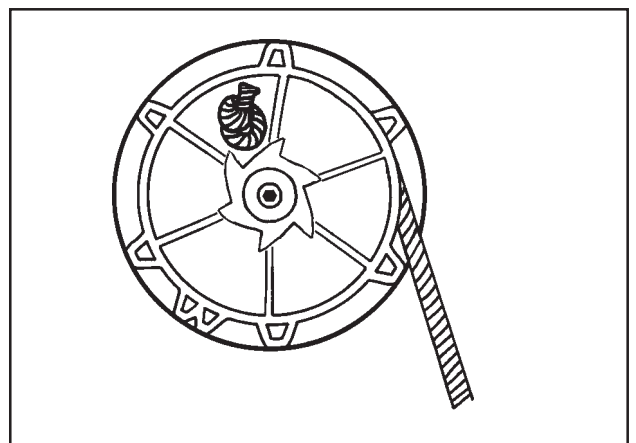
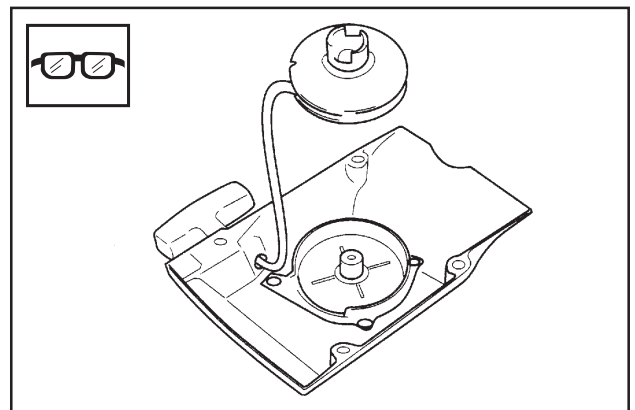
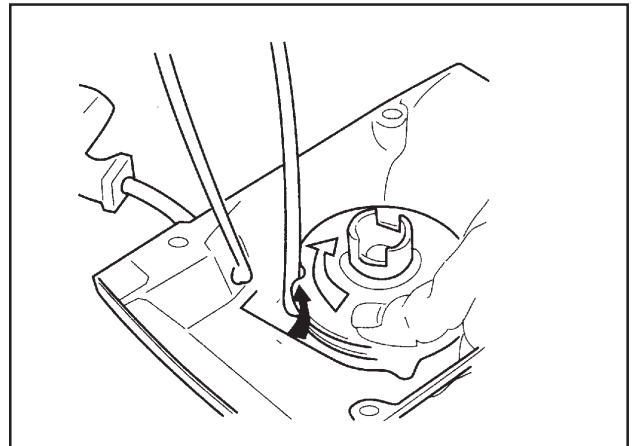
To change a broken or worn cord

1. Unscrew the screws (A) to remove the starter device from the blower.
2. Pull out the cord approx. 30 cm (12") and lift it up into the notch in the periphery of the pulley.
3. Rotate the pulley counterclockwise until the recoil spring is no longer tensioned.
4. Unscrew the pulley center screw and washer.



WARNING!
If the recoil spring is tensioned on the pulley, the spring can pop out and cause injury. Always wear protective goggles and gloves.

5. Lift up the pulley and remove the cord.
6. Fit the new cord and tie a knot at the bottom end as shown in the bottom figure.
7. Insert and pull the other end of the cord through the opening in the starter housing and through the handle. Then tie a knot in the cord to secure it in the handle.
8. Refit the pulley by rotating it until it falls into place when the pulley hook engages in the recoil spring. Refit and tighten the center screw and washer to secure the pulley .
9. Re-tension the recoil spring as described on the next page.



