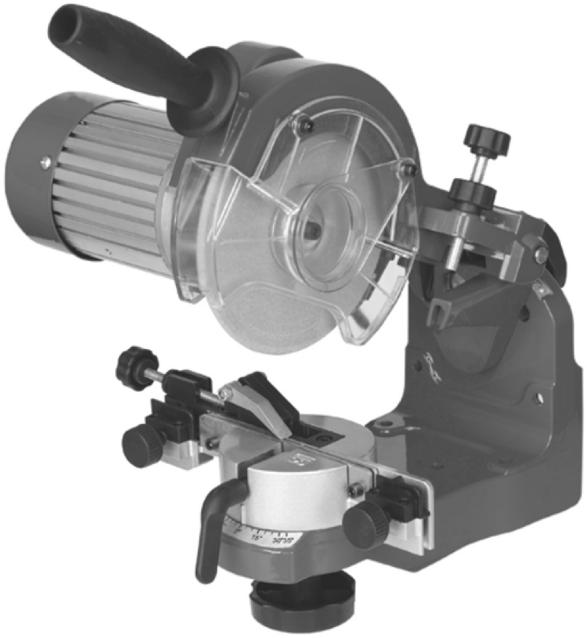
Chain Saw Sharpener

Instruction Manual



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10. mounting screw (10a/10b)
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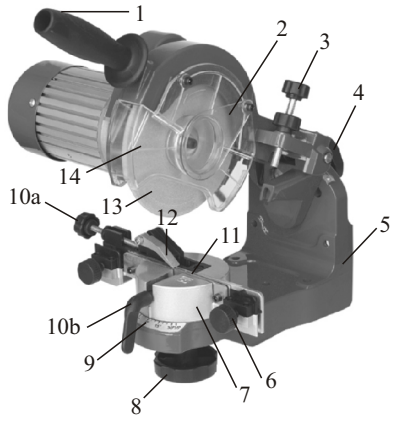


2.Technical Data

Type	
Supply voltage	230 Volt/50 Hz
Motor rating P1	230 W
Rated speed	3000 min-1
LWA/LPA	85/72 dB (A)
Weight	Ca.5,8kg
Vibration	3,21 m/s2

3. Safety Instruction

Read the instruction manual carefully before the first use of the machine.

Protect the machine from moisture, rain and dust.
FOR US TO SECURE THE HIGHEST DEGREE OF SAFETY, CONFORM TO THE FOLLOWING INSTRUCTIONS:

* Do not use the machine for unsuitable purposes.
* When using the saw-chain grinder outdoor, you should always use a weather resistant extension cable to connect it of a minimum diameter of 1.5m ㎡ with the splash-proof plug and socket.
* The noise level in the working area is above 85dB(A). Therefore, wear ear protection-hearing loss is imminent.
* To protect your health at a grinding job, always use a dust protection mask and protective goggles!
* Always unplug the machine before any work on the machine (cleaning, grinding disk replacement etc.)
* Take care to have the saw-chain to be ground secured as appropriate for it not to slip out，
* It is your own interest to keep your machine clean at any time and after you finish a grinding job, check the machine for manage.
* Always keep your saw-chain grinding machine clean.
* Do not use any caustic to clean the plastic parts.
* Do not use the machine and do not work on it in proximity of inflammable liquids and vapours thereof.
* Unplug the machine any time you replace a part or clean the machine.
* Protect the power cable from any damage the cable may be damaged by oil or acid.
* Important notice! Observe any national safety regulations regarding installation, operation and maintenance.
* Upon having completed the job, unplug the saw-chain grinding machine from the mains.
* Protect your eyes and colleagues from jumping particle and chips.
* Working gloves will protect your fingers and skin from cutting injuries.
* Always carry the power cable to the machine from behind.
* Store the machine in a place inaccessible to children.
* Always hold the machine with both the hands when working and mind safe footing and posture.

CAUTION!
Abide by the essential safety measures of protection from electric shock, accident and fire prevention. Read all these instructions before you get down to the use of the electric machine and follow them. Keep the safety instructions at a safety place for future reference..

