

Chainsaw

model 444

TECHNICAL SPECIFICATION

Displacement	44 cm ³	Fuel tank capacity	0.5 l
Bore	42 mm	Oil tank capacity	0.25 l
Stroke	32 mm	Sawing chain	0.325" pitch
Ignition advance	27°-28° before t.d.c. at 9.000 rpm	Guide bar	32 cm
Sparking plug	Bosch WS 7F/WS RF Champion CJ 7Y	Weight, empty incl. 32 cm guide bar, chain and chain brake	SE 6.0 kg SG 6.1 kg
Electrode gap	0.5 mm		
Carburettor	Diaphragm type Walbro HDC 51		

Operator's manual

WHAT IS WHAT ON THE CHAIN SAW?

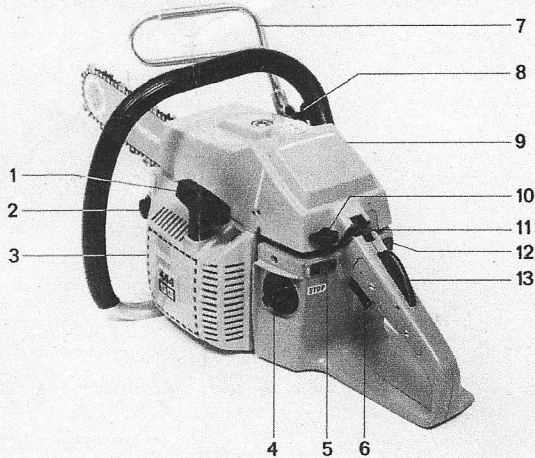


Fig. 1

- | | |
|----------------------------------|-------------------------------|
| 1. Starter handle | 8. Automatic chain brake |
| 2. Oil filler cap | 9. Cylinder cover |
| 3. Starter | 10. Choke control |
| 4. Fuel filler cap | 11. Starting throttle ratchet |
| 5. Stop switch | 12. Heating switch |
| 6. Throttle control | 13. Safety catch |
| 7. Safety handle for chain brake | |

ASSEMBLING GUIDE BAR AND CHAIN

- Undo the guide bar nut and remove the clutch cover and transport packing piece.
- Place the guide bar into its rearmost position. Make sure that the chain tensioning stud is properly into the hole in the guide bar.

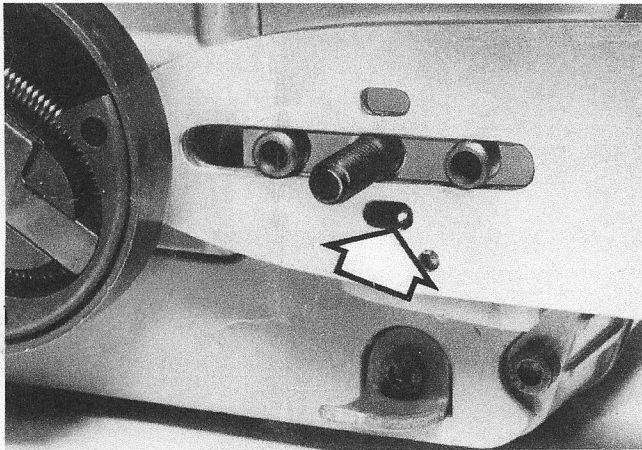


Fig. 2

- Fit the chain around the drive sprocket and in the groove of the bar. Start on the upper side of the guide bar. Make sure that the cutting edges of the sawing teeth along the top of the guide bar are facing towards the nose. Also check that the drive links go down properly into the drive sprocket.

ALWAYS TOP UP WITH FUEL AND CHAIN LUBRICANT AT THE SAME TIME

Mixing table		2%			4%			5%		
Litres of oil	Pints of oil	Litres of petrol	Petrol in Imp. gallon	Petrol in US gallon	Litres of petrol	Petrol in Imp. gallon	Petrol in US gallon	Litres of petrol	Petrol in Imp. gallon	Petrol in US gallon
0.2	0.35	10	2.2	2.6	5	1.1	1.3	4	0.8	1.0
0.4	0.70	20	4.4	5.2	10	2.2	2.6	8	1.7	2.1
1.0	1.76	50	11.0	13.2	25	5.5	6.6	20	4.4	5.2

As a rule the petrol mixture should be 1 part oil to 25 parts petrol (1:25 or 4%)

When using a special oil called two stroke oil, this shall be mixed 1 part oil to 50 parts petrol (1:50 or 2%).

