

Technical data

	L 65	L 77
Engine	2-stroke with scavenging	2-stroke with scavenging
Piston displacement	65 cm ³	77 cm ³
Bore	48 mm	52 mm
Stroke	36 mm	36 mm
Engine lubrication	4 % oil-petrol mixture (1:25)	4 % oil-petrol mixture (1:25)
Crankshaft output	3,8 hp In accordance with the standards of the Swedish Institute for Agricultural Machinery	4,5 hp In accordance with the standards of the Swedish Institute for Agricultural Machinery
Engine speed at max. output	7500 rpm	8000 rpm
Ignition system	Bosch KDI	Bosch KDI
Ignition advance	24°	24°
Sparking plug	Bosch Wka 225 T36 Champion CJ 7 Y	Bosch 225 T36 Champion CJ 7 Y
Sparking plug gap	0,5 mm	0,5 mm
Contact breaker gap	0,3-0,4 mm	0,3-0,4 mm
Field breaking position	6-9 mm	6-9 mm
Carburetter	Tillotson HS	Tillotson HS
Fuel tank capacity	0,7 l	0,7 l
Oil tank capacity	0,35 l	0,35 l
Chain lubrication	Automatic (does not function when saw is idling)	Automatic (does not function when saw is idling)
Chain speed	19 m/s	19 m/s
Sawing chain (standard)	3/8" pitch, thickness of driving links 1,5 mm (.06")	3/8" pitch, thickness of driving links 1,5 mm (.06")
Weight, empty, including chain guide and chain	7,5 kg	7,6 kg

The saw must not be started unless the chainguide and chain are fitted. The reason for this is that the clutch might become screwed off, causing personal injury.

What is what on the saw

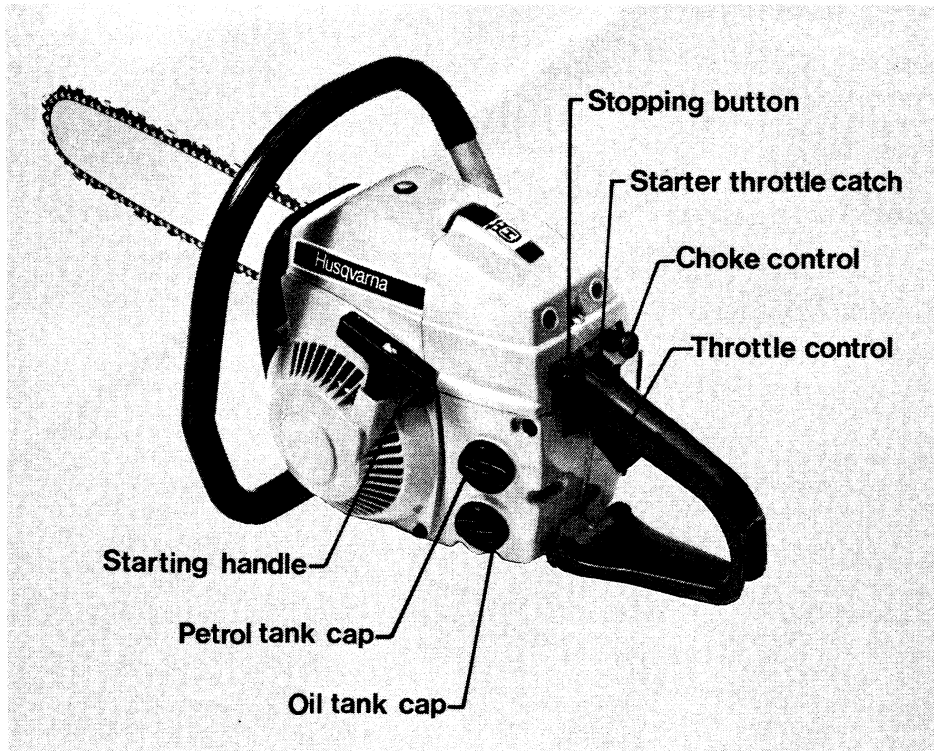


Fig. 1

WARNING

The saw must not be started unless the chainguide and chain are fitted. The reason for this is that the clutch might become screwed off, causing personal injury.

