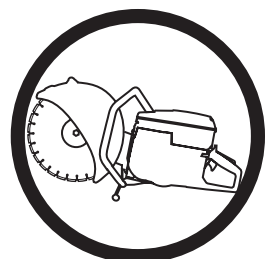




Workshop manual
K 750



HUSQVARNA K 750

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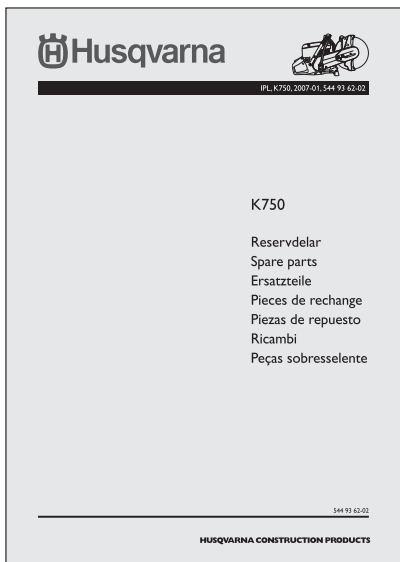
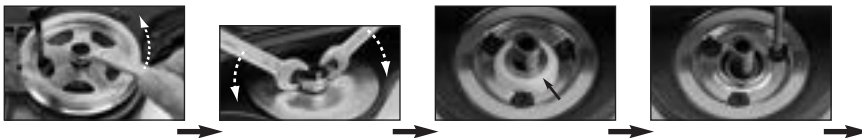
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“Dismantling into Basic Modules”



“Cutting head” (Example)



Workshop Manual

The Workshop Manual includes virtually all workshop procedures that can come into question on the K750. Some very simple and self-evident repairs have been omitted.

Outline

An introductory section with the title “Dismantling into Basic Modules” shows how the machine is dismantled into large component units, for example, the starter, cutting arm, air filter, etc.

The manual goes on to describes in detail through the different chapter how work on the basic modules should be carried out.

This arrangement means that as a mechanic, at least until you have learnt the basic composition of the machine, you need to start with the chapter “Dismantling into Basic Modules” to then move on to the chapter covering the specific service work.

Layout – pictures and text

Besides the pictures and illustrations there is generally two columns of text. The left-hand text column is a concise and is suitable for experienced mechanics, the right-hand column gives a more detailed description and is targeted at mechanics with less experience of repair work on the power cutter.

Contents

The manual is divided into numbered chapters together with chapter headings that are stated in bold at the top of each page.

The list of contents also has page references to the start of each chapter.

Spare parts

Spare parts K750

The folder includes all the spare parts for Husqvarna K750.

The folder contains complete exploded views of the entire machine where each component's placement, spare part number and appearance can be easily identified.



New technical solutions

Husqvarna K750 is the first model in a new generation of power cutters with a number of new technical solutions:

New engine technology – Dual Charge

The cylinder, piston and carburettor are radically changed.

Apart from the inlet from the carburettor with fuel-air mixture there are two ducts for the inlet of clean air, the top duct in the picture. By leading the fuel-air mixture and the clean air in separate flushing channels into the cylinder, the proportions of the air-fuel mixture and clean air can be controlled so that these vary in different phases of the engine's work cycle.

Cleaner exhaust fumes and improved performance

The amount of uncombusted hydrocarbons (HC) is reduced by the Dual Charge technology to about a third compared with a traditional design (K700). The emission values are now well below levels in the regulations from EPAII.

The output is higher over the entire speed range and the torque in the lower speed range is now significantly higher.

Lower vibration levels

The air filter system and the carburettor are mounted in the dampened handle unit, which means lower vibration on the handle through the greater mass (weight) in the handle unit.

The carburettor placement in the dampened section results in stable carburettor function and less wear on the moving parts in the carburettor.

New muffler

The volume of the muffler has now been doubled and both the sound pressure and sound power have been halved, all in comparison with K700

Poly-V belt

This type of belt has improved strength and is more resilient against stretching than previous V-belts, which results in longer intervals between adjustments.

Friction Retarder

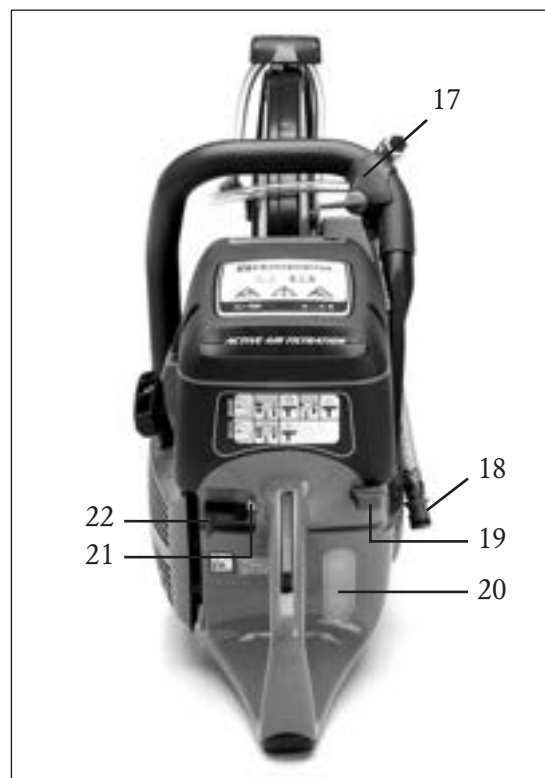
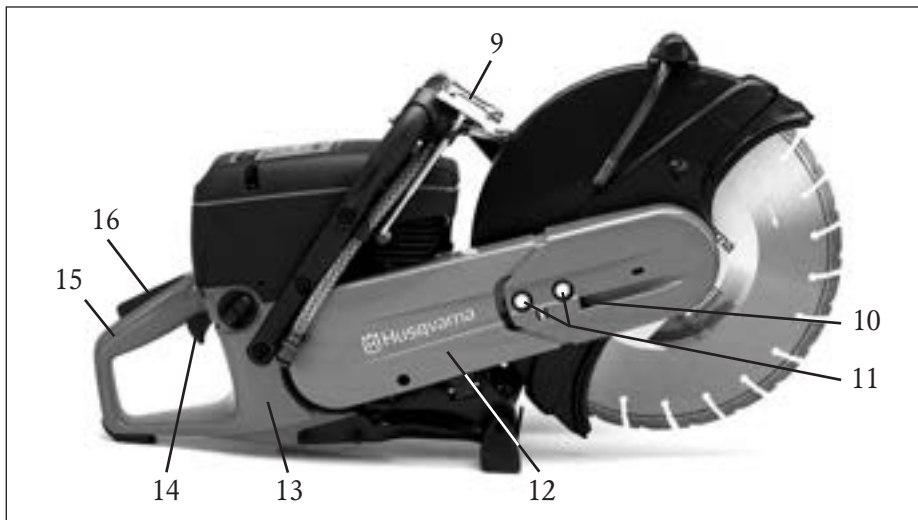
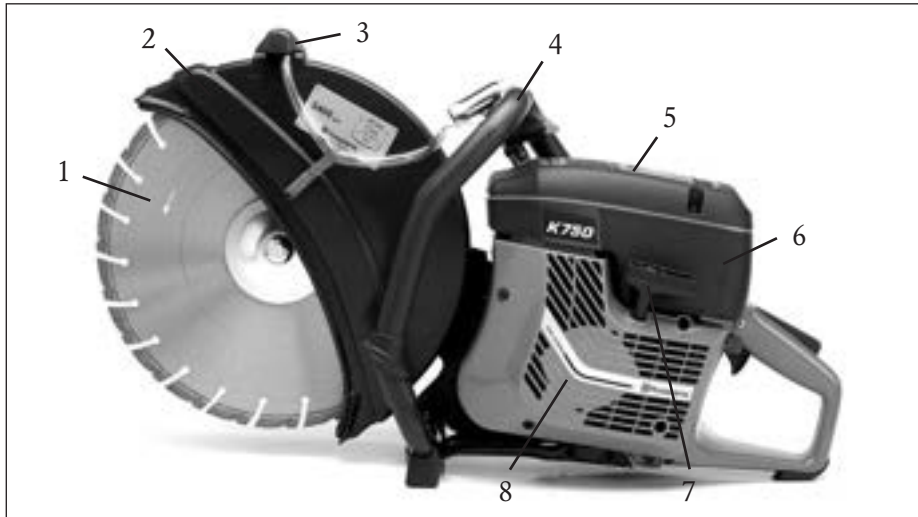
A new front belt pulley is being introduced in 2007 with a braking mechanism that takes effect at low speeds.

Torx – T27

Torx screws, with the dimensions T27, are used virtually throughout to simplify the service work.

Note that screws with both a flat and fluted undersides are used.





Components

1. Cutting blade
2. Blade guard
3. Adjustable handle for the blade guard
4. Front handle
5. Air filter cover
6. Cylinder cover
7. Starter handle
8. Starter
9. Combination spanner
10. Belt adjustment screw
11. Lock screws for belt adjustment
12. Cutting arm/rear belt guard
13. Fuel tank
14. Throttle control
15. Rear handle
16. Throttle trigger lock
17. Water valve with tool attachment
18. Water connector
19. Choke Lever
20. Sight glass for fuel
21. Start throttle lock
22. Stop switch

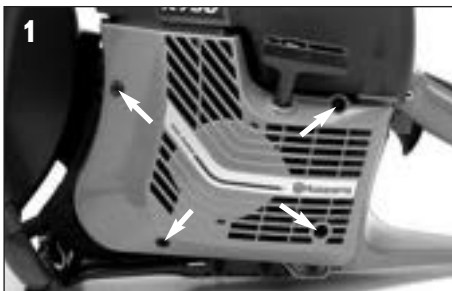


Basic modules

This chapter shows how the machine is built up of basic modules, for example, the starter, carburettor, air filter system, etc.

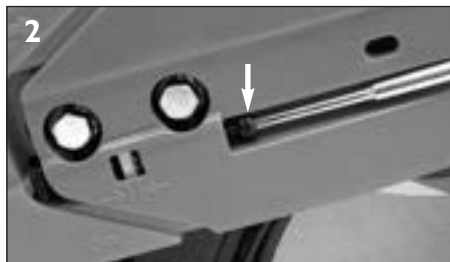
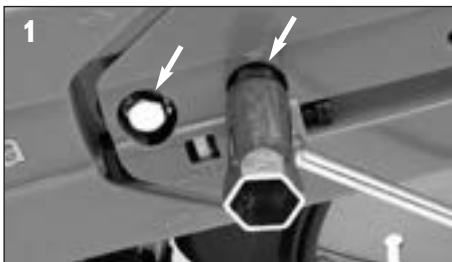
The purpose is to illustrate how you can easily and effectively dismantle and assemble the machine in its basic modules.

Service work on a component level, for example, replacing the starter cord, is described in detail in respective chapters.



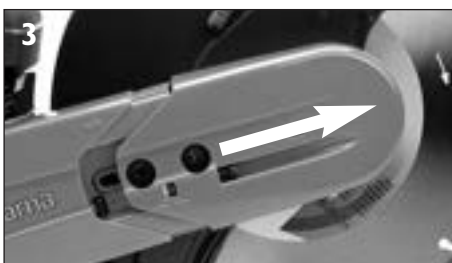
Starter

1. Loosen the 4 screws on the guard.
2. Dismantle the starter.



Cutting arm

1. Loosen the screws on the cutting head.
2. Slacken off the belt tension using the adjuster screw. Dismantle the screws on the cutting head.



3. Dismantle the front belt cover by sliding it forwards.

4. Loosen the hoses by the water valve. Lift off the belt from the pulley and remove the cutting head.

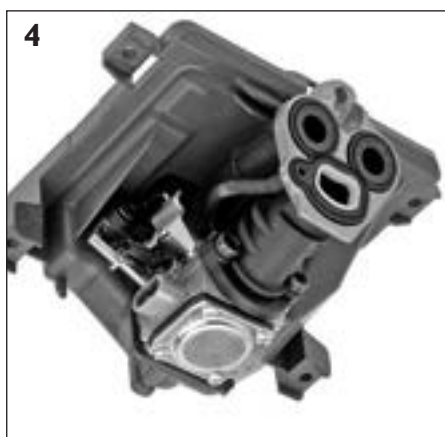
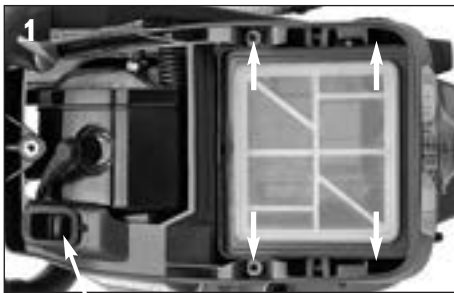


5. Loosen the two screws on the rear belt guard.

(Tightening torque when assembling 6.6-8.1 lbf·ft/9-11 Nm.)