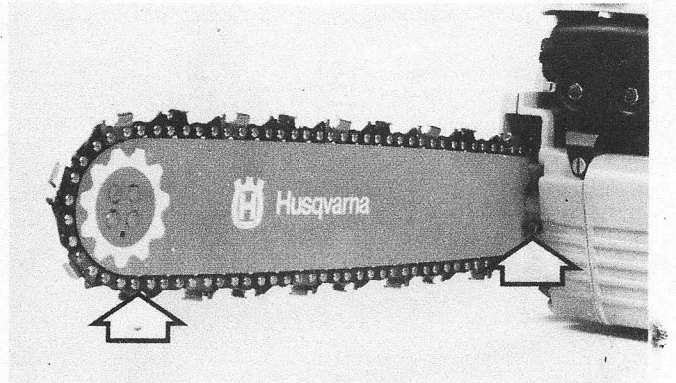


Fig. 3

- Tension the chain so it does not sag along the bottom of the guide bar. Check that the chain and guide bar fit properly. Fit the clutch cover and tighten the nut fingertight only. Pull the chain a few turns around by hand and see to, that it can move freely.
 - Tension the chain while holding up the bar nose. Do not tension the chain stronger than it can be pulled around by hand. Tighten the guide bar nut.
- NOTE!**
Do not forget to "run in" the chain and guide bar. Please see the chain manufacturer's recommendation.

CHECK THE CHAIN TENSION FREQUENTLY FOR OPTIMAL PERFORMANCE AND DURABILITY

FUEL AND OIL

The power plant of this chain saw is a two-stroke engine, that is run on a petrol- and oil mixture of certain proportions acc. to the table.

Do not use but a two-stroke oil of high quality, e.g. Husqvarna Two-stroke Oil, that is specially developed for chain saws.

NOTE!

No extra oil is needed in the petrol during the running-in period of the chain saw.

For lubricating the chain and guide bar we recommend a chain lubricating oil with good adhesive properties.

During the wintertime at air temperatures below 0°C (32°F) some types of chain lubricating oils are viscous. This can cause overloading of the oil pump, which can result in damage of the pump drive and pump parts. Under cold weather conditions it is therefore necessary to use a "wintergrade" oil which stays fluent even when cold. Concerning the choice of oil and its suitability at different air temperatures, please refer to your Husqvarna dealer.

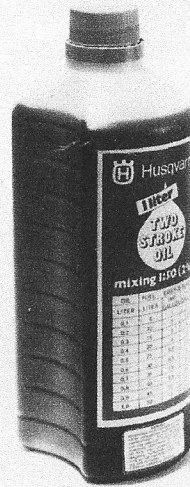


Fig. 4

NOTE!

On no account waste oil should be used as this can damage the oil pump.

ADJUSTING THE CHAIN BRAKE

Tension the brake lining of the chain brake by screwing in the nut clockwise (see fig. 5) until the chain cannot be pulled round by hand in its proper direction. Then loosen the nut approx. 4 turns. Now it shall be possible to pull the chain round easily without the brake lining being in close contact with the clutch drum.

The automatic chain brake actuator (Swed-o-Matic) shall be adjusted so that the distance between the handle and the set screw on the chain brake is approx. 5 mm (see fig. 6). A larger distance requires a greater force to make the Swed-o-Matic actuate.



Fig. 5

Check the chain brake function regularly.

A. Start the chain saw and release the brake (safety handle in forward position)

B. Open the throttle quickly. Now the chain is not supposed to rotate.

At correct adjustment the Swed-o-Matic is supposed to actuate at a load of 10–12 kp (2.2 lb) on the guide bar nose.

