

CROMMELINS™ CHIPPER GTS900

OPERATION & INSTRUCTION MANUAL

Thank you for your selection of a CROMMELINS™ Chipper GTS900. This Operation Manual explains its use, installation, checking and maintenance. We highly recommend that you retain this manual for ready reference regarding proper handling of the CROMMELINS™ Chipper GTS900.



Spare Parts & Service

Phone: 1300 554 524

Freecall Fax: 1800 636 281

spareparts@crommelins.com.au

www.crommelins.com.au



Thank you very much for purchasing a CROMMELINS™ CHIPPER GTS900. This manual covers operation and maintenance of the CROMMELINS™ CHIPPER GTS900. This CROMMELINS™ CHIPPER GTS900 can be used by arbor industries, landscaping, councils, hire industries and general use.

Please take a moment to familiarise yourself with the proper operation and maintenance procedures in order to maximise the safe and efficient use of this product.

Keep this owner's manual at hand, so that you can refer to it at anytime. Due to constant efforts to improve our products, certain procedures and specifications are subject to change without notice.

When ordering spare parts please have handy your products model number and serial number. Record these numbers in the boxes below for future reference.

MODEL NO.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

SERIAL NO.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

CONTENT

1. Safety instructions and regulations regarding health and safety during operation	
1.1 Responsibility	4
1.2 Instructions for safety during use	4-6
1.3 Safety directions for use and maintenance	6
1.4 Explanation of the safety symbols	6
2. Description and technical service	
2.1 Type description	7
2.2 Service	7
2.3 Spare Parts	7
3. General Description	7
4. Assembly Instructions	
4.1 Assembly of output tube	7
4.2 Assembly of handle	8
5. Controls	8
6. Instructions for use	
6.1 Preparation	9
6.2 Starting the Machine	9
6.3 Chipping/shredding	9-10
6.4 Stopping the machine	10
6.5 Emergency Stop	10
6.6 Deflector	10
6.7 Blocking of the rotor	10-11
6.8 Blocking of output	11
6.9 Moving the machine	11
7. Maintenance	
7.1 Cleaning	11
7.2 Verification of the emergency stop button	12
7.3 Replacing and adjusting the belts	12-13
7.4 Greasing and bearing housing	13
7.5 Replacing the blades	13-14
7.6 Replacing motor oil	15
7.7 Engine Maintenance	15
8. Technical specifications	15
9. Trouble Shooting	16
10. Spare Parts Diagram	17
11. Spare Parts List	18
12. Spare Parts List Cont..	19
13. Warranty	20

1. SAFETY INSTRUCTIONS AND REGULATIONS REGARDING HEALTH AND SAFETY DURING OPERATION

1.1 Responsibility

- The GTS 900 wood chipper may only be operated by persons over eighteen years of age, who are familiar with the safety rules and the operation manual. First and foremost, users must be able to stop the machine immediately.
- Users are responsible for all damage caused to a third party.
- The GTS900 wood chipper is only to be used for the purpose mentioned in this instruction booklet. If the machine is used for any other purpose than described, the warranty and the responsibility of both the manufacturer and distributor will be null and void.
- The warranty will also be invalidated in the case of unauthorized intervention on the machine and whenever the safety instructions, as described in the following enclosures, are not followed.
- The user should be aware of the rules and regulations concerning the environment and noise levels. When using the GTS900 wood chipper it is necessary for the user to wear personal protective equipment against noise (ear protection). Wood chipping has to be stopped every hour for at least 15 minutes. During these intervals, which are necessary in order to avoid the user being exposed to too much noise, the user should not be exposed to noise.
- In case of professional use of the GTS900 wood chipper, the instructor must provide the user of the chipper with sufficient (written) Instruction's to guarantee a safe use.



1.2 Instructions for safety during use

Users must wear heavy-duty footwear and appropriate, well fitting trousers. Safety goggles and hearing protection are mandatory. Do not wear loose clothes, or clothes with strings or ties. Long branches could lash into your face, so keep at a distance and always wear face protection. Wear gloves whenever dealing with the blades. Defects must be corrected before use. Use only ORIGINAL spare parts for your own safety and validity of the warranty.