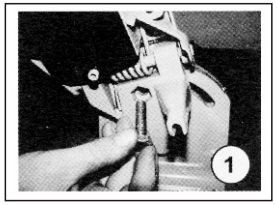
Safe work
* Keep your workplace tidy.
* Always make allowances for the environmental effects. Do not expose the electric tools to rain. Do not use them in moist or wet areas. Take care of sufficient lighting. Do not use them in proximity of flammable liquids or gases.
* Get protected from electrical shock. Avoid any bodily contact with grounded objects (such as pipes, radiators, stoves and refrigerators).
* Prevent the children from access.
* Do not let other person to touch the machine or the cable. Prevent any unauthorized persons from access to the working area.
* Store the machine at a safe place. When off the use, the machine should be kept at a dry, elevated locked place out of the reach of children.
* Do not overloaded the machine.
* Use the correct machine. Only use the machine for the purposes described in the instruction manual.
* Wear proper working clothing!

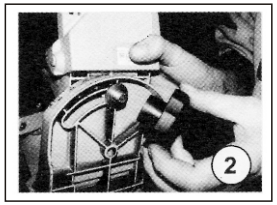
Do not wear any wide garments and jewellery that might be caught by the moving machine parts, for working outdoors, rubber gloves and non-kid shoes are recommended. If your hair is long, wear a hairnet.Use protective goggles.
* Wear a breathing mask when engaged in a dust-producing job.
* Do not use the cable for any purpose it has not been designated for.
Do not use the cable for carrying or hanging of the machine. Do not use the cable to pull out the plug from the socket. Protect the cable from excessive temperatures, oil, and sharp edges.
* Avoid any abnormal posture. Mind safe footing and keep balance at any time.
* Take due care of your machine.
Abide by the maintenance and grinding disk replacement regulations.
Check the machine cable regularly and when it is found to be damaged, have it replaced by a skilled electrician.
Check the extension cables regularly and replace them if damaged.
Keep the handle dry, free of any dir, oil and grease.
* Unplug the machine, if it is out of use, prior to the maintenance and tools replacement, e.g.grinding disk.
* Remove any spanners from the machine.
Before switching on, check to see that any wrenches and adjustment tools were removed.
* Avoid an unintended switching.
Use only permitted and properly marked extension cables for working outdoors.
* Check the machine for possible damages.
* Before using the machine, you should check any protection devices and any parts showing slight damage to see that the function intended is perfect. Check the moving parts move freely, do not drag and are not damaged. Any parts should be installed properly to comply with the conditions of the machine safe operation. Damage protection devices and parts should be repaired in a recognized professional workshop and replace unless the instructions for use specify otherwise. Damaged switched should be replaced by the customer service workshop. **Do not use a machine with a defective ON/OFF switch.**

CAUTION!

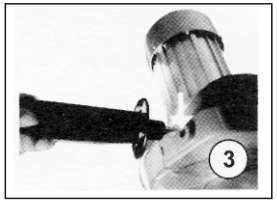
This machine is in compliance with any respective safety provisions. Any repairs shall be done by professionally qualified persons and only genuine spare parts should be used. The provision not being observed, the operator is in a risk of injury.

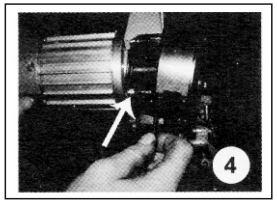
4.Assembly

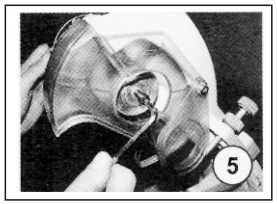




The saw-chain grinding machine is delivered pre-assembled. One part consists of the base, on which the chain guide is located. The other part is a bearing arm with the motor and handgrip.
The assembly shall be performed with the machine unplugged!
The machine design provides either for a desk installation or wall mounting.
When installing it on the desk, put the machine on the edge of the desk and screw it to the desk using the holes in the base.
When mounting on the wall, use the respective holes in the vertical part of the base (here, a distance from the wall should be kept or spacers should be used for the access to the rear set screw to be preserved).
After the desk top installation, fit the arm in the base inserting the pilot pin and securing it with a hexagonal screw (Fig.1)





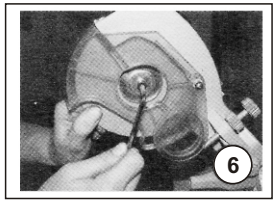


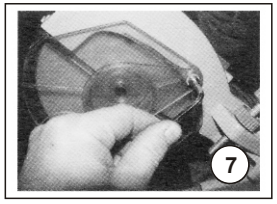
Now, it is possible to fit a washer on the rear side screw and screw the setting and screw the setting wheel on. (Fig.2)
Screw the supporting arm control holder on the screw in the grinding disk body (Fig.3)
Fit the grinding disk enclosure in using the supplied screws and a respective wrench (Fig.4).