Check the adjustment as follows:

Keep the saw horizontally 35 cm (14") above a stump. The brake is supposed to release when the saw is pending, by its own weight, around the rear handle and hits the stump.

MAINTENANCE OF THE CHAIN BRAKE

Use the chain brake as a parking brake when moving the chain saw and when making short breaks.

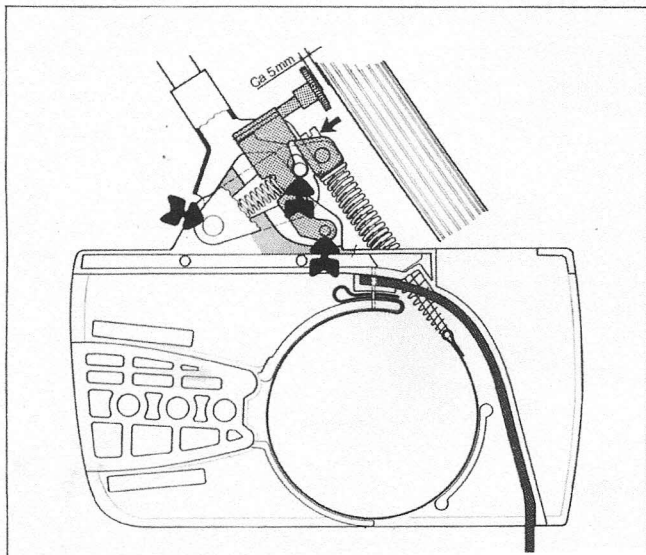
At breaks:

Check that the chain brake mechanism runs easily without seizing.

If it seizes:

Remove resin and sawdust from the chain brake. See to, that bearings and sliding surfaces (see fig. 6) are lubricated with chain oil or temperature-resistant engine oil.

Check that the braking capacity is sufficient. If not, adjust the chain brake by means of the adjusting knob. (N.B. See to, that the brake lining does not lie close to the drum in unbraked position).



At the service workshop:

Check that the braking mechanism and the braking lining are free from sawdust and dirt.

Check the wear of the braking lining and see to, that it does not lie close to the drum in unbraked position.

Check the wear of the release.

Check that the safety handle is not deformed and that it has the correct distance to the handle.

Lubricate with chain oil or temperature-resistant engine oil the bearings and sliding surfaces of the safety handle.

Check that the automatic release "Swed-o-Matic" is adjusted properly (see fig. and above instructions).

ADJUSTING THE CARBURETTOR

The carburettor has three adjusting screws:

- L = Low speed needle
- H = High speed needle
- T = Throttle adjusting screw

The carburettor is adjusted as follows:

1. Clean the air filter.
2. Screw the needles H and L carefully right in.
3. Then screw the needles out to recommended basic position:
H = 1 turn out, L = 1 turn out

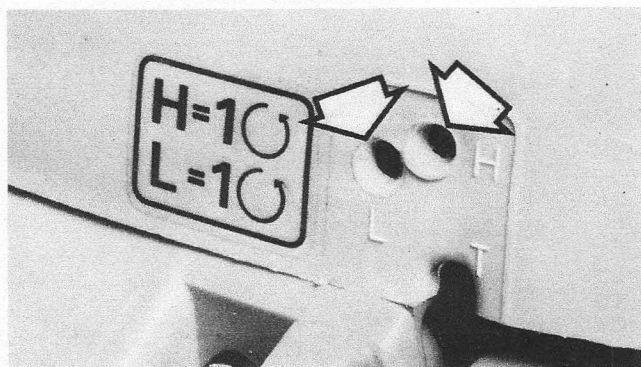


Fig. 7

4. Start the engine and warm it up. Adjust the idling speed by means of the throttle adjusting screw to that R.P.M., at which the chain starts rotating.
5. Adjust the low speed needle to reach the highest R.P.M., at which the engine is still idling. Then screw the needle out equivalent to 10 minutes on a clock-face.