Check before every use at least the following:

- Loose bolts and nuts
- Damaged rubber flaps in the input tube – change them if they are damaged or worn.
- Oil level in the engine
- Cracks in the plating and/or failed welding
- Cracked or damaged wiring
- In-feed tube and rotor should be empty

- The user is responsible for the safety of all persons within a radius of 12 m. Mark off an area at least 3 meters wide and 12 meters long on the output side. Use red/white ribbons for marking the danger zone. If your machine is equipped with a turnable output tube, each time you change the direction of the output tube, the marked area needs to be adjusted accordingly. Always stand clear of the discharge zone when operating the machine.
- Do not allow processed material to build up in the discharge zone; this may prevent proper discharge and can result in kickback of material through the feed intake opening.
- See that the machine stands horizontal and check the tire pressure regularly (minimum 1,5 bar, maximum 1,9 bar).
- The engine should only be run outdoors or in well-ventilated spaces. The smoke from the exhaust is very toxic and prolonged inhalation can be fatal.
- The fuel tank must be filled using a funnel (Fig. 1), always in the open air or in a well-ventilated space, with the engine switched off and having cooled down. Fuel is highly flammable. Do not smoke or light a fire. Use only an approved container. Always replace and securely tighten the fuel cap after refueling.
- If fuel is spilled, do not attempt to start the engine, but move the machine away from the area of spillage before starting. Always clean up spilled fuel.
- Use only unleaded petrol (Fig. 2).
- Place the machine in such a way that the exhaust fumes are blown away from the operator position. If needed move the machine.
- Do not operate the machine on a paved or gravel surface where ejected material could cause injury.
- Only operate the machine in an open space (e.g. not close to a wall or other fixed object).
- Never leave the machine unattended. If you leave the machine, stop the engine and (if applicable) remove the key (Fig. 3) from the contactor or disconnect the spark plug wire.
- If the machine is equipped with a turnable output, always stop the machine before changing the direction of the output tube. Left over wood chips could be thrown out of the machine during the manipulation of the turnable output.
- Assemble the machine completely before use. Never use the machine without the in-feed or out-feed tube mounted on the machine. If the machine is equipped with a turnable output tube, never remove the turnable output. Always assemble the belt cover and the handle. All these parts assure that it is possible to work on a safe and easy way with the machine.
- If the blades hit a foreign object (anything except wood), or if the machine starts making unusual noises and/or shaking unusually, you must switch off the machine at once to stop the blades rotating. Switch off the engine and take the machine to the recommended dealer.



- Keep your face and body as far as possible from the input tube. While feeding the machine do not stand higher than the bottom of the wheels. Keep your balance and make sure your feet have grip on the soil. Do not bend forwards. Do not allow hands or any other part of the body or clothing inside the in-feed or out-feed tube. Stay away from moving parts. Replace warning signs if damaged or not sufficiently legible.
- It is prohibited to feed any other material into the machine (e.g. metal, stones, plastics or any other material) than those mentioned in the manual.
- If the machine becomes clogged at the input or output tube, shut-off the engine and disconnect the spark plug wire or remove the key (if applicable) before cleaning the debris. Keep the power source clear of debris and other accumulations to prevent damage to the engine or possible fire. Remember that operating the starting mechanism on the engine will cause the cutting means to move.
- Do not tilt the machine while the engine is running.



1.3 Safety directions for use and maintenance

Do not leave the key (when applicable) in the ignition. Never leave the keys unattended. Keep out of reach of children and unauthorised persons. Disconnect the spark plug wire before attempting to do maintenance on the machine.

Wait until the engine is cooled down before attempting maintenance on the machine. During servicing disconnect the battery, if applicable.

The blades have to be sharp and well balanced.

Never repair bent or damaged blades, but replace them. Always use ORIGINAL blades for your own safety! Do not use, nor perform maintenance in the absence of light.

Remember that operating the starting mechanism on engine powered machines will still cause the cutter blades to move.