Assembling the chain guide and chain

1. Unscrew the two chain guide nuts and remove the chain guide casing and transport packing piece.
 2. Place the chain guide in position and adjust the chain tensioning screw so that the chain guide comes into the rearmost position.
 3. Place the chain over the drive sprocket and in the groove on the chain guide. The cutting edges of the sawing teeth should face towards the nose of the chain guide. Check that the chain tensioning dowel locates properly in the hole in the chain guide (see arrow). Tension the chain so that it does not sag along the bottom of the chain guide.
 4. Check again that the chain tensioning dowel is properly located in its hole. Place the chain guide casing in position. Fit the chain guide nuts, but not so hard that the chain cannot be tensioned.
 5. Tension the chain, but not harder than so that it can be pulled round by hand. Tighten the chain guide nuts.
- N. B. Do not forget to "run-in" the chain. Please refer to the chain manufacturer's recommendations.

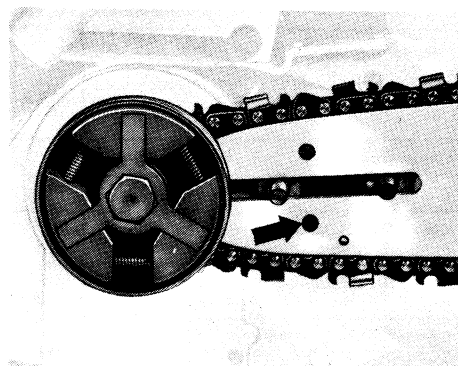


Fig. 2

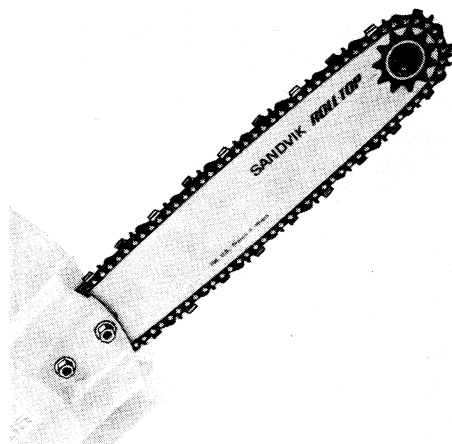


Fig. 3

CHECK THE CHAIN TENSION
FREQUENTLY!

Maintenance schedule

	Regular checks and adjustments	Daily main-tenance	Weekly main-tenance	Monthly main-tenance	See picture no.	Remarks
Sharpening the chain	Touch up the chain every time you fill up with fuel					Please refer to the chain manufacturer's recommendations.
Chain tension	X				3	
Chain lubrication	X					
Clean the air filter		X			4	Rinse the filter in petrol or paraffin.
Clean the chaingroove and oil hole in the chain guide		X			2	
Clean the body of the saw		X				Use a brush and rag moistened with paraffin.
Care of the guide and chain			X			See the manufacturers' recommendation.
Lubricate the clutch bearing			X		5	Use ball bearing grease.
Clean, check, and if necessary adjust the sparking plug			X		6	Sparking plug gap 0,5 mm.
Clean the oil strainer			X		7	
Clean the cooling fins			X		8	Use a stiff brush.
Clean the fuel tank				X		Wash out with petrol.
Clean the oil tank				X		Wash out with petrol.
Clean and check the starting device; change the starting cord if necessary				X	9-10	

Workshop overhauls

It often happens that chain saw owners use their saws until they break down for one reason or another. This is indefensible from an economic point of view. Such breakdowns frequently cause damage to other parts which do not normally get worn or broken. This results in higher spare parts costs than necessary. In the same way as all other machines, the chain saw must have regular preventive maintenance. The saw should therefore be handed to an authorized service workshop once every other month or after every 250 working hours. The workshop then carries out adjustments and checks of the fuel and ignition systems, tightening of bolts, inspection of gaskets, etc.