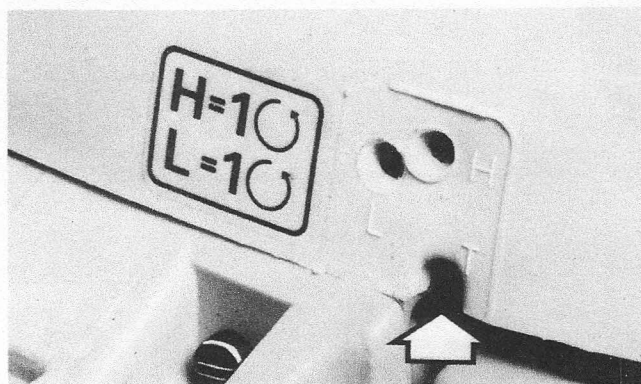


Fig. 8

6. Again adjust the idling speed by means of the throttle screw (see 4 above) so that a speed of approx 2,500 r/min is received.
7. At correct adjustment of the high speed needle, the engine is supposed to be fourstroking. If this is not the case, screw out the needle to reach a distinct fourstroke.

Engine speed: Maximum 12,500 r/min.

NOTE!

SHOULD THE ENGINE NOT BE FOURSTROKING, THERE IS A RISK OF PISTON SEIZURE. THE HIGH SPEED NEEDLE SHALL BE ADJUSTED FOR MAXIMUM POWER AND NOT FOR MAXIMUM REVS

CLEANING THE AIR FILTER

A clean air filter is necessary for optimal carburettor function and optimal engine power.

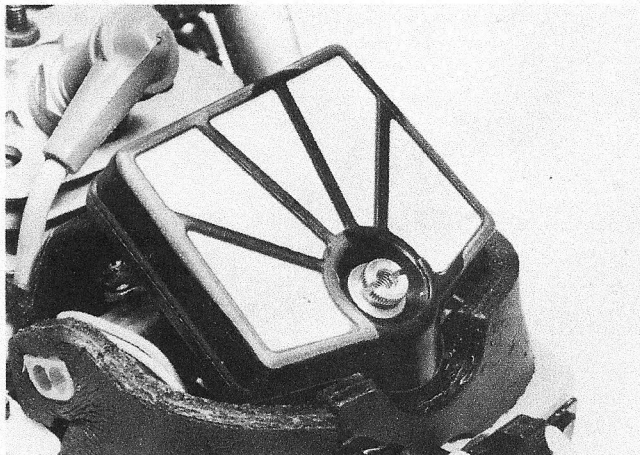


Fig. 9

In order to get at the air filter, remove the cylinder cover by undoing the retaining screw and lifting the cover off upwards-backwards. Remove the heaviest dirt from the air filter. Undo the screw and lift the filter off carefully to avoid dirt from falling down into the carburettor.

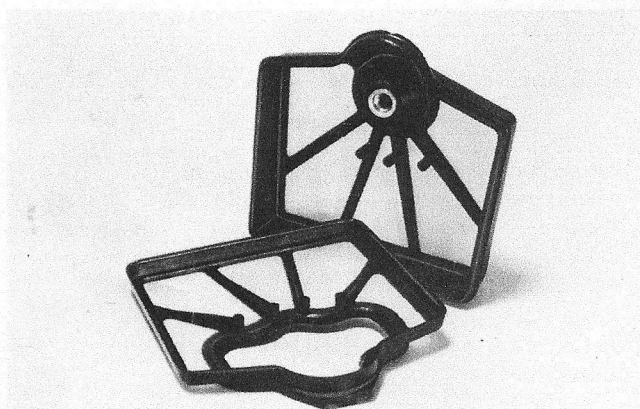


Fig. 10

Separate the two filter halves by means of a screwdriver or a knife. Clean the filter halves carefully in warm soapy water. Avoid cleaning them in chain saw petrol. You preferably dry the filter by blowing it with compressed air. Reassemble the filter and make sure, that it lies close to the carburettor. Use two airfilters alternately. Clean the filter each day!