MAINTENANCE

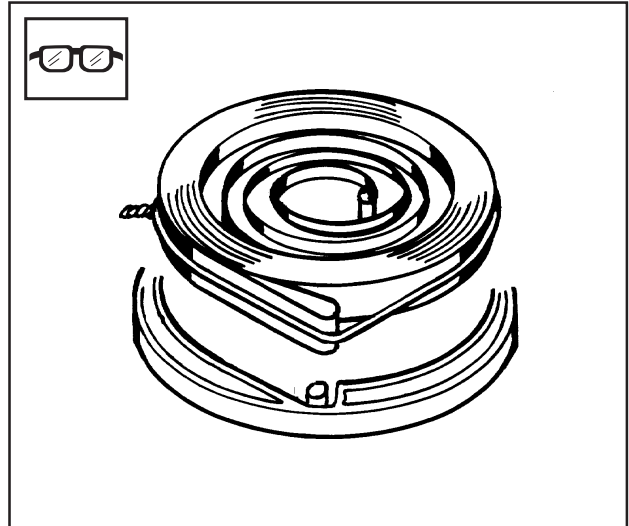
To change the recoil spring

1. Dismantle the pulley according to items 1 to 5 in the instructions on the preceding page.



WARNING!
The recoil spring may pop out and cause injury. Wear protective goggles or a visor.

2. Carefully lift out the recoil spring.
3. Fit the new recoil spring held together by a wire or holder, so that its looped end is on the pin in the starter housing.
4. Fit the starter pulley by rotating it slightly so that it will fall into place where the pulley hook engages in the recoil spring. Refit and tighten the screw and washer that secure the pulley.
5. Re-tension the recoil spring as described below.

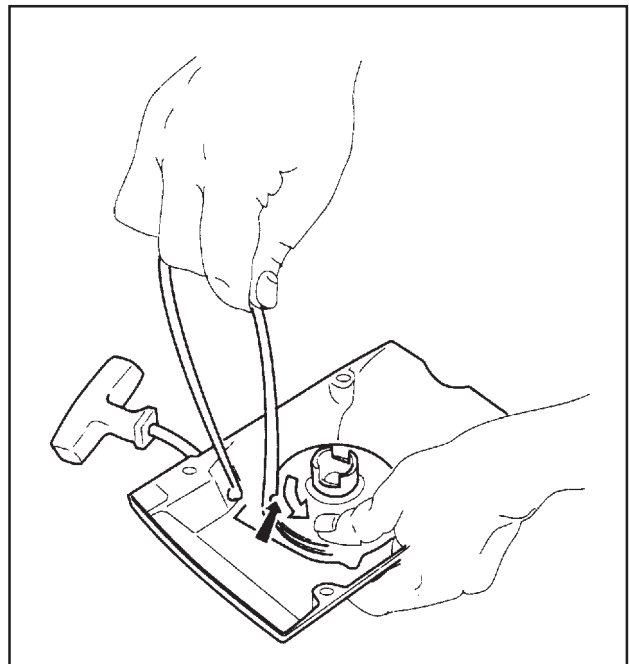


To tension the recoil spring

1. Pull out the cord approx. 30 cm (12") in the notch in the pulley.
2. Rotate the pulley until the cord is correctly tensioned.

To check the tension of the cord

- A. Pull out the cord as far as you can without resistance.
- B. From this point, it should be possible to turn the starter pulley an additional one half or three quarters of a turn.