1.4 Explanation of the stickers and safety symbols (Fig. 4)

Sticker 1:



Watch out:
Danger



Read the users' manual carefully



Danger of flying debris



Keep a sufficient distance (12m)



Risk of severe cuts and wounds



Risk of getting stuck

Sticker 4:



Read the users' manual carefully

Wear safety goggles, ear protection and safety gloves

Sticker 5:



CE-sticker

Sticker 6:



Hot surface - Risk of burns

Sticker 7:



Noise level

Fig. 4

2. DESCRIPTION AND TECHNICAL SERVICE

2.1 Type description

Each GTS900 wood chipper is provided with a factory identification and serial number plate with the most important dates. You can find this plate on the chassis between motor and rotor housing.

2.2 Service

This manual contains the instructions for the operation and basic maintenance of the GTS wood chipper. An authorized service dealer should carry out all other adjustments. It is advised to have the machine serviced once every year by an authorized service dealer.

2.3 Spare parts

Always use ORIGINAL spare parts, which are safe and guaranteed replacements.

2.4 Warranty

The warranty will be granted in accordance with the text on the page 20 of this instruction manual.

3. GENERAL DESCRIPTION

The GTS900 is a wood chipper intended to shred all kinds of fresh cut wood having a maximum diameter of 55mm. It is also possible to shred roots, but the roots need to be cleaned from sand, earth, rocks or any other materials.

The machine consists of an engine that propels a rotor using two belts. On the rotor there are two blades installed. Via an in-feed tube the cut wood is introduced into the rotor where the material is shredded. The shredded material is then discharged via the output tube. (An optional turnable output tube can be installed and allows you to change the direction of the output).

On the rotor housing one counter blade is installed.

4. ASSEMBLY INSTRUCTIONS

4.1 Assembly of the output tube

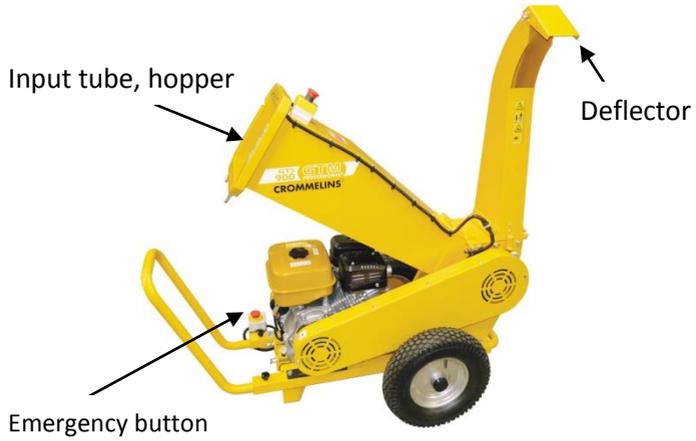
Put the output tube on top of the output hole of the rotor housing (Fig 5). Take the 2 long allen bolts (M8x25) and 2 short allen bolts (M8x16), and 4 spring washers to fix the output tube to the rotor housing (Fig. 6). The long allen bolts are used on the back of the machine, the short allen bolts are used on the front side of the output tube (facing the input tube). Tighten firmly. It doesn't matter how you orientate the output tube. This is a user decision. Both directions are possible. This allows the user to choose the output direction (Fig 7a and Fig 7b).



4.2 Assembly of the handle

Assemble the handle on the chassis. Put the long bolts with handle through the chassis and through the handle. Tighten firmly.

5. CONTROLS



6. INSTRUCTIONS FOR USE

6.1 Preparation

Check that the machine is assembled according to the assembly instructions. Check following points before using the machine:

- No damage to the machine
- All bolts and nuts tightened firmly
- Oil level of the engine



Always respect the safety and environment instructions!



Before starting the machine, always check that there are no woodchips in the rotor. These chips can block the rotor, making it impossible to start the engine.

6.2 Starting the engine

Before starting the engine, execute following steps:

- Open the fuel valve.
- Close the choke handle.
- Open the throttle valve for 1/3.
- Verify that the emergency button is not active. (see chapter 6.5)
- Verify the position of the deflector. (see chapter 6.6)
- Put the on/off switch in the “on” position. (not applicable for electric start machines)

Pull the starter rope (depending 3 to 6 times) to start the engine.