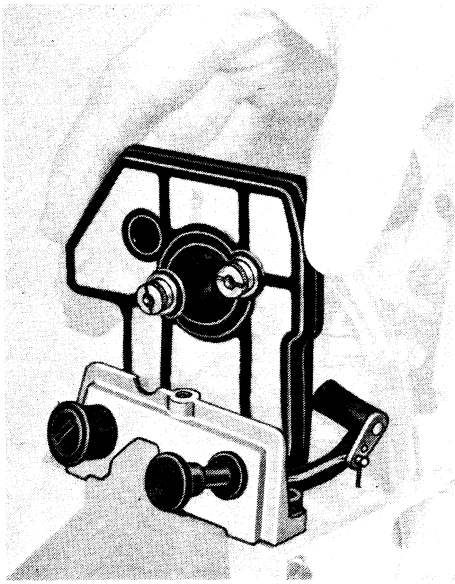


Fig. 4

Remove the air filter cover. Unscrew the filter retaining screws. Pull out the choke control. Lift up the filter. Wash the filter clean in petrol or with soap and water. In the latter case the filter must be wiped dry before refitting. It is a good idea to have two air filters which can be used alternately. Fitting is done in the reverse order to removing.

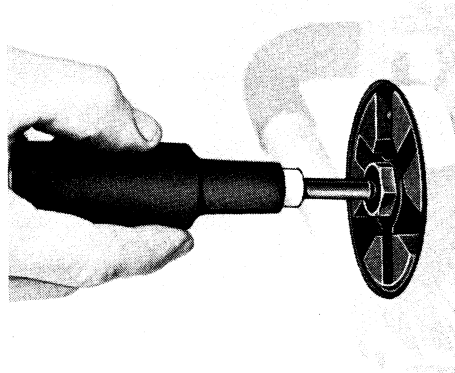


Fig. 5

The clutch bearing is lubricated with the same type of grease that is used for a chain guide with nose wheel i.e. ball bearing grease. Lubricating is done with a grease gun set. Remove the clutch casing. Force in grease through the hole in the centre of the clutch. Two strokes of the grease gun are sufficient, but check that the grease gun supplies grease when it is operated.

Screw out the sparking plug. Scrape off all carbon and deposits. Also clean the space between the porcelain rod in the middle and the socket.

Adjust the spark gap to 0,5 mm (0.02") as recommended. The gap should be measured with a steel wire, drill or similar. A feeler gauge is not suitable.

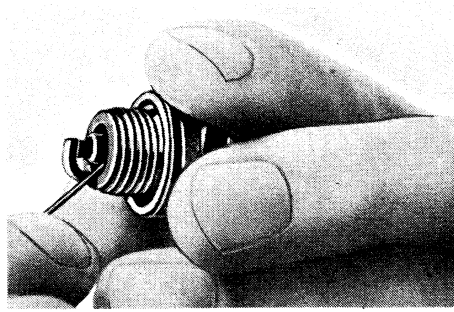


Fig. 6

The oil tank is most simply cleaned by washing it out with petrol or paraffin. This should be done before cleaning the oil strainer.