Tip:
When mounting on the wall, take care to mount the machine at a height of 120-130cm from the floor to avoid working at eye height!

To be able to install the disk, it is necessary to unscrew the auxiliary flange (Fig.5) .

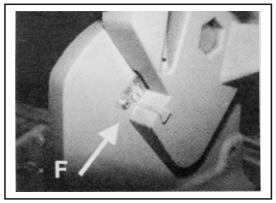
5.Grinding Disk Assembly



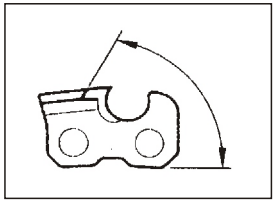


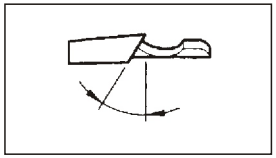
After you have removed the ancillary flange, you can insert the grinding disk in the body from below. See that the ancillary flange and the disk abut against each other precisely. (Fig.6).
Do not tighten the screws too much to avoid any damage to the disk. The grinding disk on the hub torque is 7Nm. Where practicable, use a torque spanner. Now, the grinding disk additional guard should be fitted on (Fig.7).
Check the correct bottoming of the disk: in should not move across and lengthwise. Now, with the grinding disk properly installed, a trial may be performed. Stand by the machine from the side and watch out for anybody dwelling in the working area.
If the grinding disk is vibrating or shows otherwise incorrect run, promptly switch off and unplug the machine before you attempt clearing the fault.
The machine has a zero voltage circuit breaker, which is disabled on outage and will prevent any restarting of the machine after the power supply is restored.
Using the sharpening stone and a clamping plate, it is possible to sharpen the disk to obtain the required profile. In this case, be careful at work.

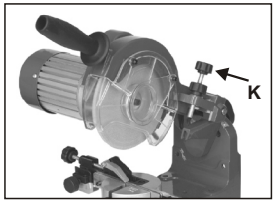
6.Grinding



Before the start of grinding, the chain should be conducted between both the attachment guides. Now, the tooth be sharpened first should be taken against the stop. Watch out for the sharpening angle to correspond to the guides position. The type of the chain to be sharpened should be determined using the sharpening block provide or the table p.9. There, you can find out the cutting thickness, angles and dimensions.







Loosen the mounting screw (10b) and place the cutting chain in the guide rail between the guide plate (11).
Fold the chain stop (12) down and pull the chain toward the back until the cutting link to be ground rests against the stop.
Set top plate angle by means of the set screw (P.2,P.4) and it may be also read on the scale (F). The vice angle should be set up by set screw .
With the clamping screw adjusted and the vice angle set up (Notice: RH and LH teeth to be differentiated) and preset the top plate angle, set the distance with the help of the mounting screw (10a), lead the grinding disk down to the tooth by soft pushing the supporting strut. The grind depth may be set by set screw (K) .

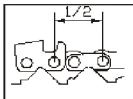
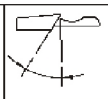
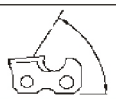
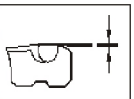
Tighten the mounting screw (10b), now, the machine may be switched on and the saw-chain grinding may be started by a careful thrust on the grinding disk. Adjust the pressure as necessary. Mark the start of grinding e.g. with a piece of chalk and grind all the teeth in one direction, then turn the clamping screw (mind the angle) and grind the teeth in opposite direction.
With warn chains, the lateral guide position shall be set for the grinding disk not to touch the guide.
Avoid any strong thrust as the teeth might collide and the chain would wear and tear too fast.
Notice: Never grind any driven parts.

7.Grinding Depth Delimiter

Find out in Table (p.9) what is the size of the depth delimiter back grinding.
Grinding the depth delimiter, the screw clamp position shall always be 0° .
Set the supporting strut and holder at 90°
The grind depth may be set using set screw K.