When the engine is running, push the choke handle back to the normal position. If you leave the choke handle open too long, you will drawn the engine.

Let the engine run idle for at least 30 seconds before opening the throttle handle.

The machine is now ready for use.



Always start the machine idle (without load). Make sure that the input tube is empty and that there are no woodchips in the rotor.

6.3 Chipping/shredding

Put the branches in the input tube until the wood chipper starts pulling the branches into the machine. Release the branches.

When shredding branches with a big diameter, don't put too much branches at once. Make sure the speed of the engine doesn't drop. Cut side branches thicker than 3cm off from the main branch and gradually feed them into the machine separately.

Advice: The hardness of the wood depends on the wood type, the time between pruning and chipping and how dry the branches are. The machine performs best if the branches are chipped right after pruning.

 Check the torque of the blade bolts every two hours. If needed adjust the torque! (see chapter 7.5)

6.4 Stopping the machine

Make sure the machine is completely empty before stopping the engine. After feeding the last branch into the machine, let the machine turn for a couple of minutes. Then you can switch the machine off using the on/off switch.

 Use the emergency button in case of unexpected situations.

6.5 Emergency stop button

The emergency stop button is located on the chassis on the side of the input (Fig 8). The button can be operated by foot or hand. Push the emergency stop button by pressing the button. The engine will stop immediately. To release the emergency stop button, turn the red button. Within half a turn, the button is released and it will be possible to start the machine again.



6.6 Deflector

The deflector guides the woodchips so they end up on a pre defined place. The angle of the deflector can be changed by the wing nut.

 Never stand in front of the output of a wood chipper when the engine is turning.

6.7 Blocking of the rotor

It is possible that the rotor blocks because the rotor was not empty before stopping the engine or the emergency push button was pressed (leaving woodchips inside the rotor) or because the engine has stopped due to overloading the chipper with too many branches, etc.

To de-block the motor, follow these steps:

Put the on/off switch in the "off" position. Remove the input and output tubes. Remove the bracket from the bearing housing by loosening the two bolts. The black cover can now be removed (Fig.9). Use the supplied key and slide it over the shaft of the rotor (Fig.10). Twist the key up and down and remove the woodchips between the blades on the rotor and the counter blade.





Use a branch or a tool to remove the woodchips between the blades. Never use your hands. Be careful! The blades are very sharp and can cause serious injuries. Assemble the output as explained in chapter 4.1.



Always check the blades after a jam. Replace the blades immediately when damaged. Using damaged blades is very dangerous.

6.8 Blocking of output

When too much wet material is put into the input, it is possible that the output jams. To empty the output tube, follow these steps:

Put the on/off switch in the “off” position. Disassemble the output tube from the machine and remove all the material inside the output tube. Remove all the material on top of the rotor. Also remove the material inside the rotor to prevent the machine from blocking during start up.



Use a branch or a tool to remove the woodchips between the blades. Never use your hands. Be careful! The blades are very sharp and can cause serious injuries. Assemble the output as explained in chapter 4.1.

6.9 Moving the machine

The machine is equipped with a bumper. Put the machine in a van or on a trailer. Make sure the bumper is touching a vertical flat surface. Now use straps to tie down the machine. Use the chassis to attach the straps to the machine. Check that the machine can't move. Never use the input or output tube to strap the machine down.

7 MAINTENANCE

Before you start any maintenance activities, always take following precautions:

- Stop the engine and let the engine cool down,
- Remove the starter plug cap,
- If the machine is equipped with an electrical start system, remove the key from the contact and disconnect the battery.



The GTS900 consists out of parts with a weight over 20kg. Never lift these parts alone. Ask someone to help you lift these parts.

- Rotor housing +/- 20kg
- Engine +/- 20kg
-

7.1 Cleaning



Do not clean the machine with high pressure water.

7.2 Verification of the emergency stop button

Start the machine as described earlier. Do not put any material in the input (hopper). Push on the emergency button. The machine should stop. Release the emergency button as described in chapter 6.5. It is now possible to start the machine again. Execute this check before each use.

7.3 Replacing and adjusting the belts

The belts only need to be replaced when they are worn or damaged. Inspect the belts at least 2 times a year.