6. Remove the guard.

4 DISMANTLING INTO BASIC MODULES



Air filter

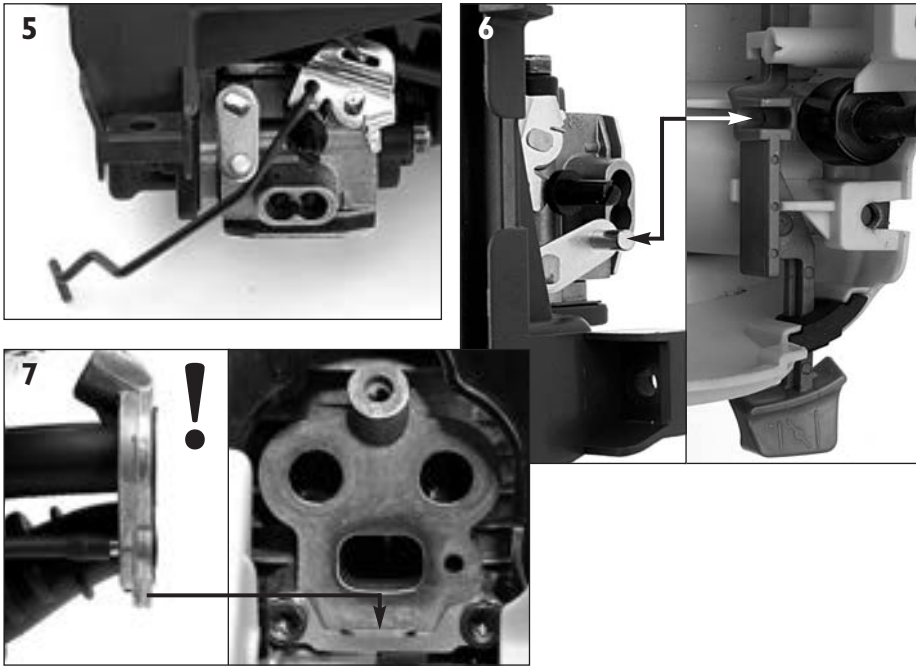
1. Loosen the three screws on the air filter cover and remove the cover.
2. Lift off the filter base.
3. Carefully lift up the paper filter so that the dust does not fall down onto the service filter.

Cylinder cover

1. Loosen the four screws on the cylinder cover.
Press together the rubber seal's collar so that the cylinder cover can be lifted off.
2. NOTE! When reassembling the rubber seal must be drawn up through the cover and the collar then adjusted to fit correctly against the cover.

Carburettor

1. The carburettor unit is attached to the cylinder by a single screw. Loosen the screw.
2. Lift up the carburettor unit. Loosen the fuel hose (arrow) from the carburettor.
Tip: Tape the throttle control in the full throttle position to improve access to the throttle rod's attachment on the throttle control.
3. Pull the throttle rod out of the control.
4. The entire carburettor unit can now be lifted out.

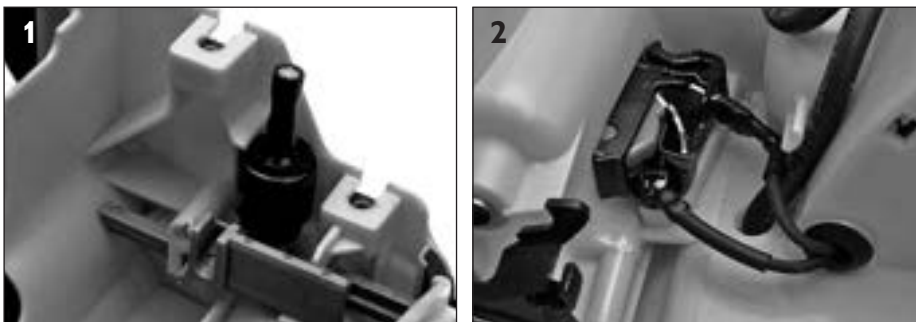


Assembly

5. Hook the throttle rod into the valve arm as illustrated. Lift the carburettor unit into position and fit the fuel hose. Press down the throttle rod into throttle control with the help of a pair of pliers.

6. Align the carburettor's choke arm in the blue choke control.

7. Fit the carburettor unit. Align the lug on the flange with the cut-out on the cylinder. Tighten the screw at the top.



Carburettor compartment

1. Tank venting

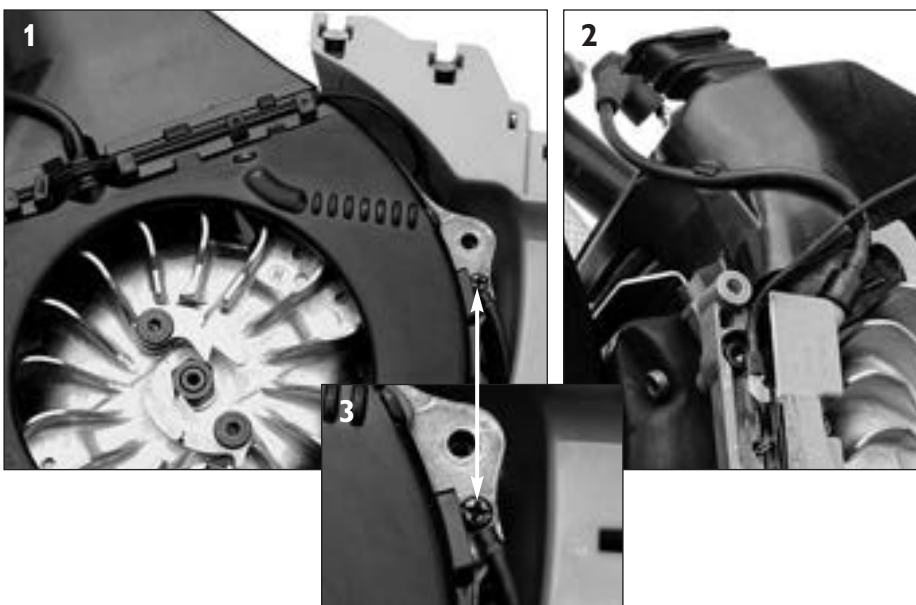
This is dismantled by angling the unit backwards and then pulling it out the tank.

2. Stop switch

This is secured by a screw in the carburettor compartment.

3. Controls

The controls in the rear handle become accessible for service once the carburettor unit has been dismantled.



Air duct

First dismantle the starter.

1. Lower air duct

Note, to facilitate reassembly, how the cable to the stop switch is fitted in the air duct. Lift the cable out of its mounting.

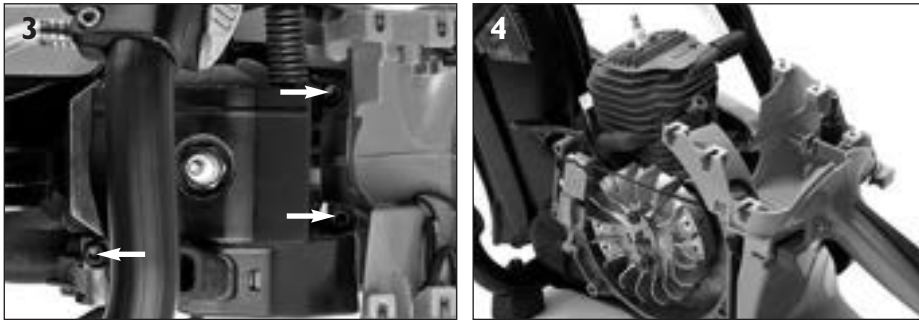
2. Upper air duct

Loosen the ignition lead by the spark plug and lift the cable out of its mounting in the cover.

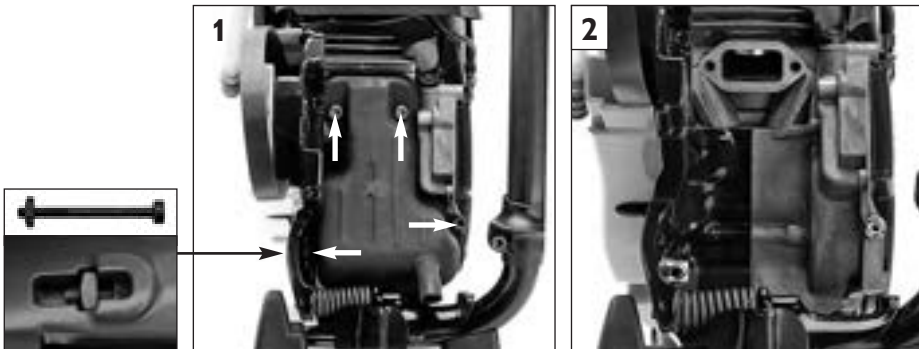
3. The engine's earth point

The engine's earth point to the stop button is located here

4 DISMANTLING INTO BASIC MODULES



3. Dismantle the three screws on the air duct cover.
4. Lift off the air duct cover.



Muffler

Dismantle the cutting head and the starter.

1. Dismantle the four screws on the muffler.
2. Dismantle the muffler.



Fit the gaskets correctly!

3. The insulated fibre gasket should lie closest to the muffler.
4. Fit the heat shield.
5. The aluminium gasket should lie against the cylinder.

The screws should be tightened to a torque of 8.0-9.5 lbf.ft/11-13 Nm.

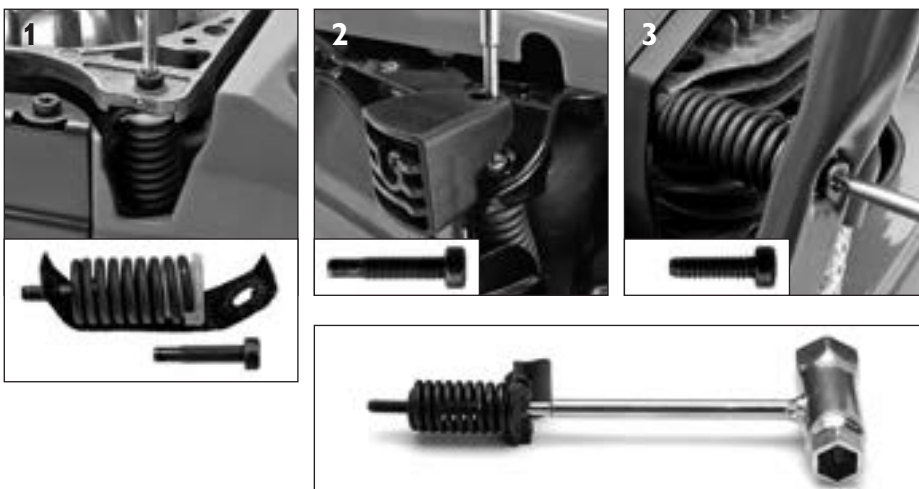


Vibration dampening

Some service work can be aided by splitting the machine by the vibration dampening element.

Dismantle the air filter unit, cylinder cover and upper the air duct cover. Dismantle the screw holding the carburettor. Dismantle the starter and the air duct cover. Loosen the cable lug by the ignition module and unscrew the cable to the earth point. Pull off the water hose by the valve.

The engine unit is attached to the handle unit at three points with the vibration dampening element in the form of springs. Dismantle the screws located by:



1. The lower section on the flywheel side.
2. The base on the clutch side.
3. The handle loop next to the water valve.

To gain access to the spring's inner screw, Torx T27, the tool diameter must be max. 5 mm. The combination spanner fits.



Replacing the starter cord

Dismantle the starter.

Eliminate the spring force from the return spring

1. Pull out the starter cord approximately 12 in./30 cm. Hold the starter pulley and place the cord in the cut-out on the starter pulley.



2. Let the starter pulley rotate and wind up the cord on the metal sleeve.

3. Lift off the cord from the starter pulley.

Replacing the starter cord

Dismantle the starter.

Eliminate the spring force from the return spring

1. Pull out the starter cord approximately 12 in./30 cm. Hold the starter pulley with your thumb and place the cord in the cut-out on the starter pulley.

2. Let the starter pulley rotate slowly and wind up the cord on the metal sleeve.

3. Lift off the cord from the starter pulley.



Attach the new starter cord

The starter cord should be 45 in./115 cm long and have a diameter of .16 in./4 mm.

1. Insert one end of the cord from the top through the hole in the starter pulley and then out through the notch for the cord. Pull out virtually the whole cord length until sufficient cord remains to tie a knot as illustrated.

2. Insert the other end through the cover and on through the handle. Tie a double knot as illustrated.



Loading the return spring

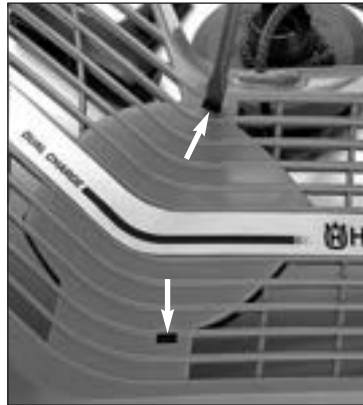
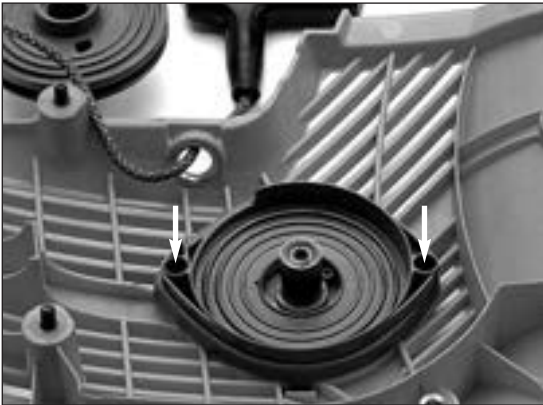
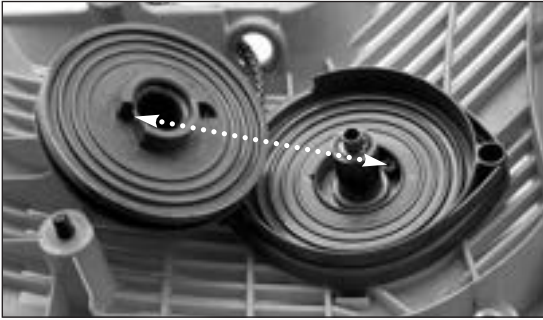
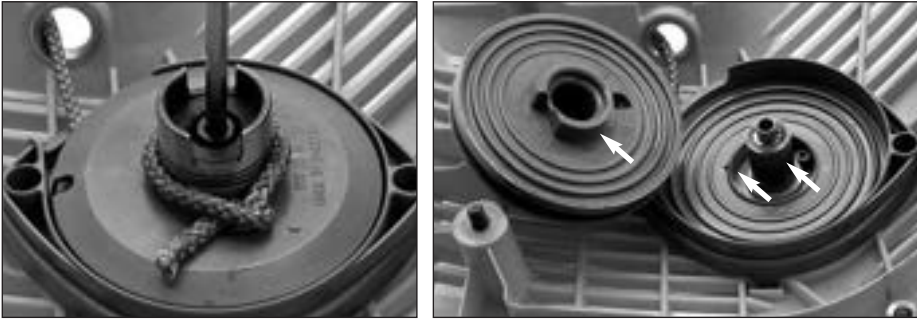
1. Fit the starter cord in the cut-out.