MAINTENANCE

Maintenance schedule

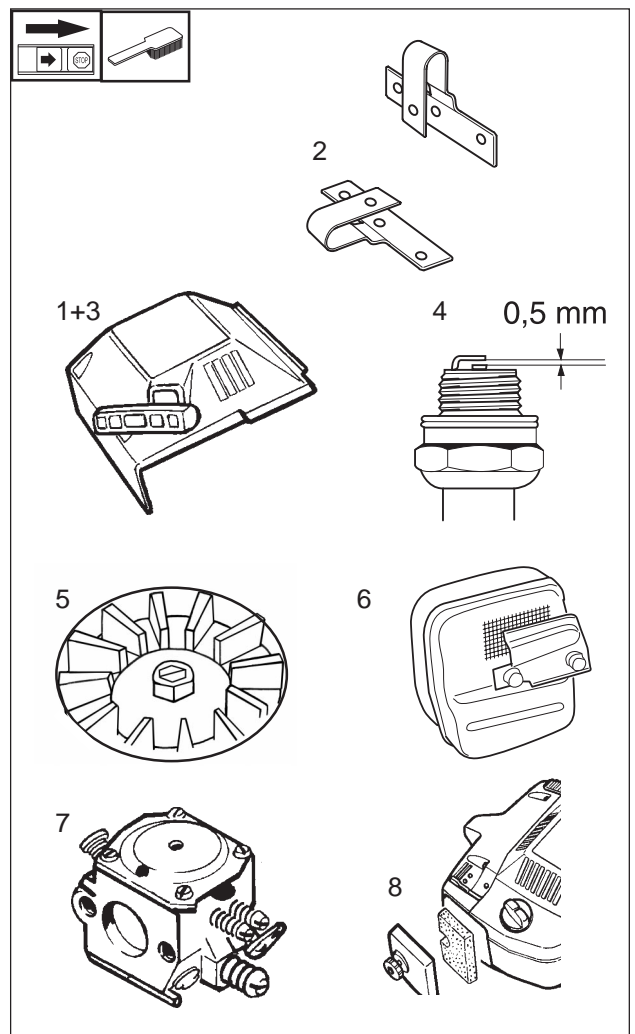
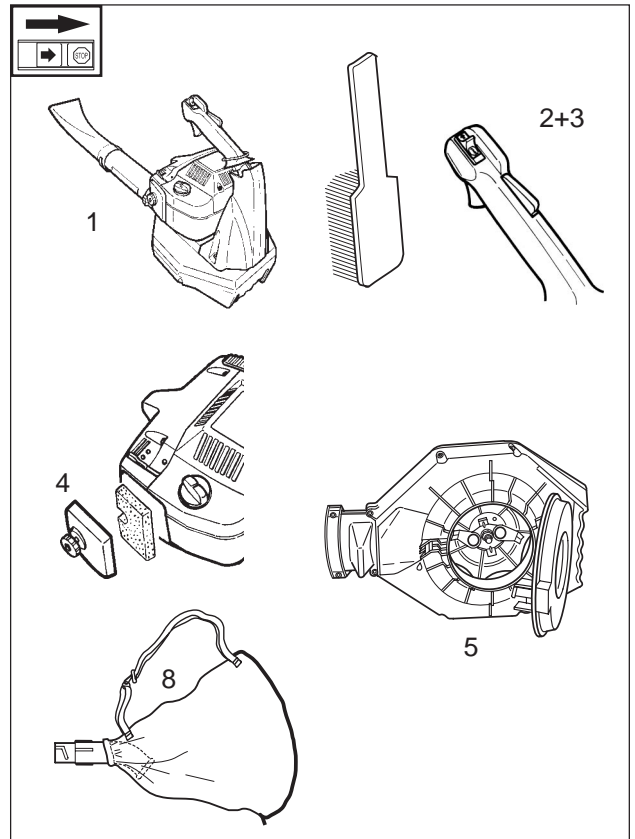
A number of general maintenance instructions are given below. If more detailed instructions are required, get in touch with your local servicing dealer.

Daily maintenance

1. Clean the exterior surfaces of the blower.
2. Check that the throttle lock and the throttle trigger function in a safe manner. Replace damaged parts.
3. Check that the stop switch works properly. Replace if necessary.
4. Clean the filter. Replace it, if required.
5. Check that the inspection cover can be locked in the closed position. Carefully check that the fan impeller is clean, especially if the blower has been used for collecting debris (vacuuming).
6. Check that all nuts and screws are properly tightened.
7. Check that all the housings are free of cracks. Damaged parts shall be replaced.
8. Check that the collection bag is intact and that the zipper works. Replace it, if required.