Remove the cover from the belt housing (bolts in the circles, Fig 11.1). Loosen slightly the bolt that fixes the belt housing to the rotor housing (Fig 11.2). Unscrew the bolts fixed horizontally to the engine. (Fig. 11.3). Loosen slightly the bolts that fix the engine on the chassis (Fig 11.4). Move the engine block in the direction of the rotor. Now the old belts can be removed the new ones can be fitted.

Note that once the belts are removed, it is easy to check the distance between blades and counter blade, because the rotor can turn freely.



Fig. 11.1



Fig. 11.2



Fig. 11.3

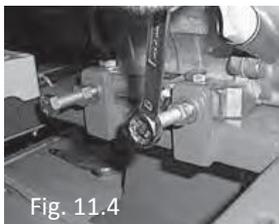


Fig. 11.4



Fig. 11.5



Fig. 11.6

Tension the belts by moving the engine block away from the rotor and, once the correct belt tension is found, block the engine position by screwing tight the 4 bolts to the chassis. Once you have got the right tension, check that the pulleys are in-line. You can see this by holding a bar against the pulleys (Fig 11.5). You have reached the right tension when the belt can be pulled down $\pm 6\text{cm} / 2.5\text{ inches}$ (Fig 11.6). When new belts are fitted the distance between pulley spindles should be $\pm 670\text{ mm}$. Check after tensioning the belts that the pulleys are in-line again. Check that all bolts are tightened properly - pay extra attention to the bolt holding the belt housing to the rotor housing (Fig 11.2). Put the cover for the belt housing back in place and mount the input and output tubes.

After changing the belts, let the machine run for 5 minutes without load. While running without load, check the machine for loose bolts, unusual noises or vibrations. Now the machine is ready for use.

7.4 Greasing the bearing housing

There are 2 grease nipples on the machine, on both sides of the rotor house, on the bearing housings (Fig. 12.1 and Fig. 12.2). Slide a grease pump over the nipple and fill the bearing housing with universal grease.

REMARK: if you have problems reaching the grease nipple on the side of the belt cover, just loosen the bolt that holds the belt cover attached to the rotor housing. Now you can pull a little on the belt cover and now you should be able to fit the grease pump over the nipple. Don't forget to put the bolt back!

Grease the bearing housings at least once a year, using universal grease.



7.5 Replacing the blades

The blades are dull when the material isn't pulled into the machine anymore. The blades should be replaced. The blades are sharp on both sides, so you can turn the blades around and use the other side of the blade. When this side becomes dull, a new pair needs to be installed or the blades can be sharpened.

To replace the blades, follow the steps below:



- Stop engine.
- Remove the hopper and output tube.
- Pull in the starter rope until you can see the blades through the input port on the rotor housing.
- Put a block of wood into the hole (Fig 13). Now pull the starter cord some more until the rotor is blocked.
- Now it is safe to remove the bolts and the blade.



Always use gloves when handling the blades.

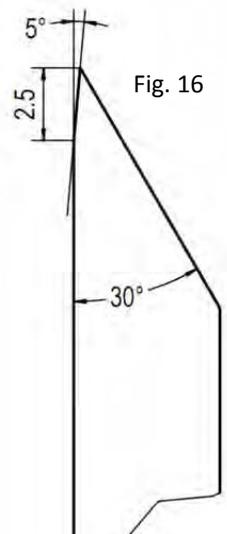
- Now repeat these steps to remove the second blade.
- In case of turning the blades, clean the blade thoroughly. No dirt should be on the bottom or top side of the blade.
- Clean the surface of the rotor where the blades should be mounted. These surfaces should be spot clean.
- Before mounting the blades on the rotor, inspect the blades for damages. Never install damaged blades. In case of damaged blades and or doubt, contact your service dealer.
- Before putting the bolts, add a little Loctite 243 on the side of the bolt.
- Now the blades can be mounted on the rotor. First tighten the bolts manually, to prevent damaging the thread on the rotor. Then a tool can be used to tighten the bolts. Don't forget to block the rotor before using tools.
- Tighten the bolts with a torque wrench up to 80Nm for the cutting blades (Fig 14).
- After installing the blades, check the gap between the blades and the counter blade. The gap should be no smaller than 0.5mm and not bigger than 0.95mm. The best way to check the gap is when the counter blade is in the middle of the grinded surface of the blade.