2. Wind the start cord 4 turns around the hub and pull out the starter handle and release so that the cord is wound into the starter pulley. Repeat the procedure with 3 turns of cord around the hub.



Important check!

Check that the return spring does not act as an end stop by extending the cord fully. In this position it should be possible to turn the starter pulley a least a further half turn before the spring stops the movement.



Starter pulley

Dismantle the centre bolt and lift off the starter pulley.

Clean the surfaces between the starter pulley and the spring cassette.

Assembly

Lubricate the hub with grease (arrows). Preferably also apply some grease around the starter pulley hub so that the grease seals against the spring cassette.

Align the starter pulley cut-out with the end of the spring when assembling. Fit the centre bolt.

The centre of the starter pulley

The spring in the starter pulley dampens vibrations. The dust seal above has an O-ring. The spacer sleeve around the centre screw is the upper bearing point for the starter pulley. Check that the spacer sleeve has not fallen off during reassembly.

Spring cassette

WARNING!

Handling springs of this type constitutes a major risk for eye injuries, especially when you dismantle a cassette with a broken spring!

Always wear protective glasses when handling the spring cassette!

Dismantling

Dismantle both screws on the spring cassette.

Press out both catches on the spring cassette with a screwdriver.

Cleaning

Never take out the spring from the cassette. If the spring is dirty it can be blown sufficiently clean with compressed air. Now apply a light oil on the spring.



Starter pawls

Function

In principle the starter pawls have two positions that are determined by the centrifugal force generated by the rotation of the flywheel.

When the engine is at a standstill the springs push the starter pawls towards the centre, which when starting then grip the starter pulley's metal sleeve. As soon as the engine starts, the starter pawls are thrown out of the starter pulley's centre to their outer positions.

Consequently it is important for the function that the springs are in full working order and that the starter pawls do not jam. The starter pawls must not be lubricated!



Inspection

Check that the springs are in full working order and that the starter pawls do not jam. Dismantle and clean if necessary.

Dismantling/assembly

The starter pawls are fitted using a shoulder screw. Note the position of the springs in relation to the flanges on the flywheel so that they are fitted correctly. NOTE! Do not forget the washer (A) that should lie under the starter pawls against the flywheel.



Assembly

It is important that the spring does not get caught between the starter pawls and the flywheel. The following method is recommended when assembling:

1. Press the spring into position in the flywheel.
2. Fit the washer.
3. Screw on the starter pawls.
4. Make the simplest of "special tools": Bend the end of a thin steel wire and use this to pull the spring under the starter pawls to the mounting on the opposite side.



Fitting the starter

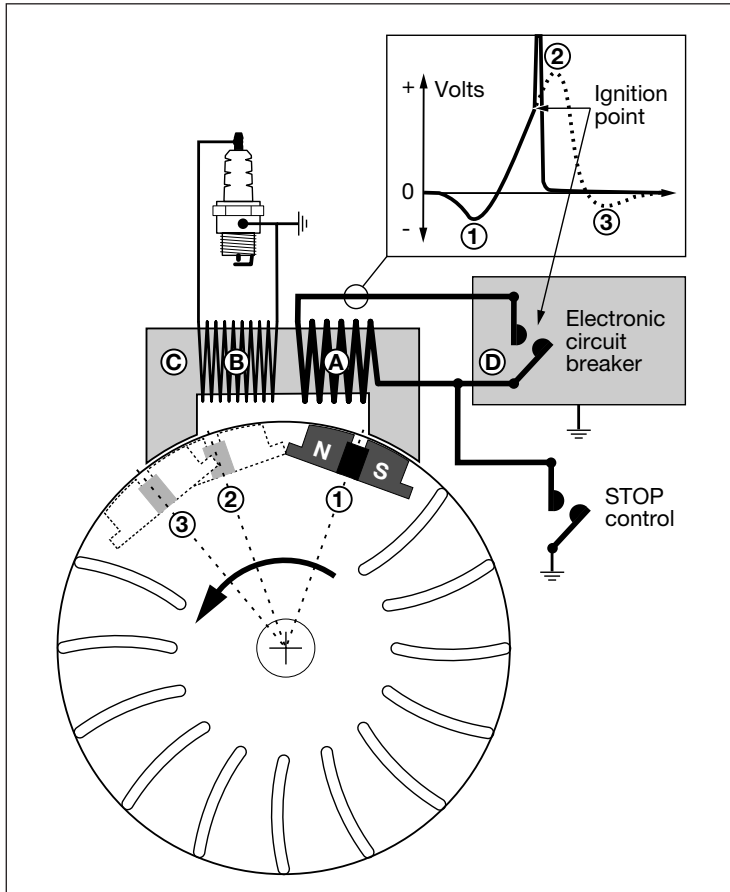
First pull out the cord about a half meter. Keep this position when the starter is set against the machine and slowly release and the starter pawls will take on the correct position.

Tighten the four screws on the starter to a torque of 6.6–8.1 lbf-ft/ 9–11 Nm.

Fitting the starter

Do as follows so that the starter pawls come into the right position against the starter pulley sleeve: First pull out the cord about a half meter. Keep this position when the starter is set against the machine and slowly release and the starter pawls will take on the correct position.

Tighten the four screws on the starter to a torque of 6.6–8.1 lbf-ft/9–11 Nm.



Function

The ignition system is fully enclosed and has no moving parts. It is insensitive to moisture and dirt. The design is such that the ignition point does not need readjustment.

Husqvarna K750 has integrated overspeed protection in the electronic unit that limits the engine's speed to 9,300 rpm.

The ignition system consists of the primary coil (A) and secondary coil (B) which are both surrounded by the iron core (C). An electronic digital unit (D) manages the switch function.

Current is generated in the primary coil when the fly-wheel's permanent magnet passes the coil and has the voltage sequence illustrated in the diagram below. (The dashed line indicates the voltage that should be generated if the current is not broken.)

The ignition point is determined by the electronic unit, which sense the voltage variation in the primary coil and breaks the current at the right level, at the same time the engine piston is just below the upper turning point. At the breaking instant the voltage in the primary coil rises from 5 V (volt) to approximately 200 V through induction. At the same time a high voltage, approximately 20,000 volt, is transformed in the secondary coil to the spark plug.



Ignition module

Individual components can not be replaced.

The ignition lead, contact unit to the spark plug and seals on the ignition module can be replaced.

The ignition module requires no periodic servicing. Nevertheless, the distance to the flywheel's magnet may need adjusting.

The short-circuit contact (arrow) is connected to the stop switch.

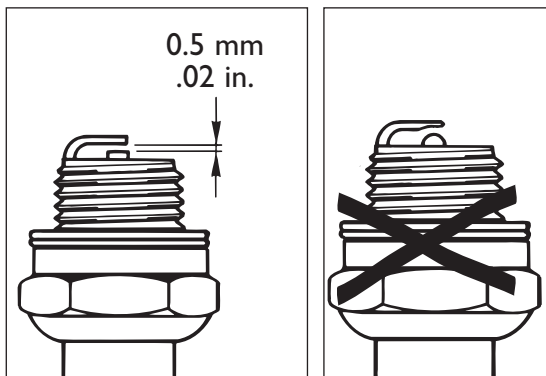
Ignition module

The ignition module's components are fully enclosed to withstand external manipulation. Individual components can not be replaced.

The ignition lead, contact unit to the spark plug and seals on the ignition module can be replaced.

The ignition module requires no periodic servicing. (Nevertheless, the distance to the flywheel's magnet may need adjusting.)

The ignition module has two connections. One to the spark plug and the other is the short-circuit contact (arrow) to the stop switch



Spark plug

The electrode gap scale should be .02 in./0.5 mm.

The electrodes should be free of soot deposits and oil. Brush clean with a wire brush.

Replace the spark plug if the electrodes are worn.

Spark plug

The spark plug's electrode gap should be .02 in./0.5 mm.

The electrodes should be free of soot deposits and oil. Brush clean with a wire brush.

A convex centre electrode and a worn side electrode impair the ignition characteristics. Replace the spark plug.



Trouble shooting

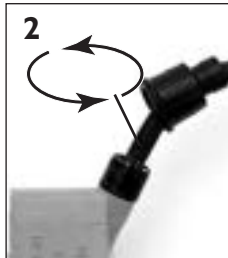
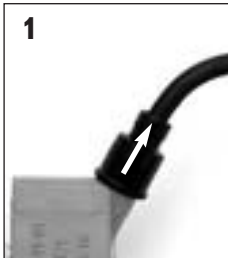
Examine the ignition system first when the engine does not start.

Check the ignition spark

Earth the spark plug against the cylinder by using the spark plug socket to extend the earth connection.

Move the stop button to the operating position. Pull the starter handle as with starting.

Do the following if no spark occurs.



Trouble shooting

Examine the ignition system first when the engine does not start.

Check the ignition spark

Earth the spark plug against the cylinder by using the spark plug socket to extend the earth cable as the air duct prevents direct earthing.

Move the stop button to the operating position. Pull the starter handle as with starting.

Do the following if no spark occurs.

Faulty spark plug

Replace the spark plug with the test spark plug 502 71 13-01. If there is spark now the spark plug is defective. Replace the spark plug.

If there is no spark the next step is to check the ignition lead.

Faulty ignition lead

1, 2. Pull up the rubber seal by the ignition module and unscrew the ignition lead from this.

3. Insert a pair of pointed pliers in spark plug connection and pull out the spring and cable end.

4. If the connection is defective, the ignition lead can be shortened slightly. Make a new hole in the cable with a awl and fit the connection spring.

5. The adjoining simple connection can be used to check that the ignition lead is not broken. The battery is connected in series with a test lamp.

Alternatively, a resistance measurement can be made using a Ohm meter.



Damaged short-circuit cable

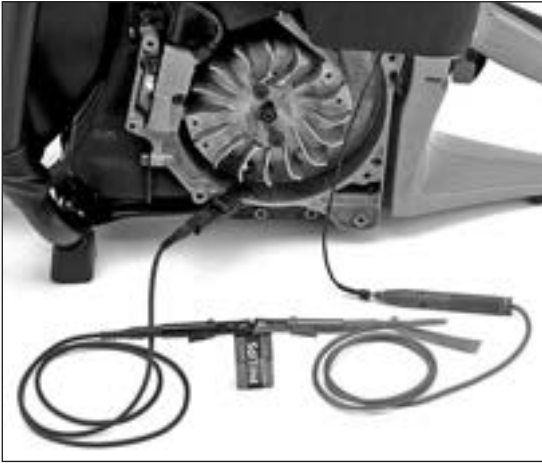
Examine the cable for signs of wear or damage where it may have reached the engine body.

Test the stop switch and the cable to this from the ignition module with one of the following methods.

Damaged short-circuit cable

Check that the short-circuit cable is in position. Examine the cable for signs of wear or damage where it may have reached the engine body and in doing so create a short circuit.

Test the stop switch and the cable to this from the ignition module with one of the following methods.



Test with a test lamp

Connect a battery in series with a test lamp to the short-circuit cable respective engine body. With the stop switch in the operating position the lamp should not be lit.

Look at the test lamp while you move the cable in different positions respective test the stop switch.



Test with a meter

Set the meter for Ohm-measurement. With the stop switch in the operating mode, the instrument should show a maximum or non measurable Ohm reading.

Watch the meter reading while moving the cable in different positions respective test the function of the stop switch.

Should the test not indicate a fault all that can be done is replace the ignition module.



Replacing the cable or stop control

Dismantle the carburettor unit to access the stop switch and cable connections



502 51 34-02

Test with a test lamp

Connect a battery in series with a test lamp to the short-circuit cable respective engine body. With the stop switch in the operating position the lamp should not be lit.

Look at the test lamp while you move the cable in different positions respective test the function of the stop switch.

Test with a meter

Connect the instrument to the short-circuit cable respective engine body.

Set the meter for Ohm-measurement. With the stop switch in the operating mode, the instrument should show a maximum or non measurable Ohm reading.

Watch the meter reading while moving the cable in different positions respective test the function of the stop switch.

Should the test not indicate a fault all that can be done is replace the ignition module.

Replacing the cable or stop control

This stop switch is secured by a screw in the carburettor compartment. Dismantle the carburettor unit to access the stop switch and cable connections.

Replacing the ignition module

The ignition module is secured by two screws to the engine body.

When assembling the new module, the flywheel with magnets is turned towards the ignition module.

Place air gap gauge (.01 in./0.3 mm) 502 51 34-02 against the magnets and fit the new module in position.

The screws should be tightened to a torque of 6.6-8.1 lbf-ft/9-11 Nm.



Dismantling

Dismantle the starter.
Dismantle the starter pawls.

Dismantling

Dismantle the starter. Dismantle the starter pawls as set out in the chapter "Starter".