Weekly maintenance

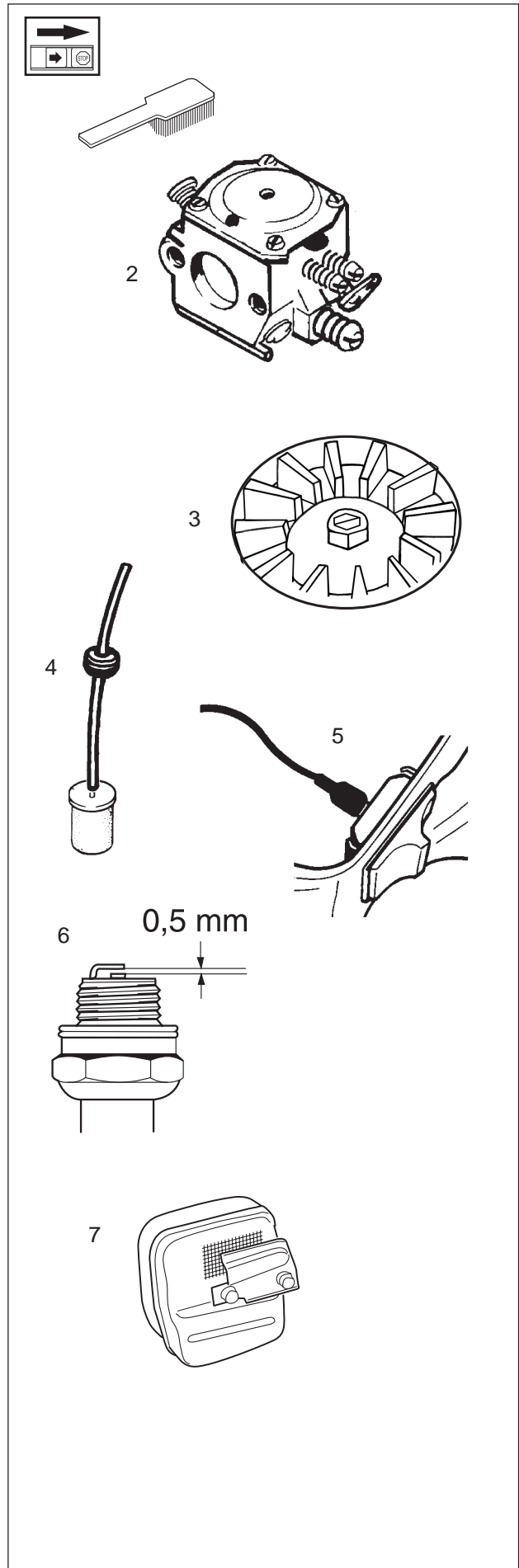
1. Check the condition of the starter device, the starter cord and the tensioning spring. Damaged parts shall be replaced.
2. Check that none of the anti-vibration mountings are damaged. Replace damaged parts.
3. Check the condition of the air intake at the starter device. Remove debris if it is clogged.
4. Clean the outside of the spark plug. Unscrew it and check the electrode gap. Re-adjust the gap to 0.5 mm (0.020"), if necessary, or replace the spark plug.
5. Clean the fan blades on the flywheel.
6. Clean or replace the muffler's spark arrest screen (not on mufflers with a catalytic converter).
7. Clean the carburetor space.
8. Clean the air filter.



MAINTENANCE

Monthly maintenance

1. Flush the fuel tank with clean gasoline, which afterward should be disposed of in an environmentally correct manner.
2. Clean the outside of the carburetor and the space around it. Replace damaged parts.
3. Clean the fan blades on the flywheel and the space around it.
4. Check the fuel filter and the fuel line. Replace them, if necessary.
5. Check all the cables and the connections. Replace damaged parts.
6. Change the spark plug.
7. Check and clean the muffler's spark arrest screen if necessary (only mufflers with a catalytic converter).



TECHNICAL DATA

Engine

Cylinder volume, cm ³ :	25,4
Cylinder bore, mm:	34
Stroke, mm:	28
Idling speed, rpm:	3.000
Max. speed – blowing, rpm:	8.200
Max. speed – vacuuming, rpm:	7.400
Max. engine output to ISO 8893:	0.9 kW/9000 rpm
Catalytic converter muffler	Yes

Ignition system

Manufacturer/type of ignition system:	Walbro MB/CD
Spark plug:	Champion RCJ 7Y
Electrode gap, mm:	0.5

Fuel and lubrication system

Manufacturer/type of carburetor:	Walbro/WT
Fuel tank volume, liters:	0.4

Weight

Weight, without fuel but with blower tube and standard nozzle fitted, kg:	5.1
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Noise levels

Equivalent noise pressure level at operator's ear. Weighted value for 50% idling and 50% full throttle to ISO 7182, dB(A):	92
Equivalent sound power level, measured to ISO 9207, dB(A):	102

Vibration levels

Vibration levels at the handle, measured according to ISO 7505, m/s ²	
Idling speed, front/rear handle:	2.6
Max. speed, front/rear handle:	4.2

Fan

Type:	Radial fan
Max. air velocity, m/s (km/h):	57 (206)
Air volume using a standard nozzle, m ³ /h:	425
Air volume without nozzle and tube, m ³ /h:	665
Air volume with vacuuming device, m ³ /h:	560

EMISSION CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

The EPA (The US Environmental Protection Agency), Environment Canada and Husqvarna Forest & Garden are pleased to explain the emissions control system warranty on your 1999 and later small nonroad engine. In U.S., new small nonroad engines must be designed, built and equipped to meet the federal stringent anti-smog standards. Husqvarna Forest & Garden must warrant the emission control system on your small nonroad engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your unit. Your emission control system includes Parts such as the carburetor and the ignition system.