This adjustment is very critical for the good operation of the machine. If you experience any trouble during this procedure, you could also remove the belts. In this case the rotor can move freely.

- When the distance between the blades is not according the above mentioned distances, the counter blade needs to be adjusted. Un-tighten the bolts from the counter blade, do not remove the bolts completely, just un-tighten them a bit. Adjust the position of the counter blade and check the distance between the blades. When the gap is according to specifications (0.5 - 0.95mm), tighten the bolts. Check the gap once more. Now put the bolts from the counter blade with a torque wrench up to 50Nm.

When both sides of the blades are dull, the blades can be sharpened again.





Always ask an experienced technician to sharpen the blades.



Don't sharpen a damaged blade. Using damaged blades can lead to dangerous situations.



Never use a grinder that doesn't guarantee a straight sharp edge.
Never use a grinder that can change the alloy (soak out iron)

When grinding, respect the angles shown in figure 16:



When the blades have been sharpened again, and they are mounted onto the machine, make sure the blade bolts don't touch the counter blade. In case of doubt, replace the blade with a new one.

7.6 Replacing motor oil

Please refer to Subaru EX27 engine user manual.

7.7 Engine maintenance

Please consult the engine manual of the engine manufacturer.

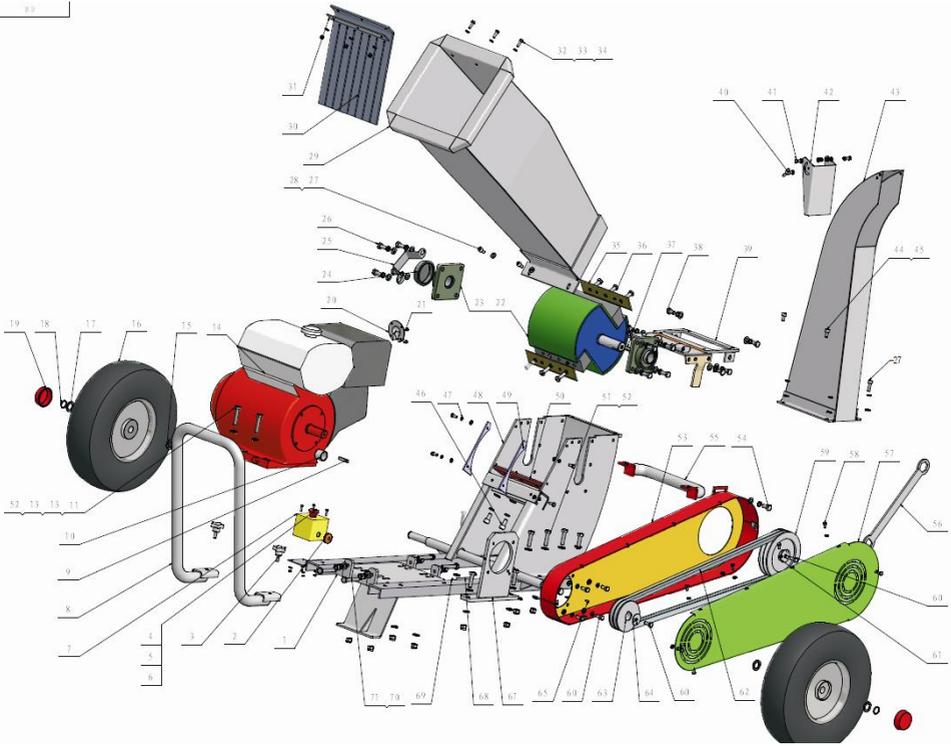
8 TECHNICAL SPECIFICATIONS

TYPE	GTS900
Engine	Subaru EX27
Starter	Recoil
Displacement	265 cc
Power	9 hp, 6.6kw
Fuel	Unleaded
Fuel tank capacity	5.6 litres
Oil sensor	Yes
Max. diameter branches	55mm
Input height	1 m
Input dimensions	25 x 25 cm
Output height	138cm
Output direction	side
Deflector	90° adjustable
Emergency stop	yes
Diameter wheels	40 cm
Wheels	onballbearings
Blades	2+1 counter blade
Dimensions (l x w x h)	125 x 67 x 138 cm
Weight	132kg