502 51 49-02

Tool 502 51 49-02

The special tool is used to dismantle and assemble the flywheel.

Tool 502 51 49-02

A special tool from Husqvarna is required to dismantle and assemble the flywheel. The tool fits virtual all flywheels on Husqvarna power cutters.



Centre the tool.

Centre the tool with a 13 mm socket.

Centre the tool.

Put the 13 mm socket on the centre bolt to help centre the tool.

Fit the plate in the holes for starter pawls.

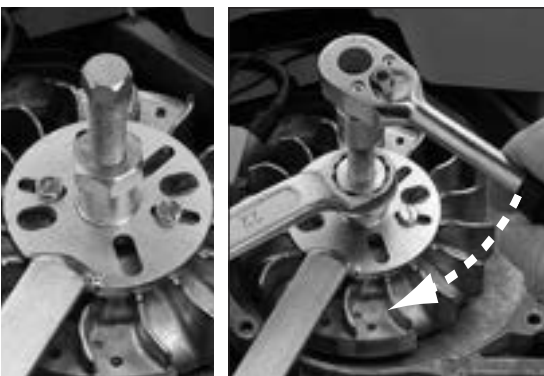
Select a suitable screw, which is supplied with the tool, and fit the plate in the holes for starter pawls.



Dismantle the nut

Dismantle the centre nut

Use the handle on the special tool to lock the rotation of the flywheel and dismantle centre bolt.



Press off the flywheel

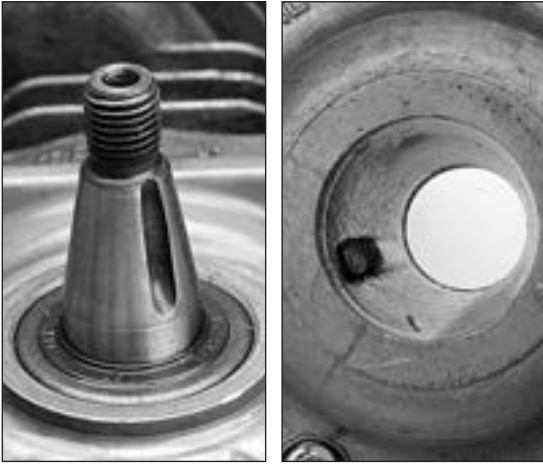
Fit the screw puller in the centre.
Screw in the centre bolt until the flywheel releases.

Tip: Knocking the bolt lightly with a hammer can help to release a tight fitting flywheel. At the same time lift the machine slightly from the tool handle.

Press off the flywheel

Fit the screw puller in the centre and screw it down as far as necessary to get a secure fitting in the plate.

Hold the large nut and screw in the centre bolt until the flywheel releases.
Tip: If the flywheel is very tight, knocking the bolt lightly with a hammer to help the flywheel to release. At the same time lift the machine slightly from the bench using the tool handle.



Check the keyway and key

Note that the key in the flywheel is cast and can not be replaced. If the key is damaged the flywheel must be replaced. Only the force of the centre nut is not sufficient to hold the flywheel in the right position.

Check the keyway and key

Note that the key in the flywheel is cast and can not be replaced. If the key is damaged the flywheel must be replaced. As the ignition point is determined by the position of the flywheel on the crankshaft, components must have exactly the right placement in relation to each other. Only the force of the centre nut is not sufficient to hold the flywheel in the right position.



Fit the flywheel

The crankshaft and the centre of the flywheel must be free from grease when assembling.

Align the key in the flywheel with the keyway on the crankshaft. Fit the washer and nut.

Fit the flywheel

The crankshaft and the centre of the flywheel must be free from grease when assembling.

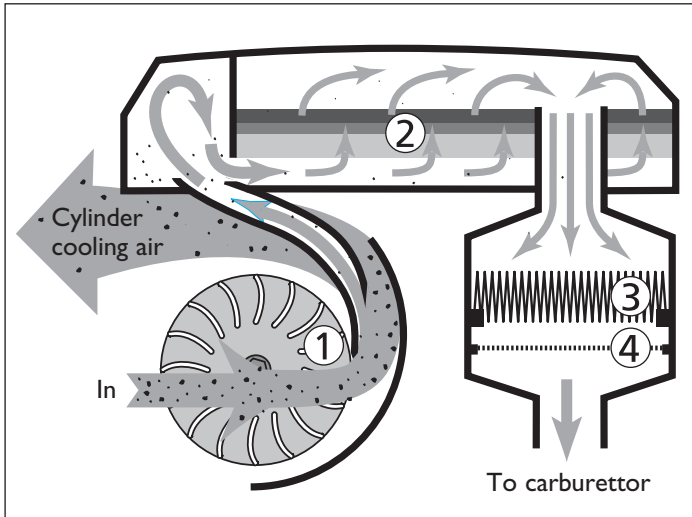
Align the key in the flywheel with the keyway on the crankshaft. Fit the washer and centre nut.

Tightening torque 18-22 lbf-ft/25-30 Nm

Use a torque wrench to tighten the nut.

Tightening torque 18-22 lbf-ft/25-30 Nm

Use a torque wrench to tighten the centre nut.



Function

Husqvarna Active Air Filtration is a filter system that effectively purifies the air to the engine in **three separate steps and according to three different purification principles**:

1. Centrifugal cleaning is the first step in the purification of the inlet air.

The fins on the flywheel supply the cylinder with cooling air at the same time as they act as the active part in the centrifugal cleaning of the engine's inlet air. An inlet nozzle is fitted close to the fins on the flywheel. The centrifugal force means that large particles do not follow the curved air currents to the nozzle, but are thrown to the outside of the nozzle. Only very small dust particles manage to swing with the air currents to the inlet.

2. Foam plastic filter is the next level of separation in the purification process. An air deflector guides and distributes the air across the whole filter surface, which means that the whole of the filter is better utilised and is fouled evenly across the surface. The filter is steeped in oil and is made up of three layers with different pore sizes.

3. The paper filter primarily provides effective protection should the foam plastic filter, on account of inadequate care, let dust through.

4. Service filter's sole task is to prevent foreign objects from entering the engine during service work. The service filter should only be replaced if it is damaged.

Filter service

Centrifugal cleaning

The inlet duct should be inspected and any deposits removed in connection with filter replacement. Dust from dry cutting is cleaned off using compressed air. Material from wet cutting normally needs to be scraped off mechanically. Check that the seal on the foam plastic filter's filter base is intact. Fit the seal correctly in the air duct cover!

Foam plastic filter

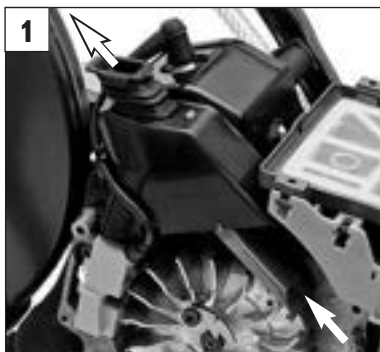
New filters are supplied steeped in the correct amount of filter oil. The replacement frequency is dependent on a number of factors and therefore cannot be generally stated. Unfortunately there is no easy method to assess a used filter's remaining capacity, and it is even harder when the machine's history is not known. However, in all safety it can be said that if dust particles can be discerned on top of the filter (clean side) it is spent.

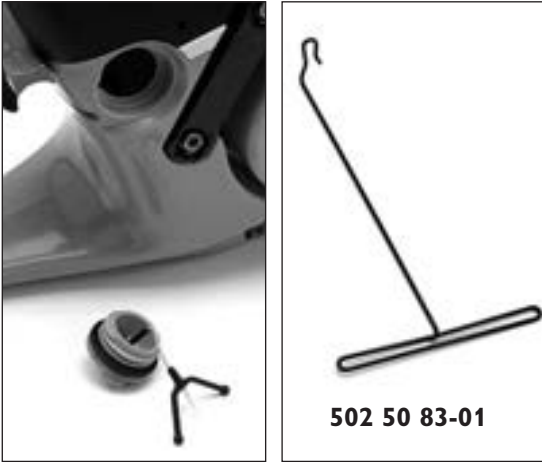
Paper filter

The paper filter should not be clean, but is replaced with a new one. The replacement frequency depends very much on the care of the foam plastic filter.

Exercise extreme care when the filter is dismantled so that dust particles do not fall down through the service filter. Vacuum cleaning is the best method to remove spillage and to clean the gasket around the service filter.

A useful rule for filter replacement is: Replace the paper filter when the yellow paper colour is no longer visible.





502 50 83-01

Fuel filter

Dismantle the filler cap.

Catch the fuel hose with the help of tool 502 50 83-01.



Pull out the fuel filter. Check that the filter is not cracked or in any other way defective. Fouled filters are replaced with new ones.

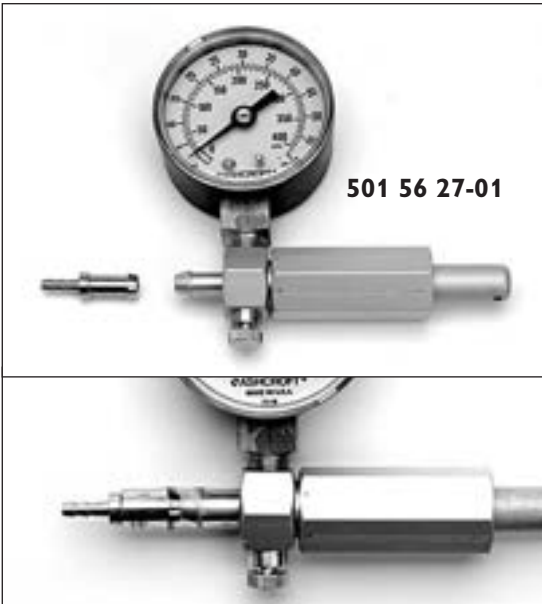
Heavily fouled filters can be due to fuelling with contaminated fuel. Check and filter the fuel if necessary.

Fuel hose

Pressure tester

Use the pressure tester to test the tightness of the fuel hose.

Connect the adapter to the pressure tester with a short hose.



501 56 27-01

Pressure test the fuel hose

Pump up the pressure to approximately 7 psi/50 kPa. Move to the next test if the pressure drops.



Fuel filter

Dismantle the filler cap and pull out the section holding the filler cap in position when fuelling.

Catch the fuel hose with the help of tool 502 50 83-01.

Pull out the hose a little through the tank fill hole and pull out the fuel filter. Check that the filter is not cracked or in any other way defective. Fouled filters must not be cleaned but replaced with a new one.

If the filter is heavily fouled, this may be due to the machine being filled with a contaminated fuel. Drain the fuel and filter when refilling.

Fuel hose

Pressure tester 501 56 27-01

Use the pressure tester 501 56 27-01 to test the tightness of the fuel hose.

The pressure tester is supplied with an adapter for small hose sizes, this should be used on the fuel hose. Make the hose between the adapter and the pressure tester as short as possible

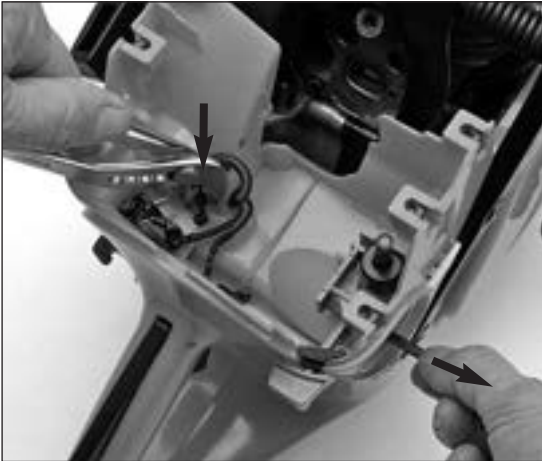
Pressure test the fuel hose

Pump up the pressure to approximately 7 psi/50 kPa. A falling pressure indicates that the fuel hose leaks, the connection to the carburettor leaks or the carburettor is defective.



Exclude the carburettor as the cause of the leakage
Dismantle the carburettor unit. Plug the hose by the carburettor and redo the pressure test.

Exclude the carburettor as the cause of the leakage
Dismantle the carburettor unit. Plug the hose by the carburettor and redo the pressure test. If the hose is intact, the carburettor must be checked.



Changing the fuel hose
Loosen the cable lug to the stop switch.

Changing the fuel hose
Loosen the cable lug to the stop switch to gain better access to the fuel hose.

Remove the hose from the tank at the same time as it is fed down through the hole in the carburettor compartment.

Remove the hose from the tank at the same time as it is fed down through the hole in the carburettor compartment little by little.

Fit the hose in the same direction by hand or with the help of a pair of pliers. Greasing the hoses facilitates assembly.

The new hoses is fed down into the tank from the carburettor compartment. Feed down the hose by hand or with the help of a pair of pliers. Greasing the hoses facilitates assembly.

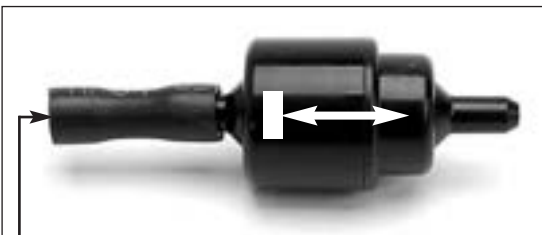


Note the how the fuel hose is fitted.

Note how the fuel hose is fitted on the tank unit when assembling.

Refit the cable lug!

Do not forget to refit the cable lug on the stop switch!



Tank venting

The tank vent has a non-return valve and a sintered metal filter.