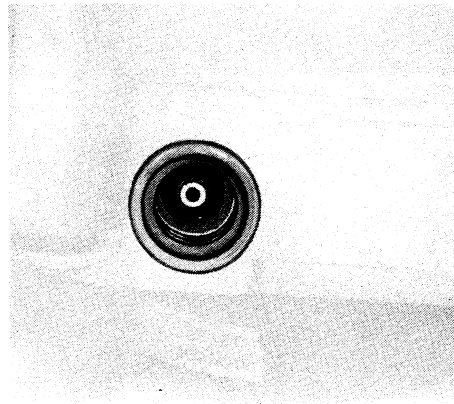
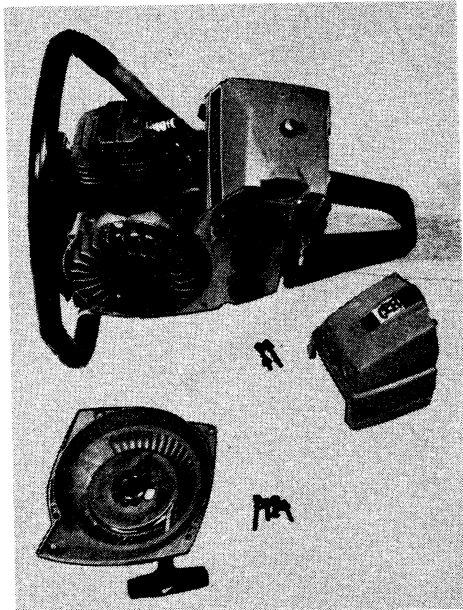
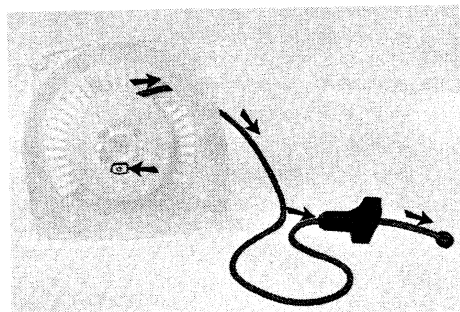


Fig. 7



Remove the chain guide casing, carburetter casing and starting device. Then remove the cylinder cover by unscrewing the two screws under the carburetter casing, after which the cover can be lifted off.

Fig. 8



To change the cord the starting device must be removed from the saw, after which the old cord is taken off. The new cord is threaded through the centre of the cord pulley from outside. (note: Only a genuine Husqvarna starting cord can be used.) The cord is then threaded through holes provided for the purpose in the starter housing and then through the starting handle and then secured by a double knot.

After this the cord is wound onto the cord pulley. The cord is then held still at the pulley and the torsion spring in the device tensioned 1 1/2-2 turns by turning round the cord pulley 1 1/2-2 times.

Fig. 9

Check that the starting device functions properly. Pull out the cord to its entire length and check that the spring does not reach the limit of its movement. It should be possible to turn the cord pulley at least a further 1/4 turn when the cord is pulled out fully.

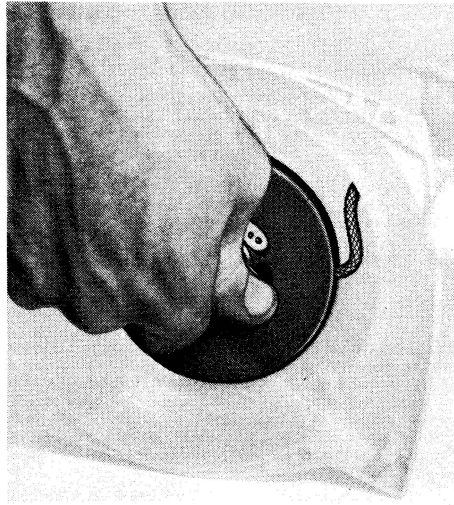


Fig. 10

Adjusting the carburettor

The carburettor has three adjusting screws: the throttle adjusting screw (S), high-speed needle (H) and low-speed needle (L).

The throttle screw should be adjusted as necessary, i. e. when the engine idling speed is too high or too low.

Idling should be adjusted so that it is fairly fast, about 2000-2200 r. p. m. Always make sure that there is a sufficient safety margin between idling speed and engaging speed. The adjusting screw is accessible through the left-hand hole in the cylinder casing. All adjustments should be carried out with the engine warm. Adjustment of the needles (H) and (L) is a very delicate operation and should only be done by specially trained personnel. In an emergency the following adjusting procedure can be adopted:

N. B. Clean the air filter and test the saw before making any adjustments to the needles (H) and (L).

1. Carefully screw in the needles (H) and (L) as far as they will go, but do not screw them in too hard, otherwise the carburettor body will be damaged.
2. Open both the needles by screwing them 3/4 turn to the left (anti-clockwise).