9 TROUBLE SHOOTING TABLE

Problem	Cause	Solution
The woodchipper does not perform properly: the wood is not pulled in by the rotor itself. The chips do not have the same size	<ul style="list-style-type: none"> - The blades are worn too much - The diameter of the branches inserted into the machine is too large - The gap is too big between the fixed blade and the counter blade: the correct gap is between 0,5mm and 0,95mm. 	<ul style="list-style-type: none"> - Reverse or sharpen or change the blades. (chapter 7.5) - Remove branches thicker than 8,5 cm - Adjust the gap between fixed blade and counter blade: the correct gap is between 0,5mm and 0,95mm. (see chapter 7.5)
The engine does not start/ the engine shuts off by itself	<ul style="list-style-type: none"> - Electrical problem with the engine - No fuel - No or not enough oil in the engine (the oil should be level with the threads of the filler hole.) 	<ul style="list-style-type: none"> - Check that the start-switch on the engine is on "on" or "1". - Check if the emergency switch is de-activated. - Check oil and fuel levels. If necessary: Contact your dealer
The machine jams during use. The engine will not start/turn because the rotor is jammed	<ul style="list-style-type: none"> - The diameter of the branch is too big - There are unacceptable materials such as stones or metal in the input tube 	<p>Shut off the engine and remove the key from the start switch. Remove the cap from the rotor-axle. Turn the rotor a few degrees counter-clockwise by means of the de-blocking tool. Block the rotor by blocking this tool on the rotor axle behind the wheel axle. Remove material from the input tube by means of a stick or tool and start the machine again. If necessary, change the blades.</p> <p>NEVER PUT YOUR HAND INTO THE INPUT TUBE OR ROTOR.</p>
The machine does not throw out chips any more. The output tube is jammed	Too much wet material (leaves, grass, rotten material) has been fed into the machine	<p>Shut off the engine, remove the spark plug cap. Block the rotor-axle by blocking the special spanner behind the wheel axle. Dismount/remove the output tube. Do not touch the blades, even if you are wearing gloves! There is a high risk of cutting your hands badly. Remove debris with a stick or tool. Mount the output tube again, tighten the screws firmly. Remove the special spanner from the axle. Fit the cap on the rotor axle. Start the engine again.</p>

10 SPARE PARTS DIAGRAM



11 SPARE PARTS LIST

New Article Nr	NR	Description	Qty
M02-9001000-01	1	frame	1
M05-3005000-01	2	feed through coil $\phi 28 \times \phi 8$	1
S01-M08020S-PN	3	star head bolt M8*20	2
S01-M04016P-FN	4	pan head screw	1
S04-0M0409P-IR	5	washer 4	1
S03-M04000N-ON	6	hex nut M4	1
E02-SPCOE01-01	7	emergencyswitch	1
M02-9002000-01	8	handle	1
M01-3003000-01	9	engine shaft key	1
M01-3002000-01	10	bush engine shaft	1
S01-M10050N-FN	11	bolt M10*50	1
S04-0M1002S-IR	12	spring washer M10	1
S04-0M1002P-IR	13	washer 10	1
M01-3011000-01	15	washer	1
C05-R164008-01	16	wheel 16" * 4.0" - 8	1
M01-3012000-01	17	washer	1
S09-O180000-00	18	circlip	1
M05-3002000-01	19	cap of wheel	1
M03-301500H-01	20	cover of the muffler	1
S01-M04005S-FT	21	tapping screw ST4.2*10	2
M03-0073000-01	22	rotor	2
S12-SSFY506-NN	23	bearing + housing FY506M	1
M05-3001000-01	24	cap bearing	1
M03-3013000-01	25	lock washer	1
S01-M10025N-FN	26	bolt M10*25	2
S01-M08020N-FN	27	screw M8*20	1
S04-0M0816P-IR	28	washer 8	1
M03-9001000-01	29	hopper	1
M05-9004000-01	30	rubber cover	1
M05-9003000-01	31	strip 3 mm	1
S01-M06020N-FN	32	hex headed bolt M6*20	1
S04-0M0816P-IR	33	washer 6	2
S03-M06000L-ON	34	hex locknut M6	6
M03-9016000-01	35	rotar blade	2