CHANGING STARTER CORD AND RETURN SPRING

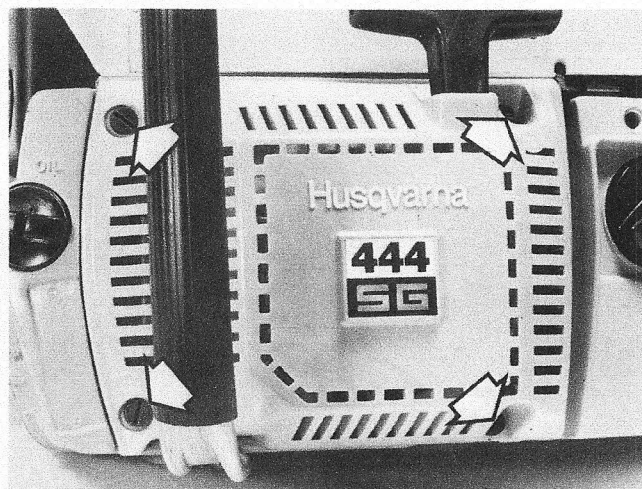


Fig. 11

Loosen the four screws that retain the starting device. Remove the starting device.

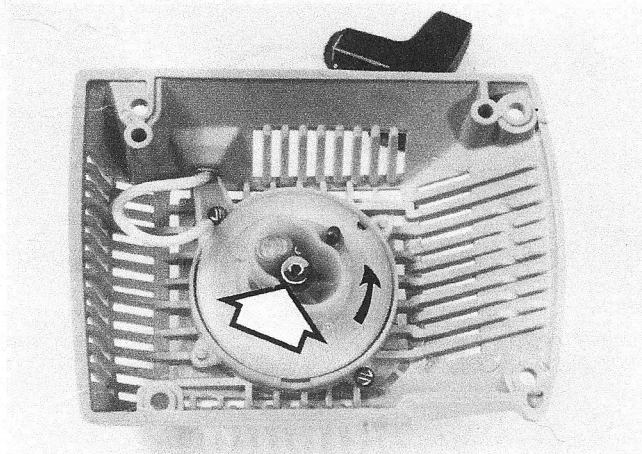


Fig. 12

Pull out the cord approx. 30 cm and lift it up into the notch in the periphery of the pulley. Zero-set the return spring by carefully permitting the pulley to rotate backwards. Undo the screw in the centre of the pulley and remove the latter.

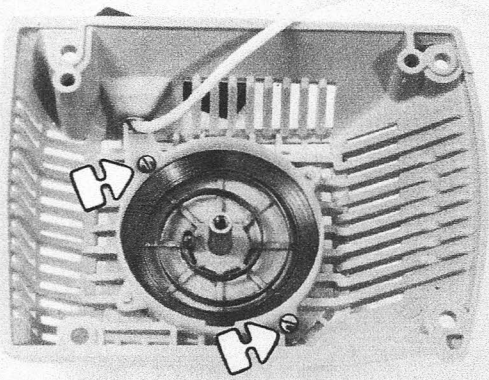


Fig. 13

In case you change the return spring as well, undo the screws, that retains the plastic cassette, which then can be removed. Change the spring and lubricate it with engine oil. Assemble the remaining parts in reverse order of removal. Lift up the starter cord into the notch on the pulley. Tension the return spring by turning the pulley clockwise about two turns.

NOTE!

Make sure, that it is possible to turn the pulley at least half a turn further when the cord is fully pulled out.