Tank venting

The tank vent has a non-return valve that permits air to enter the tank, but prevents fuel from running out. The sintered metal filter permits air to pass slowly.



Fault indication

Blocked tank vent is shown as follows: As the fuel tank is emptied during use an underpressure is created in the tank, which reduces the fuel supply - the machine lacks power. Air suction is audible when the filler cap is opened.

Fault indication

Blocked tank vent is shown as follows: As the fuel tank is emptied during use an underpressure is created in the tank, which reduces the fuel supply - the machine lacks power. When filler cap is opened air suction is audible.



Dismantling

Dismantle the carburettor unit and choke control.

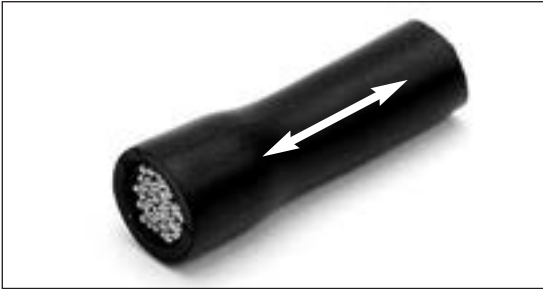
Dismantling

The carburettor unit must be dismantled to gain access to the tank vent.

Remove the choke control.



Press up the air vent unit with a pair of pliers.

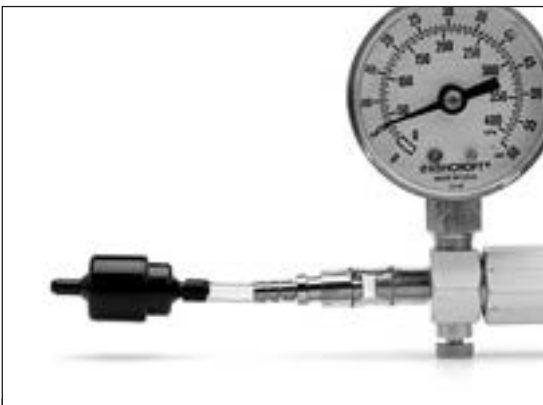


Filter – functional test

Pull off the rubber hose with the sintered filter. Blow through the hose and note whether the air can pass through slowly.

Filter replacement

A clogged filter should not be blown clean but replaced. Use a punch to push out the filter.
Push in a new filter.

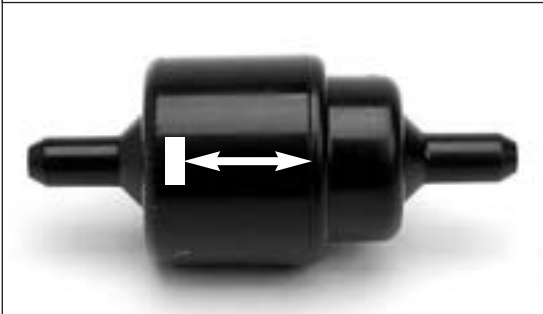


Non-return valve – functional test

Connect the non return valve to pressure tester 501 56 27-01.

Blow in the direction towards the tank. The air should pass without a build up of pressure.

Blow in the direction towards the filter. Non return valve should stop a pressure of approximately 3–6 psi/20–40 kPa and open at a higher pressure.



Press up the air vent unit with a pair of pliers.

Filter – functional test

Pull off the rubber hose with the sintered filter. Blow through the hose and note whether the air can pass through slowly.

Filter replacement

A clogged filter should not be blown clean but replaced. Use a punch to push out the filter out of the hose.

Push in a new filter.

Non-return valve – functional test

Connect the non return valve to pressure tester 501 56 27-01.

Note: Never expose the non return valve to a high pressure (compressed air)!

Test the non return valve by first blowing in the direction towards the tank. The air should pass without a build up of pressure.

Blow in the direction towards the filter. The non return valve should stop a pressure of approximately 3–6 psi/20–40 kPa. At a higher pressure the non return valve opens.



Carburettor unit

Dismantling

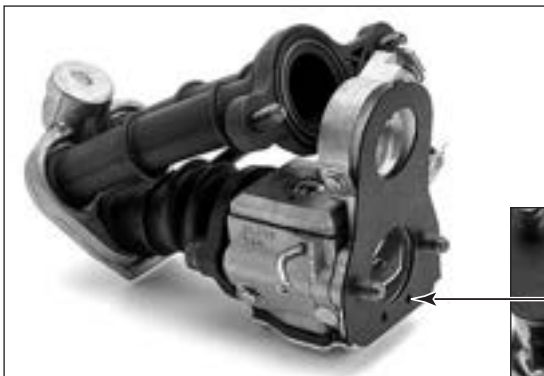
Pull up the service filter and put it to one side so that it is not damaged.



Clean the carburettor unit

Carefully clean the outside first.

Dismantle the carburettor from the bracket.



The channel, as shown in the small picture, connects the filter housing with the carburettor's measurement chamber diaphragm (SmartCarb filter compensation).



Pull off the pulse hose from the carburettor and split the units.



Examine carefully!

Check that the rubber guides are intact and that the connections to the cylinder and the carburettor do not leak. The concerned part must be replaced if there are any signs at all that contamination has leaked in.

Carburettor unit

Dismantling

Pull up the service filter and put it to one side so that it is not damaged.

Clean the carburettor unit

Work on the carburettor requires extreme cleanliness. Start work with by carefully cleaning the outside (with compressed air).

The carburettor is secured on the inlet bracket by four screws. Remove the screws.

Note the gasket between the carburettor and the inlet bracket.

The channel, as shown in the small picture, connects the filter housing with the carburettor's measurement chamber diaphragm. The air passage keeps the fuel/air mixture constant irrespective of how much the air filter is clogged (SmartCarb filter compensation).

Pull off the thin pulse hose from the carburettor. Separate the carburettor from the inlet unit.

Examine carefully!

Check that the rubber guides are not cracked or in any other way defective. Check especially carefully that the connections to the cylinder and the carburettor do not leak. The concerned part must be replaced if there are any signs at all that contamination has leaked in (contamination inside the gaskets).



Support insert

Later versions of the K750 are fitted as standard with a support insert in the rubber guide for the fuel-air mixture. The support insert ensures the guide is properly seated in the metal plate.

Supplementing older machines

It is recommended that this support insert also be fitted to older machines when they are serviced.



Replacing the guides

First remove the support insert.

The guides are dismantled from their mountings by pulling them out by hand. Push out one edge first.

Assembly

Push in the rubber guides past their seatings on the plate.

Now pull out the guides, one at a time, into their correct position.

Fit the support insert.



Parts must face the right way!

Note that the guide to the inlet is slightly bevelled on one edge.

Note the tongue that should be aligned with the holder.



Replacing the guides

First remove the support insert.

The guides are dismantled from their mountings by pulling them out by hand. First press out one edge of the rubber guide, after which the whole guide can be easily extracted.

Assembly

It is easier to assemble by first pushing the guide past its seating in the plate.

Now pull out the guides, one at a time, into their correct position.

Fit the support insert.

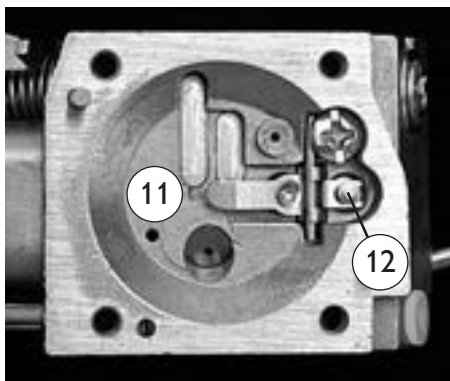
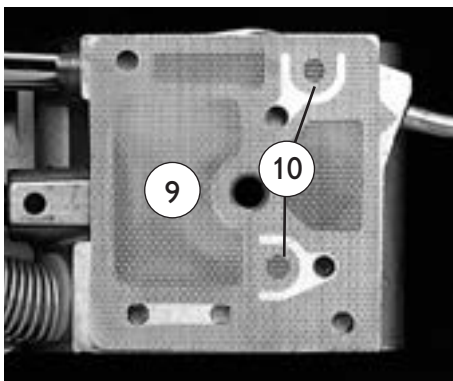
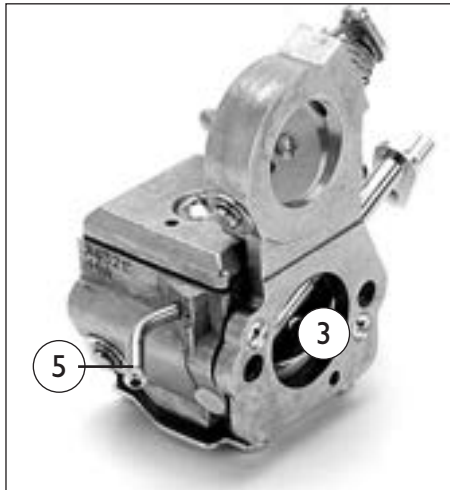
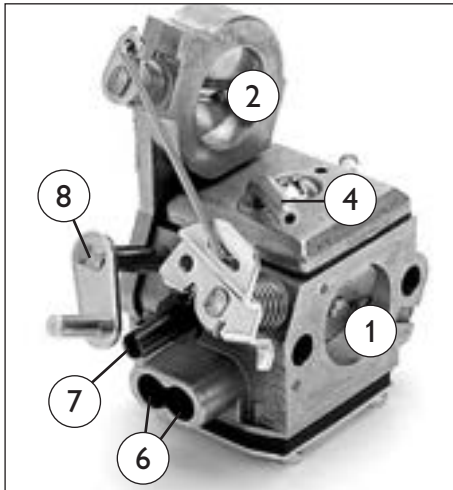
Carefulness!

Perform assembly with the greatest possible care. Air leakage can result in engine failure, and dust that is drawn in will significantly shorten the life of the engine.

Parts must face the right way!

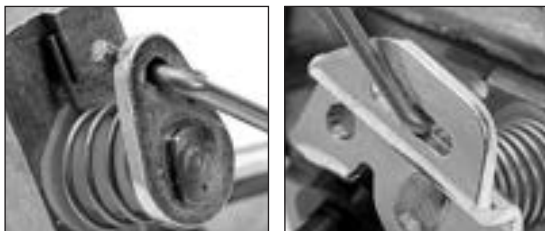
Note that the guide to the inlet is slightly bevelled on one edge. Turn the bevel towards the fuel/air inlet.

The inlet guide for the fuel/air has a tongue that must be aligned in the holder by the connection with the bracket.

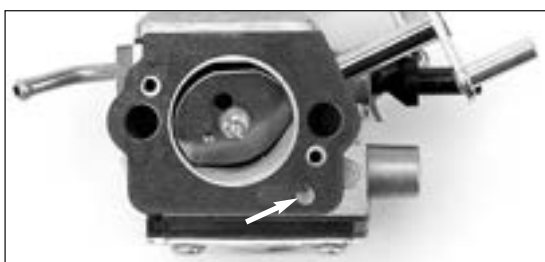


Dismantling/ assembling

Dismantling the air valve
Dismantle the air valve if the work demands this.



Link rod
Note the attachment of the link rod when reassembling.



Turn the gasket the right way!
Make sure that the gasket faces the right way so the pulse channel is not covered.

Components

1. Throttle valve
2. Air valve
3. Choke valve
4. Pulse line, to the carburettor's pump diaphragm
5. Fuel line
6. High and low speed jet (set at the factory)
7. Idle screw, speed adjustment
8. Throttle rod for the choke
9. Pump diaphragm
 - on top in relation to the crankcase via the pulse line
 - fuel under the diaphragm
10. Fuel pump's valve flaps
11. Fuel chamber, measurement chamber diaphragm above
12. Needle valve for pressure regulator

Dismantling/assembling

Dismantling the air valve

The air valve is secured on the carburettor by two screws.

The air valve does not need to be dismantled to check the function of the carburettor or for most service work. However, dismantling the air valve facilitates accessibility.

Link rod

Note the attachment of the link rod when reassembling.

Turn the gasket the right way!

Make sure that the gasket is turned the right way so that the arrow is not covered. The channel connects the crankcase with the carburettor's pump diaphragm (pulse channel).



Functional test

Pressure tester 501 56 27-01

The pump is operated with one hand.

The pressure tester is supplied with an adapter nipple for small sizes. Make the hose connection as short as possible.

Functional test

Pressure tester 501 56 27-01

The pressure tester has a pump piston that is operated with one hand.

The pressure tester is supplied with an adapter nipple for small sizes. Make the hose connection to the nipple as short as possible, this gives a clearer test result.



Needle valve

Reliable inspection of the needle valve's function demands certain conditions. The clearest result is obtained from a carburettor that is drained of fuel, yet still has some fuel residue. A completely "dry" carburettor, or a carburettor that has not been used for a long time give a measurement result that is difficult to interpret.

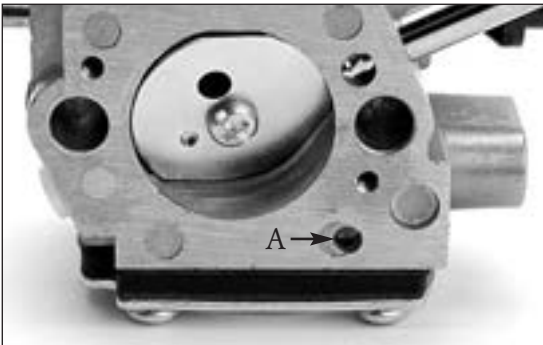
Tip when the carburettor is full with fuel: Turn the carburettor with the pulse line upwards, as shown in the picture. Pump up the pressure to approximately 30 psi/200 kPa and let the fuel run out through the venturi under water. Not until air bubbles emerge from the venturi, can the function of the needle valve be tested as set out below.