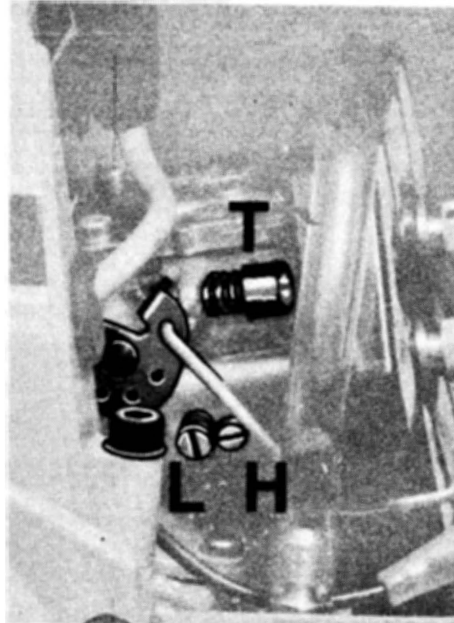


Fig. 11

In case of difficulties to obtain a proper idling, you should have the chain-saw checked by a workshop.

Fuel and lubricating recommendations

Engine lubrication

The engine is lubricated by mixing oil with the petrol. The mixture should be 1 part of oil to 25 parts of petrol, i. e. 4%. We recommend the use of high-quality engine oils intended for 2-stroke engines (2-stroke-oils).

Lubricating the chain guide and chain

For lubricating the chain guide and chain we recommend a chain lubricating oil with good adhering properties. During winter at air temperatures below 0°C (32°F), some chain lubricating oils are viscous. This can cause overloading of the oil pump, which can result in damage to the pump drive and pump parts. During cold weather it is therefore necessary to use a "winter grade" oil, or to dilute the oil so that it flows easily. Concerning the choice of oils and their suitability at different air temperatures, please refer to your Husqvarna dealer. On no account should waste oil be used as this can damage the oil pump.

Chain guide with nose wheel

A grease gun must be used for lubricating the chain guide nose wheel. A high-quality ball bearing grease should be used as the lubricant. Your Husqvarna dealer stocks suitable grease for this purpose in convenient packings for loading the grease gun directly. The chain guide nose wheel should be lubricated every time the chain saw is filled up with fuel. The chain guide should be placed on a flat surface and the nose wheel turned round at the same time as the grease gun is operated to make sure that the bearing is properly filled with grease. Concerning lubrication of the clutch bearing and other parts, please see under the heading "Maintenance and repair work".

MAKE A HABIT OF ALWAYS FILLING THE OIL TANK AND GREASING THE CHAIN GUIDE NOSE WHEEL EVERY TIME YOU FILL UP WITH FUEL!

Starting the saw

When the engine is cold

1. Pull out the choke control. Pull up the throttle control about halfway and push in the starting throttle catch. Release the throttle control but keep the catch pressed in. This locks the throttle control in a suitable position for starting.
2. Place the right foot on the plate under the rear handle. Grasp the front handle with the left hand. Press the saw firmly against the ground. Make sure that the sawing chain is not in contact with anything.
3. Grasp the starting handle with the right hand and pull out the starting cord slowly until the starting pawls engage. Then pull the starting handle sharply. N.B! Do not pull the starting cord right out or release the starting handle in the pulled out position, as this can cause damage to the casings and similar parts of the saw when the handle flies back.
It is usually necessary to pull out the starting cord twice to start the saw. If the saw does not start at the third attempt, push in the choke control before trying again.
4. Push in the choke control as soon as the engine has started. Pull up the throttle control to the full throttle position, when the catch disengages.

When the engine is warm

Use the same procedure as with a cold engine, but in this case do not pull out the choke control.
N.B. One of the commonest causes of difficulty in starting is that too many attempts are made with the choke control pulled out, which means that the engine becomes "flooded". This can easily be checked by removing and inspecting the sparking plug. If it is wet, this is what has happened, in which case it must be wiped dry. Make sure that the choke control is pushed in fully. Then pull up the starting handle repeatedly with the throttle control in the full throttle position and with the stopping button pushed in. Fit the sparking plug again and make a fresh attempt to start with the choke control pushed in and with the throttle control in the full throttle position. (The control can be held in this position with the toe of the right foot).