STARTING THE CHAIN SAW

A. Cold engine

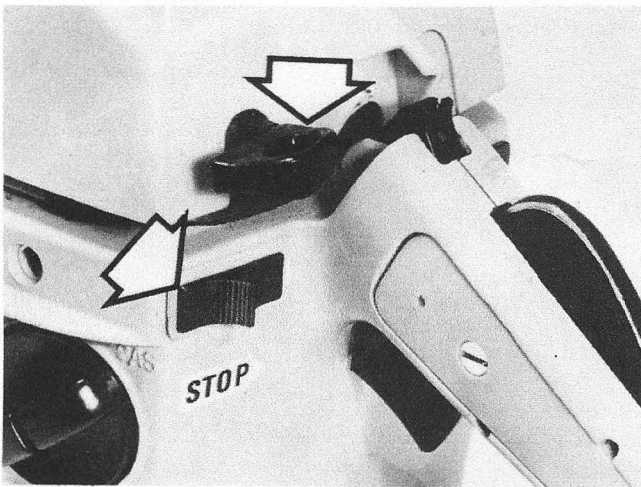


Fig. 14

1. Switch on the ignition (push the stop switch to the right so that the 1 is visible).
2. Pull out the choke control.

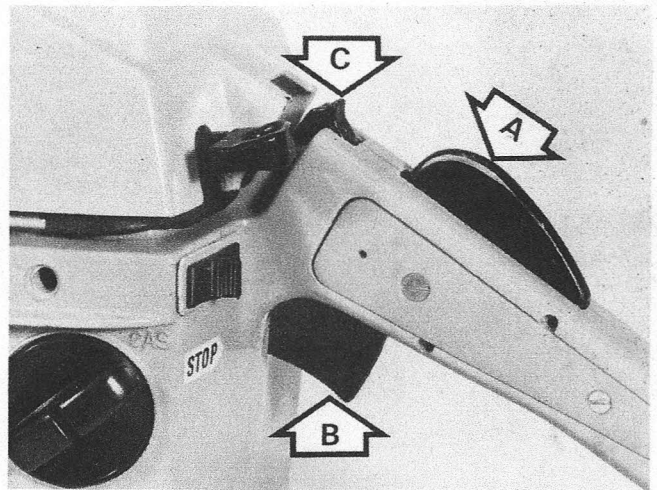


Fig. 15

3. Push down the throttle safety catch (A).
4. Open the throttle fully (B).
5. Push the starting throttle ratchet backwards (C). Now all controls are in starting position and the chain saw is ready to be started.
6. Put your right foot on the plate beneath the rear handle.
7. Grasp the front handle with your left hand and press the saw against the ground.
8. Grasp the starter handle with your right hand and pull out the starting cord slowly until the starter pawls engage.
9. Give the starting cord a short sharp tug.

NOTE!

Do not pull the starting cord entirely out or release the starting handle in pulled out position, as this can cause damages on the chain saw.

10. Normally the engine will start after 2-3 starting attempts. Push the choke control as soon the engine starts. Open rapidly the throttle wide and the catch will disengage.

B. Warm engine

Use the same starting procedure as for cold engine but without pulling out the choke.

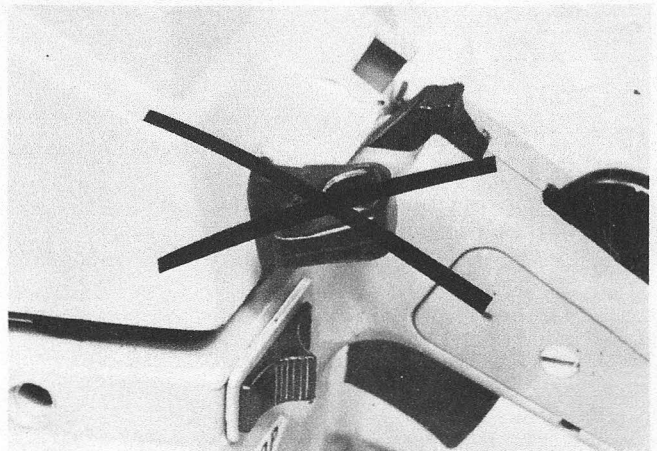


Fig. 16

NOTE!

One of the most common causes of starting difficulties is, that too many starting attempts have been made with a closed choke flap. If this is the case, remove the sparking plug and wipe it dry. Open the choke flap fully.

Before your reassemble the sparking plug, we recommend you to pull the starting handle several times to "ventilate the cylinder", the stop switch in 0-position.

Assemble the sparking plug and make a new starting attempt with open choke flap and full throttle.

CAUTION!