Water bath

By lowering the carburettor into the water any external leakage can be examined at the same time as the function of the needle valve. Connect a piece of hose to the pulse line, this should come out above the water line.

Connect a thin, short hose to the carburettor's fuel pipe. Pump a pressure to 15-36 psi/100-250 kPa, the needle valve should then lift. Air bubbles then come out of the jets in the venturi. The pressure should then drop to approximately 15-7 psi/100-50 kPa and then drop significantly slower or stop completely. Pressure drop after 7 psi/50 kPa indicates a leaking needle valve.

If the needle valve does not open at 36 psi/250 kPa (max. permitted pressure test) the needle valve has jammed. This can usually be forced open by blowing gently through the hole for filter compensation (A).



Leaking needle valve – indications

A leaking needle valve can be seen in numerous ways. A machine that is run for short periods is often difficult to start when it is warm, fuel leaks into the venturi and gives too much fuel for the next warm start. With a cold start, especially when the machine has not been used for a long period, the fuel chamber above the needle has been slowly emptied and fuel has evaporated. First after several attempts to start, has new fuel been pumped forwards and the machine starts.

Pump diaphragm

Put the hose from the pulse line into the water and pump up the pressure. If air comes out of the hose, the pump diaphragm leaks.

Measurement chamber diaphragm

Cannot be checked with a pressure measurement.

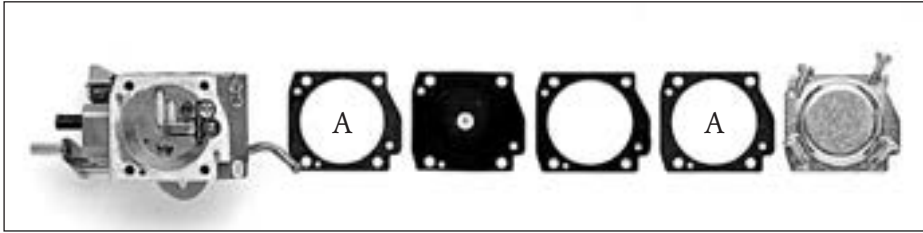
Pump diaphragm

Put the hose from the pulse line into the water and pump up the pressure. If air comes out of the hose, the pump diaphragm leaks.

Measurement chamber diaphragm

The condition of the diaphragm cannot be checked by pressure measurement. A punctured diaphragm stops the fuel supply.





Metering unit

Fuel chamber

Note the interrelated positions of the components when dismantling, as they can be reassembled in the wrong order. The gaskets A are identical.

Measurement chamber diaphragm

The air volume above the diaphragm acts as an air spring and is a prerequisite for the fuel to be pumped to the fuel chamber on the underside.

Make a visual inspection of the diaphragm with regard to cracks and leakage. Fuel on the top, towards the cover, indicate leakage. Change the diaphragm.

Needle valve

A faulty needle valve is the most common cause of malfunction caused by the carburettor. Perform a pressure test as previously described. If the test indicates a leaking needle valve, proceed as follows: Dismantle the screw holding the axle and remove the components.

Check that the spring is intact and that the lever runs easily on the axle.

Inspect the tip of the needle with a magnifying glass

If there are signs of deposits that cannot be removed easily or the tip of the needle is deformed (waistline) after the seating that it seals against, the needle valve should be replaced. Always replace in uncertain cases.

See the needle valve as a wear part that needs to be replaced during the life of the machine. (The picture shows a new needle tip.)

Clean the seating

Check whether there is dirt on the needle valve's seating. Blown clean with compressed air.

Measurement chamber diaphragm

Make a visual inspection of the diaphragm with regard to cracks and leakage.

Fuel on the top, towards the cover, indicate leakage. Change the diaphragm.

Needle valve

Perform a pressure test as previously described. If the test indicates a leaking needle valve, proceed as follows: Dismantle the screw holding the axle and remove the components.

Check that the spring is intact and that the lever runs easily on the axle.

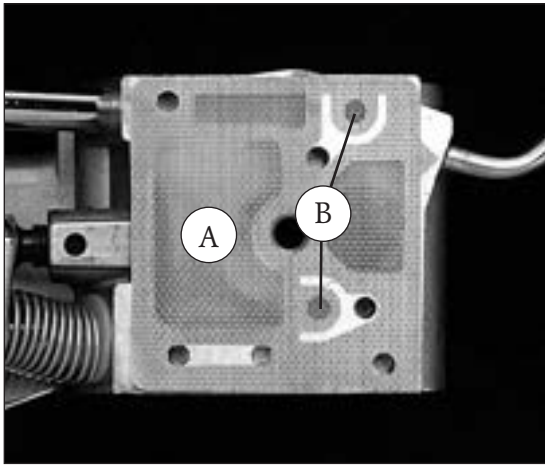
Inspect the tip of the needle with a magnifying glass

If there are signs of deposits or the tip of the needle is deformed (waistline) after the seating that it seals against, the needle valve should be replaced. Always replace in uncertain cases. (The picture shows a new needle tip.)

Clean the seating

Check whether there is dirt on the needle valve's seating. Blown clean with compressed air.





Pump unit

Function

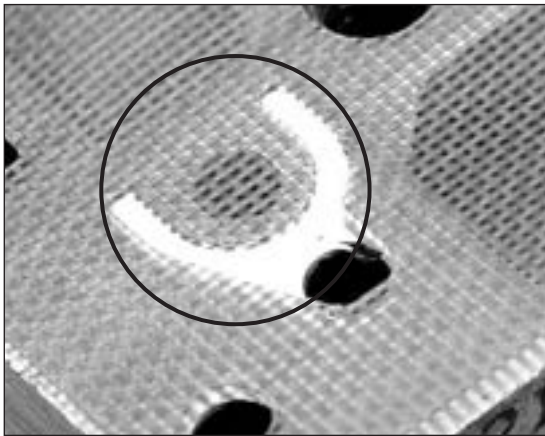
The pump diaphragm (A) is driven by the pressure variations in the crankcase.

The fuel on the underside of the diaphragm is pumped to the valves (B). The counter pressure of the measurement chamber diaphragm regulates the amount the valves open and the quantity of fuel pumped to the fuel chamber.

Inspection

Pump diaphragm leakage is checked as previously described.

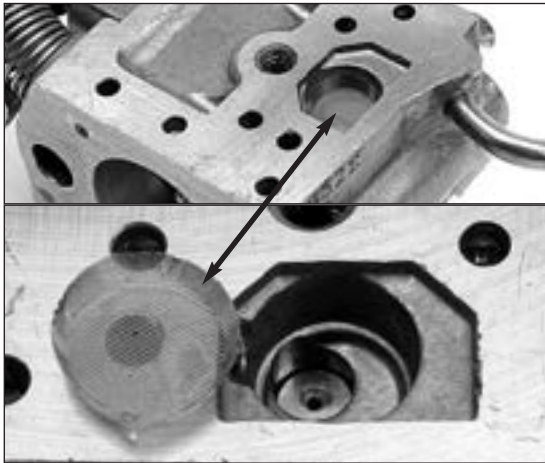
The function of the valve flaps cannot be pressure tested and must be visually inspected. The valve flaps must be absolutely flat and close tight against the carburettor housing.



Fuel strainer

Inspect the strainer with a magnifying glass. Loose dirt particles can be blown away from the needle valve's seating. If there are deposits that are hard to remove or the mesh is damaged the strainer must be replaced.

The strainer is dismantled using a needle or awl. Fit the new strainer with a .3 in./7 mm punch.



Pump unit

Function

The pump diaphragm (A) is driven by the pressure variations in the crankcase that are led to the pulse line on the pump unit cover.

The fuel on the underside of the diaphragm is pumped to the valves (B). The counter pressure of the measurement chamber diaphragm on the metering side regulates the amount the valves open and the quantity of fuel pumped to the fuel chamber.

Inspection

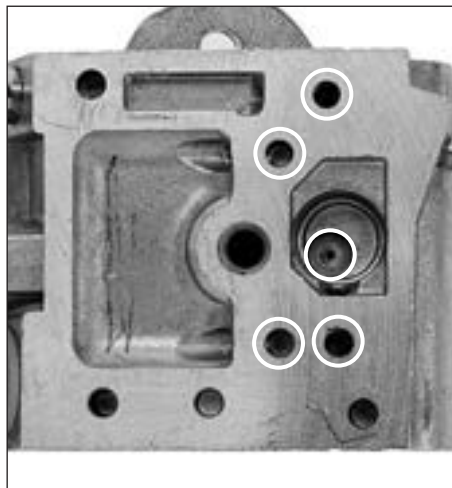
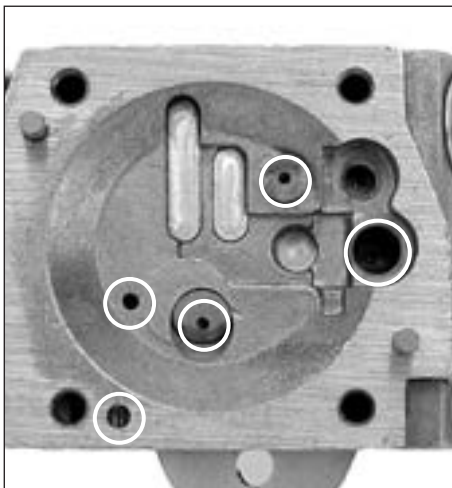
Pump diaphragm leakage is checked as previously described.

The function of the valve flaps cannot be pressure tested and must be visually inspected. The valve flaps must be absolutely flat and close tight against the carburettor housing in order for the pump function to work. If the flaps show signs of buckling, fatigue or cracking, the diaphragm must be replaced.

Fuel strainer

There is a fine-meshed strainer located on the fuel inlet to the carburettor. Inspect this with a magnifying glass. Loose dirt particles can be blown away from the needle valve's seating. If there are deposits that are hard to remove or the mesh is damaged the strainer must be replaced.

The strainer is dismantled using a needle or awl. Fit the new strainer with a .3 in./7 mm punch.



Channels

Blowing clean the carburettor

In connection with a service on the carburettor it is appropriate to blow out any particles from the channels using compressed air. The measurement chamber diaphragm and the pump diaphragm as well as the needle valve must be dismantled before starting to blow clean. Open the choke valve to give free air passage through the venturi.

The rings indicate where blowing clean should be done.



Valve axles

Check that there is no radial play on the valve axles. Replace parts if necessary.

Valve axles

Leakage from the valve axles results in incorrect fuel/air mixture and to dust penetration in the engine.

Check that there is no radial play on the valve axles. Replace parts if necessary. See the spare parts list.



Adjustment

The jets on the carburettor are set at the factory. These should not be readjusted.

Adjustment

The high and low jets on the carburettor have been set at the factory. These should not be readjusted.



Idle speed

The idle speed should be checked during a service.

The hole for the adjuster screw is next to the cover for the fuel. Use the special screwdriver (501 60 02-03).

Idle speed

The idle speed adjustment is the only carburettor adjustment that can and should be made during a service. The idle screw mechanically affects the opening of the throttle valve.

The hole for the adjuster screw is next to the cover for the fuel. Use the special screwdriver (501 60 02-03).



502 71 14-01

Tachometer 502 71 14-01

The instrument is induction sensing and does not need to be connected directly to the ignition lead. The air filter cover can be fitted when testing.

Tachometer 502 71 14-01

The instrument is induction sensing and does not need to be connected directly to the ignition lead. The air filter cover can be fitted when testing.

The supplied antenna cable does not normally need to be used.



Idle speed 2,700 rpm

Adjust outdoors

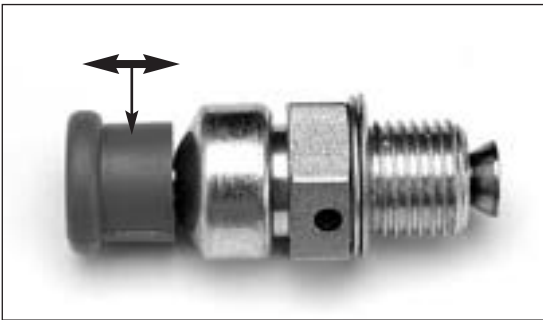
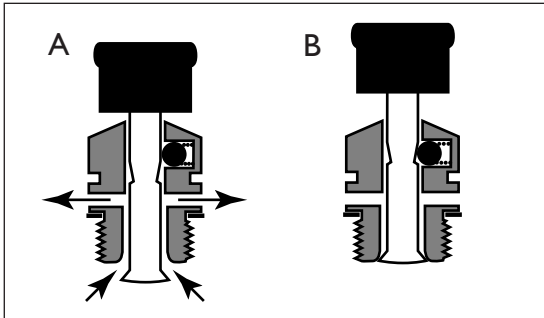
Naturally the idle speed must be adjusted outdoors. The blade should be fitted.

- Run the machine warm for approximately 5 minutes.
- Keep the instrument with the arrow directed downwards towards the position of the spark plug.
- Adjust the idle screw to an idle speed of approximately 2700 rpm. The blade should not rotate at this speed.
- If the blade rotates, lower the speed a little. If this does not help the clutch should be rectified.

Adjust outdoors

Naturally the idle speed must be adjusted outdoors on account of the exhaust fumes. The blade should be fitted.

- Run the machine warm for approximately 5 minutes.
- Keep the instrument with the arrow directed downwards towards the position of the spark plug.
- Adjust the idle screw to an idle speed of approximately 2700 rpm. The blade should not rotate at this speed.
- If the blade rotates, lower the speed a little. If this does not help the clutch should be rectified.