8. Symbols machine

9. Dimensions

										
Chain Pitch	Gauge	OREGON	STIHL	SANDVIK	CARLTON	Vise Angle	Top Plate Angle	Tilt Angle	Wheel Width	Depth Gauge
1/4"	0.050"/1.3mm	25AP	13RM	50K		30°	60°	10°	1/8"/3.2mm	0.025"/0.63mm
0.325"	0.050"/1.3mm	20LP	23RS	50JLG	K1L	25°	60°	10°	1/8"/3.2mm	0.025"/0.63mm
0.325"	0.058"/1.5mm	21LP	25RS	58JLG	K2L	25°	60°	10°	1/8"/3.2mm	0.025"/0.63mm
0.325"	0.063"/1.6mm	22LP	26RS	63JLG	K3L	25°	60°	10°	1/8"/3.2mm	0.025"/0.63mm
0.325"	0.050"/1.3mm	20BP	23RM	50J	K1C	30°	60°	10°	1/8"/3.2mm	0.025"/0.63mm
0.325"	0.058"/1.5mm	21BP	25RM	58J	K2C	30°	60°	10°	1/8"/3.2mm	0.025"/0.63mm
0.325"	0.063"/1.6mm	22BP	26RM	63J	K3C	30°	60°	10°	1/8"/3.2mm	0.025"/0.63mm
0.325"	0.050"/1.3mm	95VP			K1N	30°	60°	10°	1/8"/3.2mm	0.025"/0.63mm
0.325"	0.050"/1.3mm	95R				5°	50°	10°	1/8"/3.2mm	0.030"/0.76mm
0.325"	0.058"/1.5mm	M21LP				25°	60°	10°	1/8"/3.2mm	0.025"/0.63mm
0.325"	0.063"/1.6mm	M22LP				25°	60°	10°	1/8"/3.2mm	0.025"/0.63mm
3/8"	0.050"/1.3mm	72LG	33RS	50AL	A1LM	25°	60°	10°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.058"/1.5mm	73LG	35RS	58AL	A2LM	25°	60°	10°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.063"/1.6mm	75LG	36RS	63AL	A3LM	25°	60°	10°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.050"/1.3mm	72LP	33RS	50ALG	A1L	25°	60°	10°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.058"/1.5mm	73LP	35RS	58ALG	A2L	25°	60°	10°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.063"/1.6mm	75LP	36RS	63ALG	A3L	25°	60°	10°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.050"/1.3mm	72DP	33RM1	50AG	A1EP	35°	60°	0°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.058"/1.5mm	73DP		58AG	A2EP	35°	60°	0°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.063"/1.6mm	75DP	36RM1	63AG	A3EP	35°	60°	0°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.050"/1.3mm	72RD				10°-15°	50°	10°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.058"/1.5mm	73RD				10°-15°	50°	10°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.063"/1.6mm	75RD	36RMX			10°-15°	50°	10°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.058"/1.5mm	M73LP				25°	60°	10°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8"	0.063"/1.6mm	M75LP				25°	60°	10°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8(90)	0.043"/1.1mm	90SG	63PMN		N4C	30°	50°	0°	1/8"/3.2mm-3/16"/4.7mm	0.020"/0.50mm
3/8(91)	0.050"/1.3mm	91VS	63PM	50R	N1C	30°	60°	0°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8(91)	0.050"/1.3mm	91VG	63PM1	50RG	NIC-BC	30°	60°	0°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
3/8(91)	0.050"/1.3mm	91R	63PMX			5°	60°	0°	1/8"/3.2mm-3/16"/4.7mm	0.025"/0.63mm
0.404"	0.058"/1.5mm	58L			B2LM	25°	60°	10°	3/16"/4.7mm	0.025"/0.63mm
0.404"	0.063"/1.6mm	59L			B3LM	25°	60°	10°	3/16"/4.7mm	0.025"/0.63mm
0.404"	0.058"/1.5mm	26/P		58B	B2EP	35°	60°	10°	3/16"/4.7mm	0.030"/0.76mm
0.404"	0.063"/1.6mm	27/P	46RSF	63B	B3EP	35°	60°	10°	3/16"/4.7mm	0.030"/0.76mm
0.404"	0.063"/1.6mm	59AC	46RM	63BC	B3S	35°	60°	0°	3/16"/4.7mm	0.030"/0.76mm
0.404"	0.063"/1.6mm	27R	46RMX	63BR	B3RM10	10°-15°	50°	10°	3/16"/4.7mm	0.030"/0.76mm
0.404"	0.063"/1.6mm	16LI	46RMH	1IC	B3M	35°	60°	10°	3/16"/4.7mm	0.050"/1.27mm
0.404"	0.080"/2.0mm	18H	49RMH	2HC	B5M	35°	60°	10°	3/16"/4.7mm	0.050"/1.27mm
3/4"	0.122"/3.1mm	11TI			G7S	35°	60°	10°	1/4"/6mm	0.070"/1.77mm

10. Assembly Drawing