GUIDE BAR, CHAIN AND CLUTCH COVER MUST BE MOUNTED BEFORE THE ENGINE IS STARTED, OTHERWISE THE CLUTCH MAY COME LOOSE AND CAUSE IN-

HEATED HANDLES

On model SG and FG both the front handle and the rear handle are provided with electric heating elements. These are fed with electric current from a generator, enclosed in the electric system.

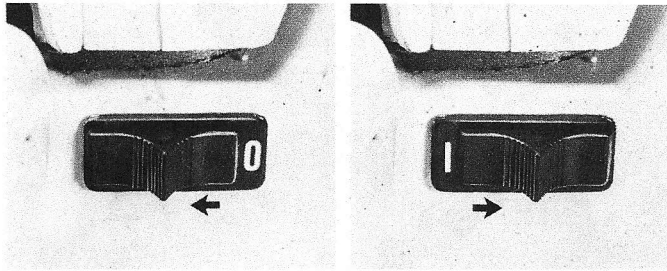


Fig 20

The switch for the heating elements is located to the right of the rear handle.

When the switch is pushed to the left (the 0 is visible), the heating is switched off.

When the switch is pushed to the right (the 1 is visible), the heating is switched on.

WINTER USE

In winter, extreme cold and powdery snow can cause running problems.

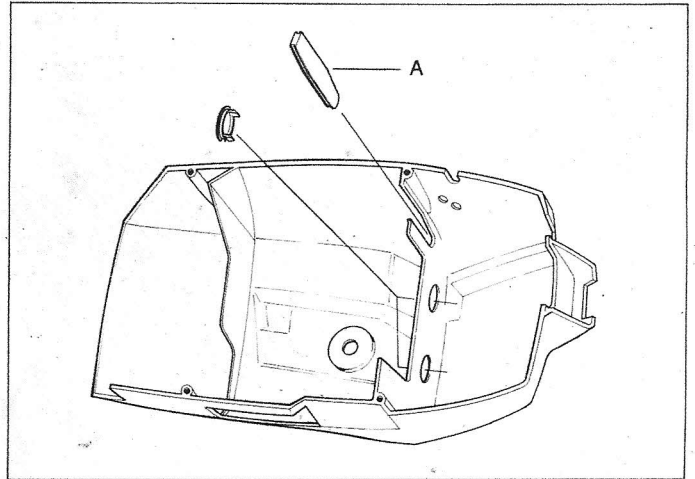


Fig. 21

The cylinder cover is prepared to be changed for extreme cold working conditions. In the partitioning wall of the cover there are two holes, that are covered by caps when operating at normal temperatures. In case of extreme cold, these caps shall be removed, so that heated air from the cylinder can flow into the carburettor space in order to prevent e.g. the air filter from being iced up.

In order to prevent cold intake air from entering the carburettor space, the covering plate (A) shall be mounted in the recess of the cylinder cover (see fig. 21). At normal temperatures the covering plate is to be kept in the pocket on the right side of the cover.

NOTE!

Under normal temperature conditions the caps has to be mounted and the covering plate shall be removed, otherwise there is a certain risk of over-heating of the chain saw.

Safety reminders

Handling

1. When transporting the saw, fit the chain protection.
2. Do not smoke when filling the fuel tank.
3. Before cutting, fix the barking support properly.
4. When using the saw, keep both hands on the handles.
5. Nobody is allowed to be within the swing area of the saw.
6. Always stop the engine before checking and adjusting the chain tension for exchanging the chain.

Procedure

1. When felling, always step aside from the falling tree.
2. When escaping, stay alert for falling branches.
3. When cutting split wood, look out for ejecting wood pieces.
4. When bucking a felled tree on sloping ground, always stand above the tree.
5. Be calm and collected when working; eliminate the risk of injury to other persons.

Personal safety equipment

1. To protect the hearing organ, the operator must wear protective wad, plugs or ear caps.
3. When cutting, wear gloves of chrome leather.
3. When felling, wear a protective helmet.
4. Wear suitable cloths which do not hinder your work.