12 SPARE PARTS LIST CONT...

New Article Nr	NR	Description	Qty
S01-M10030X-FN	36	blade bolt	2
M01-3004000-01	37	rotor shaft key	4
S01-M10016N-FN	38	bolt M10*16	4
M03-9006000-01	39	top of the box	4
S01-M06016W-PN	40	wing screw M6*16	4
S01-M06016N-FN	41	bolt M6*16	23
M03-9007000-01	42	deflector	51
M03-9005000-01	43	conveyor	2
S01-M08016J-FN	44	screw M8*16	2
S04-0M0825L-IR	45	spring washer M8	2
S01-M10020N-FN	46	screw M10*20	4
S04-0M0615L-IR	47	spring washer	8
M03-9002000-01	48	shredder box	4
M03-9012000-01	49	rotor protector	10
M03-3017000-01	50	counter blade	3
S01-M10040N-FN	51	bolt M10*40	23
S03-M10000L-0N	52	hex locknut M10	5
M03-9003000-01	53	belt cover	7
S01-M10020N-FN	54	bolt M10*20	1
M02-9003000-01	55	bumper	6
M03-3014000-01	56	rotor deblocking tool	2
M03-9004000-01	57	top belt cover	10
S01-M06012N-FN	58	bolt M6*12	3
M07-3146000-01	59	pulley 146	4
S01-M08020N-FN	60	bolt M8*20	10
M03-3026000-01	61	safety ring for rotor	14
S07-A661709-LP	62	V-belt A 1709 L4/13*1676L.A66	1
M03-3025000-01	64	safety ring for engine	1
S01-M05010J-FS	65	socket hex holding screw	1
M03-9009000-01	67	silent block	2
M03-9018000-01	68	production serial number plate	4
S13-AL32090-00	69	rivet ϕ 3.2x12	4
S03-M10000L-0N	70	hex nut M10	1

Consult the CROMMELINS Machinery warranty leaflet (supplied with your new product) for full details and a list of service dealers for this product, also available online at www.crommelins.com.au

CROMMELINS PRODUCTS

WARRANTY

CROMMELINS WARRANTY EXPLAINED
Crommelins Machinery warrants free goods against defects in material and workmanship under normal use and service.

3 YEAR SUBARU INDUSTRIAL ENGINES WARRANTY
Subaru Industrial Engines come with a 3 year manufacturer's warranty.

2 YEAR CROMMELINS BRAND WARRANTY
CROMMELINS brand products covered by a Subaru Industrial Engine come with a 2 year manufacturer's warranty and a 3 year Subaru engine warranty.

1 YEAR OTHER PRODUCTS WARRANTY
All other Crommelins Machinery products including flexible drive products and high pressure pumps come with a 1 year manufacturer's warranty.

CONSUMER ADVICE
Any claim under these warranties must be made within warranty period from the date of purchase of the product.

CONTACT INFORMATION
Crommelins Operations Pty Ltd
15A Crommelins Avenue
and Crommelins Machinery
ADEL 11 008 88166
PO Box 102, BIRCHTON VIC 5202
PH: (08) 9351 5388
Fax: (08) 9351 5381
enquiries@crommelins.com.au

CROMMELINS MACHINERY
Perth Sydney Brisbane Melbourne Adelaide

WARRANTY
IMPORTANT WARRANTY DETAILS ENCLOSED

3 YEAR
Manufacturer's warranty on SUBARU Industrial Engines

2 YEAR
Manufacturer's warranty on CROMMELINS brand products fitted with a SUBARU Industrial Engine

1 YEAR
Manufacturer's warranty on all other Crommelins Machinery products, flexible drive products and high pressure pumps

www.crommelins.com.au

NOTES

A series of 20 horizontal dotted lines for writing notes.

NOTES

A series of 20 horizontal dotted lines for writing notes.