Where a warrantable condition exists, Husqvarna Forest & Garden will repair your small nonroad engine at no cost to you. Expenses covered under warranty include diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE

The 1999 and later small nonroad engines are warranted for two years. If any emission related part on your engine (as listed above) is defective, the part will be repaired or replaced by Husqvarna Forest & Garden.

OWNER'S WARRANTY RESPONSIBILITIES

As the small nonroad engine owner, you are responsible for the performance of the required maintenance listed in your Operator's Manual. Husqvarna Forest & Garden recommends that you retain all receipts covering maintenance on your small nonroad engine, but Husqvarna Forest & Garden cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the small nonroad engine owner, you should, however, be aware that Husqvarna Forest & Garden may deny you warranty coverage if your small nonroad engine or a part of it has failed due to abuse, neglect, improper maintenance, unapproved modifications or the use of parts not made or approved by the original equipment manufacturer.

You are responsible for presenting your small nonroad engine to a Husqvarna Forest & Garden authorized servicing dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized servicing dealer or call Husqvarna Forest & Garden at **1-800-487-5963**.

WARRANTY COMMENCEMENT DATE

The warranty period begins on the date small nonroad engine is delivered.

LENGTH OF COVERAGE

Husqvarna Forest & Garden warrants to the initial owner and each subsequent purchaser that the engine is free from defects in materials and workmanship which cause the failure of a warranted part for a period of two years.

WHAT IS COVERED

REPAIR OR REPLACEMENT OF PARTS

Repair or replacement of any warranted part will be performed at no charge to the owner at an approved Husqvarna Forest & Garden servicing dealer. If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized servicing dealer or call Husqvarna Forest & Garden at **1-800-487-5963**.

WARRANTY PERIOD

Any warranted part which is not scheduled for replacement as required maintenance, or which is scheduled only for regular inspection to the effect of "repair or replace as necessary" shall be warranted for 2 years. Any warranted part which is scheduled for replacement as required maintenance shall be warranted for the period of time up to the first scheduled replacement point for that part.

DIAGNOSIS

The owner shall not be charged for diagnostic labor which leads to the determination that a warranted part is defective, if the diagnostic work is performed at an approved Husqvarna Forest & Garden servicing dealer.

CONSEQUENTIAL DAMAGES

Husqvarna Forest & Garden may be liable for damages to other engine components caused by the failure of a warranted part still under warranty.

WHAT IS NOT COVERED

All failures caused by abuse, neglect or improper maintenance are not covered.

ADD -ON OR MODIFIED PARTS

The use of add-on or modified parts can be grounds for disallowing a warranty claim. Husqvarna Forest & Garden is not liable to cover failures of warranted parts caused by the use of add-on or modified parts.

HOW TO FILE A CLAIM

If you have any questions regarding your warranty rights and responsibilities, you should contact your nearest authorized servicing dealer or call Husqvarna Forest & Garden at **1-800-487-5963**.

WHERE TO GET WARRANTY SERVICE

Warranty services or repairs shall be provided at all Husqvarna Forest & Garden authorized servicing dealers.

MAINTENANCE, REPLACEMENT AND REPAIR OF EMISSION-RELATED PARTS

Any Husqvarna Forest & Garden approved replacement part used in the performance of any warranty maintenance or repairs on emission-related parts, will be provided without charge to the owner if the part is under warranty.

EMISSION CONTROL WARRANTY PARTS LIST

1. Carburetor and internal parts
2. Intake pipe, airfilter holder and carburetor bolts.
3. Airfilter and fuelfilter covered up to maintenance schedule.
4. Ignition System
 - a) Spark Plug, covered up to maintenance schedule
 - b) Ignition Module
5. Muffler with catalytic converter

MAINTENANCE STATEMENT

The owner is responsible for the performance of all required maintenance, as defined in the operator's manual.