Decompression valve

Function

The decompression valve reduces the compression in the cylinder when starting.

A limited quantity of fuel/air mixture leaks out through the decompression valve, as shown in fig. A.

As soon as the engine fires the valve will close due to the combustion pressure, as in fig. B.

Dismantling

Use a long socket or the combination spanner to dismantle the decompression valve.

Service

Check that the valve moves. Carbon removing chemicals or a light oil (diesel oil) can help a jammed valve to work again. Blown clean with compressed air. Carbon deposits can be removed using fine emery cloth.

Assembly

Clean the sealing washer and check that this is not damaged before assembling the the decompression valve.

Leakage test

Use a leakage spray or soapy water. Move the stop button to the stop position and slowly pull the starter handle while observing the decompression valve.

Dismantling

Use a long socket or the combination spanner, 506 38 26-01, to dismantle the decompression valve.

Service

Check that the valve moves. Carbon removing chemicals or a light oil (diesel oil) can help a jammed valve to work again. Blown clean the valve with compressed air. Carbon deposits on the valve and the seating can be removed using fine emery cloth.

Assembly

Clean the sealing washer and check that this is not damaged before assembling the the decompression valve.

Leakage test

The decompression valve can easily be checked for leakage without starting the machine. Use a leakage spray or soapy water. Move the stop button to the stop position and slowly pull the starter handle while observing the decompression valve.



503 55 22-01

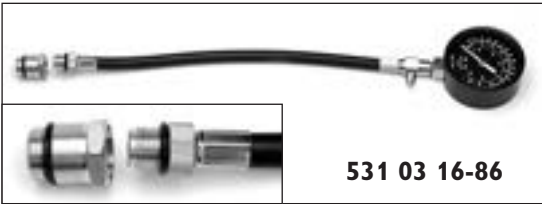
Compression test

The test indicates leakage from the combustion chamber.

Close the decompression valve or fit the sealing plug 503 55 22-01.

Compression tester

Connect the compression tester in the spark plug hole.



531 03 16-86

Compression test

- Run the engine warm.
- Connect the instrument.
- Make 5-6 attempts to start and read the pressure. Evacuate the pressure and repeat the procedure a few times. Note the average value for the tests.

Values less than 8 bar (120 psi) indicate faults with on the cylinder, piston or piston rings.



**New, run-in engine approximately 10 bar
Rectify below 8 bar**

Compression test

The compression test indicates leakage from the combustion chamber. If the machine lacks engine power and is difficult to start this may be due to poor compression.

Close the decompression valve or fit the sealing plug 503 55 22-01 to eliminate the decompression valve as the source of the fault.

Compression tester

The compression test is performed using the measurement instrument 531 03 16-86, which is connected to the spark plug hole. The valve below the gauge evacuates the pressure.

Compression test

- Run the engine warm for a few minutes.
- Unscrew the spark plug and connect the instrument.
- Make 5-6 attempts to start and read the pressure on the gauge. Evacuate the pressure and repeat the procedure a few times. Note the average value for the tests.

The average value for a new and run-in engine is approximately 10 bar (150 psi). Values less than 8 bar (120 psi) indicate faults with on the cylinder, piston or piston rings.



Cylinder

Dismantling

It may be appropriate to secure the engine body in a vice to facilitate work. Use soft jaw guards!

Cylinder

Dismantling

It may be appropriate to secure the engine body in a vice to facilitate work. Use soft jaw guards!

Dismantle the cylinder.

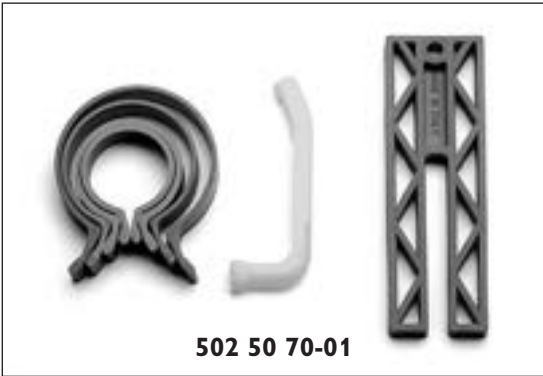
Dismantle the 4 screws at the base of the cylinder and lift off the cylinder.





Remove the cylinder base gasket.

Remove the cylinder base gasket.



Tool kit 502 50 70-01

The tool kit contains piston ring compressors, a piston stop, and a support plate for the piston.

The piston stop must not be used on K750.

Tool kit 502 50 70-01

The tool kit contains, to the left, piston ring compressors to press together the piston rings when assembling.

The middle tool is a piston rod which must not be used on K750.

The support plate to the right is placed between the piston and the crankcase to facilitate the work.



Piston

Dismantling

Place the support plate under the piston.

Piston

Dismantling

Place the support plate under the piston.



Seal with a cloth or paper so as not to risk anything falling down into the crankcase.

Seal with a cloth or paper so as not to risk anything falling down into the crankcase.



Dismantle the circlips on both sides of the gudgeon pin.

Dismantle the circlips on both sides of the gudgeon pin using a pair of pliers. Turn and press together the circlip at the same time as it is pulled outwards.



505 38 17-05

Gudgeon pin punch
Used to dismantle and assemble the gudgeon pin.

Gudgeon pin punch 505 38 17-05
The gudgeon pin punch is used to press out the gudgeon pin. It is also used for assembly.



Dismantle the gudgeon pin
Push out the gudgeon pin by hand. If it is tight, it can be knocked out with a small hammer and gentle force. Use a counterhold.

Dismantle the gudgeon pin
Push out the gudgeon pin in any direction. Can usually be done by hand. If it is tight, it can be knocked out with a small hammer and gentle force. Use a wooden block or a large plastic hammer as a counterhold on the opposite side.



Dismantle the needle bearing

Dismantle the needle bearing
Press the needle bearing out of connecting rod.



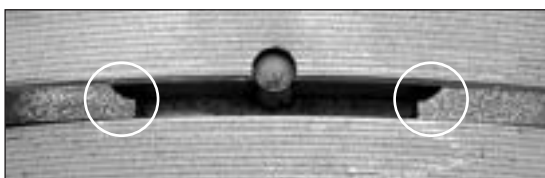
Piston rings
Dismantle the piston rings.

Piston rings
The piston rings are dismantled without tools using the following method. Slide the piston ring towards you, so you can grip the ends. Carefully expand the ring and move it away from you, so it can be lifted out of the groove at the rear edge. Assemble the parts in the reverse order.



Important when assembling
Fit the open part of the piston ring so it aligns with the guide pin.

Important when assembling
The piston ring groove has a guide pin that prevents the piston rings from rotating. Fit so that the open part of the piston ring aligns with the guide pin.



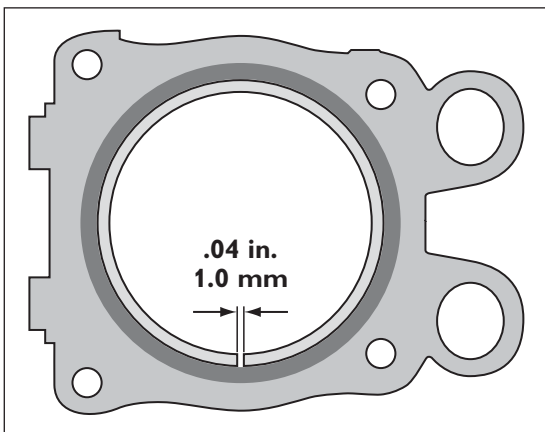
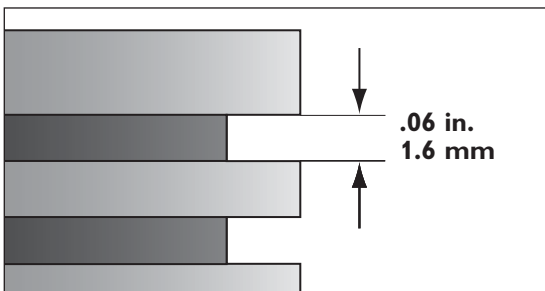
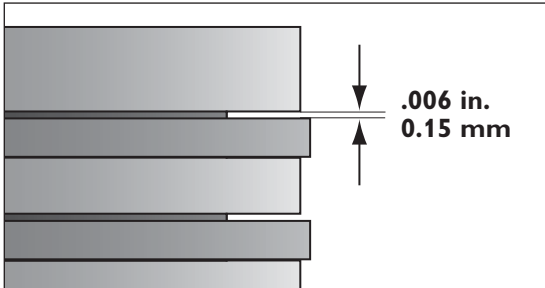
Turn the piston ring with the bevelled edge towards the guide pin.

Turn the piston ring with the bevelled edge towards the guide pin.



Examine the components
Investigate the cause of the impaired compression or failure. Machines with a few hours of use should be examined carefully to identify the cause of the abnormal wear.

Examine the components
Investigate the cause of the impaired compression or failure. With normal wear, due to many hours of use, components are measured and replaced if necessary. Machines with a few hours of use should be examined carefully to identify the cause of the abnormal wear, which is described later in this chapter.



Wear tolerances

Cylinder

Inspect the cylinder bore against the light. As long as the surface layer has not been broken through, the cylinder is in working order.

Aluminium from the piston can be removed using emery cloth.

Piston

Wear is at its greatest at the bottom of the piston by the inlet and exhaust ports. A study of the machining lines after manufacture give a picture of wear. If the piston has been worn completely smooth by the ports you should consider replacement.

Piston ring play

If the piston ring play exceeds .006 in./0.15 mm the piston ring groove should be measured as set out below.

Piston ring groove

If the piston ring groove is greater than .06 in./1.6 mm the piston must be replaced. Fit a complete piston kit with piston rings, needle bearing and gudgeon pin.

Piston rings

Insert the piston ring in the cylinder with the help of the piston, about one inch/a few centimetres from the base of the cylinder. The piston ring gap may be max. .04 in./1.0 mm.

Wear tolerances

Cylinder

Inspect the cylinder bore against the light. As long as the surface layer has not been broken through, the cylinder is in working order.

Aluminium from the piston can be removed using emery cloth, particle size approximately 120 grit. Carefully clean after sanding.

Piston

Wear is at its greatest at the bottom of the piston by the inlet and exhaust ports. A study of the machining lines after manufacture give a picture of wear. If the piston has been worn completely smooth by the ports you should consider replacement.

Characteristic for a worn piston is that the machine is difficult to start due to the piston's reduced valve function.

Piston ring play

Measure the piston ring play using feeler gauges. If play exceeds .006 in./ 0.15 mm the piston ring groove should be measured as set out below.

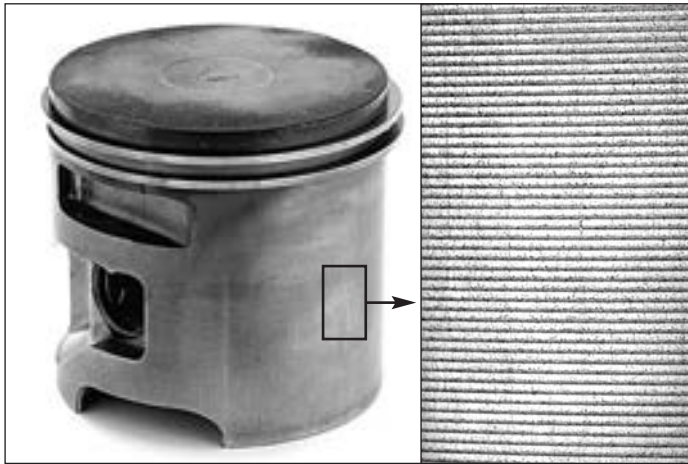
Piston ring groove

Measure the piston ring groove using feeler gauges. If the piston ring groove is greater than .06 in./1.6 mm the piston must be replaced. Fit a complete piston kit with piston rings, needle bearing and gudgeon pin.

Piston rings

Piston ring wear can be measured by inserting the piston ring into the cylinder and measuring the piston ring gap using feeler gauges. The piston ring gap may be max. .04 in./ 1.0 mm.

Use the piston to press in the piston ring exactly flat, about one inch/a few centimetres from the base of the cylinder.

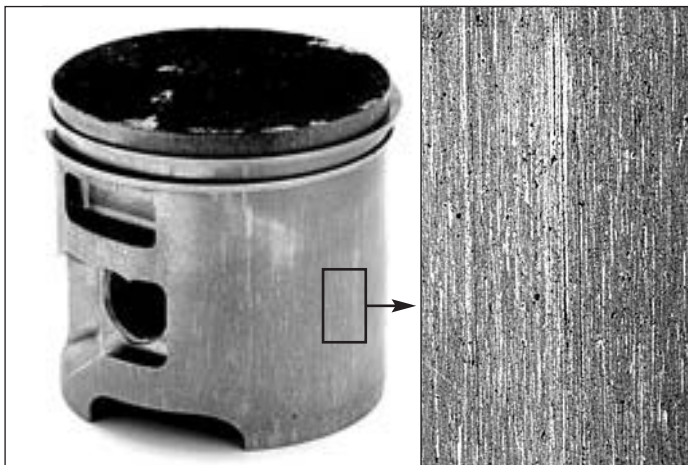


Piston damage

The cause of engine failure is often difficult to establish, primarily when the machine's history is not known. The typical cases below can provide some guidance.

Normal wear

Typical normal wear is easiest to see on the piston sections that face the exhaust and inlet sides. From the detailed image it is evident that the piston has been "polished" to give a bright surface, yet the machining lines after manufacture are still visible. Oiled piston rings indicate correct lubrication. The piston rings have full moveability in the piston ring groove.



Dust

Dust entering the engine will dramatically shorten its life. The effect of dust can be clearly seen if the piston is studied under a magnifying glass. Spiral lines in line with the piston's travel are a clear sign. The machining lines after manufacture cannot be seen. The surface is matt.

Usual cause is inadequate filter service and/or leakage. Check the condition of the filters and gaskets. Also check the rubber guides between the cylinder and the carburettor as well as the connections. Methodical searching for dust, from the filter units to the inlet by the cylinder, should give a result.

(The sooty piston top indicates that the machine works at short intervals and has not been run completely warm.)



Scoring

Damage of this type is always the result of overheating. The cores are usually on the exhaust side, which is the hottest. Inlet side can show similar damage.

Check whether the machine has broken down due to an incorrect oil mixture, or no oil at all. The oil on the overheated piston has probably carbonized. Check instead whether the connecting rod or the crankcase has a film of oil.

If a lack of oil can be excluded, inlet leakage should be looked at. When the engine has air leakage on the inlet side, this results in a lean fuel/air mixture which first and foremost give scoring on the exhaust side. Look for combination effect as in the example below.



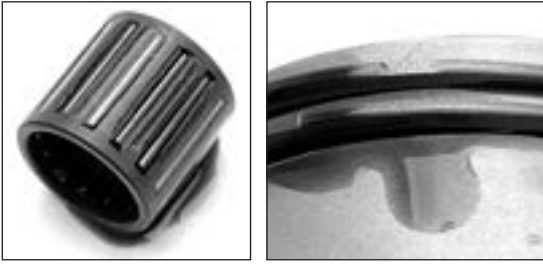
Overheated piston top

Clear signs of overheating are aluminium deposits on the top of the piston, which in extreme cases can result in melting.

Excess air in relation to the fuel volume increases the temperature in the combustion chamber. Therefore check whether the inlet system is blocked. Check that the fuel supply has not been obstructed due to a defective fuel hose, tank vent or the pulse hose.

Fuel with a too low octane grade cause ignition at the wrong point like spark plugs with the wrong thermal rating, which both increase the temperature in the combustion chamber.

Check that the flywheel's key on the crankshaft is intact, as the flywheel position on the crankshaft controls the ignition time point.



Assembly

Oil in

New or cleaned bearings and piston rings should be oiled in with 2-stroke oil before assembly.

The arrow pointing towards the exhaust port

It is important that the arrow is turned towards the muffler when assembling the piston on the connecting rod.

Fit the needle bearing in the connecting rod. Fit a circlip in the piston, hold the piston in position, press in the gudgeon pin and fit the other circlip.

Cylinder base gasket

Carefully clean off any old gasket residue from the surfaces that connect with the gasket.

Fit the gasket on the cylinder.

Assemble the cylinder

Check that the opening on the piston rings align with the guide pin.

Press together the piston rings using the piston ring compressor. Place this a few millimetres below the top of the piston to facilitate next phase.

Press down the cylinder over the piston and let the piston ring compressor slide over the piston.

Remove the piston ring compressor and the support plate.

Fit the screws on the base of the cylinder and tighten these crosswise to a torque of 8-9.5 lbf-ft/11-13 Nm.

Assembly

Oil in

New or cleaned bearings and piston rings should be oiled in with 2-stroke oil before assembly to initially ensure satisfactory lubrication.

The arrow pointing towards the exhaust port

The piston is not symmetrical. It is important that the arrow is turned towards the muffler when assembling the piston on the connecting rod.

Fit the needle bearing in the connecting rod. Fit a circlip in the piston, hold the piston in position, press in the gudgeon pin and fit the other circlip. Check that the circlips are seated correctly in their grooves.

Cylinder base gasket

It is extremely important that the base of the cylinder seals tight against the crankcase. Carefully clean off any old gasket residue from the surfaces that connect with the gasket.

Fit the gasket on the cylinder.

Assemble the cylinder

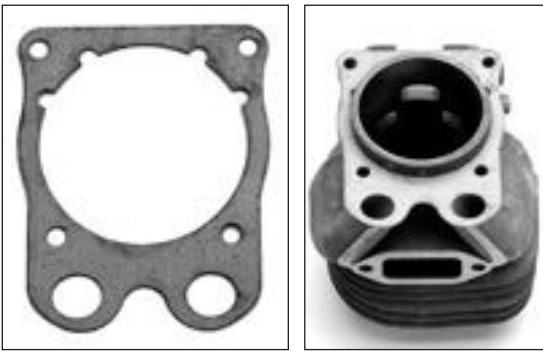
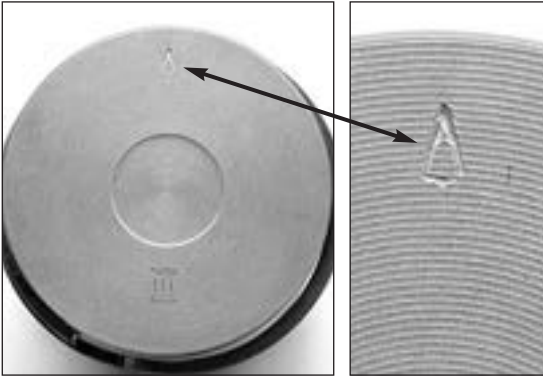
Check that the opening on the piston rings align with the guide pin.

Press together the piston rings using a suitable piston ring compressor included in the tool kit 502 50 70-01. Place the piston ring compressor a few millimetres below the top of the piston to facilitate the next phase.

Press down the cylinder over the piston and let the piston ring compressor slide over the piston until the cylinder has past the piston rings.

Remove the piston ring compressor and the support plate align the cylinder on the crankcase.

Fit the screws on the base of the cylinder and tighten these crosswise to a torque of 8-9.5 lbf-ft/11-13 Nm.





544 10 33-01

Leakage test

A leaking crankcase results in reduced crankcase compression. A typical sign is that the machine is difficult to start.

Tools

The tool kit 544 10 33-01 consists of parts for sealing the cylinder's exhaust and inlet ports as well as a sealing plug that replaces the decompression valve.

Pressure tester 531 03 06-23, or the like, is needed for the test.

Important

Turn the crankshaft so the exhaust port is fully open, i.e. the piston is at its lower turning point.



531 03 06-23



1



2

Exhaust port

1. Fit the exhaust port seal on the cylinder by the muffler's position.

The clutch lubrication channel

2. Tape over the clutch lubrication channel on the crankshaft. Does not apply to machines with bearing-mounted clutch drum.



3

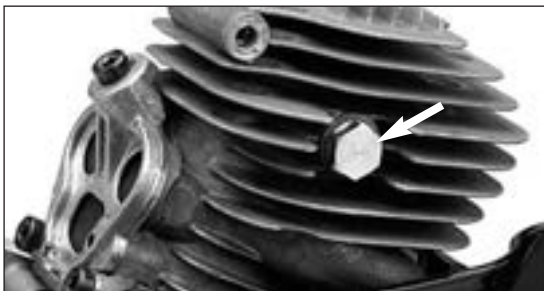


4

Inlet port

3. Loosen the screws on the carburettor's lower mounting a few turns.

4. Position the inlet seal and fit the screw. Tighten the lower mounting with care so that the clamp is not deformed.



Fit the sealing plug in the hole in the cylinder for the decompression valve.



Test for leakage

Connect the pressure tester on the nipple at the exhaust port seal.

Pump a pressure to 7 psi/50 kPa. After 30 seconds the pressure may drop at the most to 3 psi/20 kPa.

If a leakage is indicated

Find the leakage by brushing with soapy water or use a leakage spray. Check the seals on the crankshaft first. Next check by the gaskets (crankcase halves, base of the cylinder). Finally the possibility of cracks in the cast material of the crankcase.



Crankcase seals

Tools

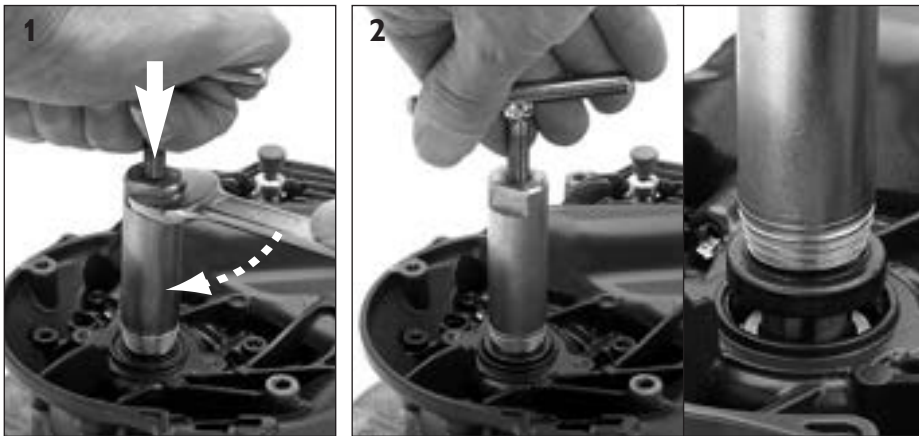
The puller 504 91 40-01, assembly taper 505 38 17-23 and the assembly punch 502 50 82-01 are needed to change the crankcase sealing rings.

Dismantling

1. Press down the puller and tighten the puller's conical thread in the sealing ring.

2. Pull up the sealing ring by screwing in the tool's centre bolt (T- handle).

Repeat the procedure on the flywheel side.



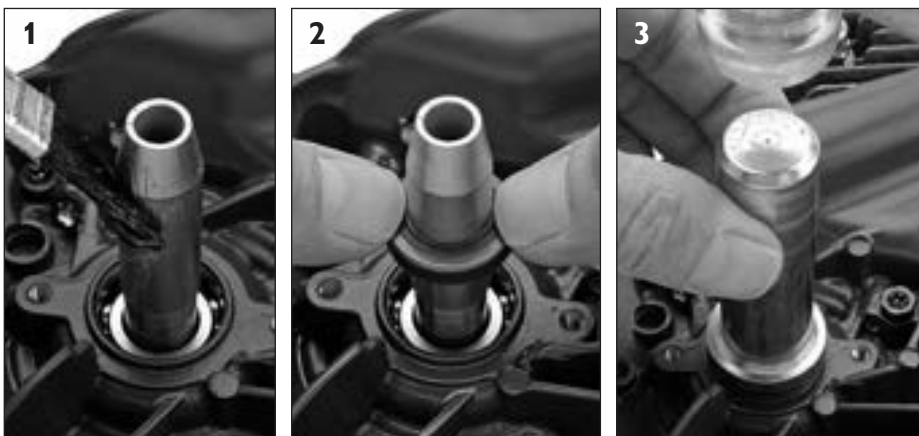
Assembly

CLUTCH SIDE

1. Lubricate the assembly taper and place on the axle.

2. Press down the sealing ring over the taper and down towards the seating.

3. Knock down the sealing ring into its seating with the assembly punch.



Assembly

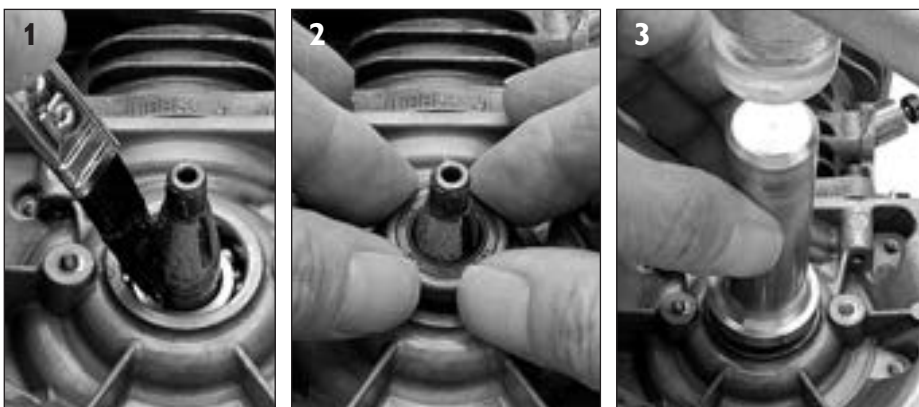
FLYWHEEL SIDE

1. Lubricate the axle. (The assembly taper is not used.)

2. Press the sealing ring against the seating.

3. Knock down the sealing ring into its seating with the assembly punch.

Wipe off the grease on the axle before the flywheel is fitted.



Pressure test

Pressure test the crankcase. Check the seals crankshaft/sealing ring and sealing ring/crankcase with leakage spray or soapy water.





Crankcase

Tools

A universal puller and a special tool are needed to spilt the crankcase.

Crankcase

Tools

A universal puller (504 90 90-02) and a special tool (grip plate) from Husqvarna (544 06 00-02) are needed to spilt the crankcase.



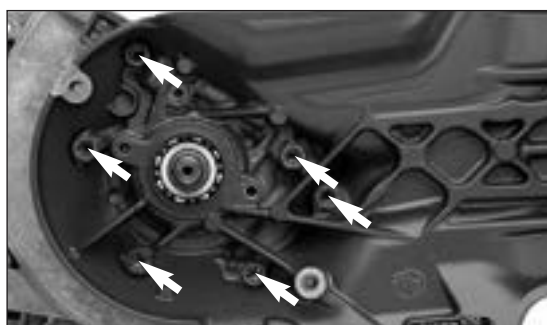
Starting position

Note that the crankshaft's stuffing boxes are to be dismantled.

Starting position

Dismantle the basic modules from the crankcase.

Note that the crankshaft's stuffing boxes are to be dismantled.



Split the crankcase

Remove the screws.

Split the crankcase

Remove the six screws that join the crankcase halves.



Fit the grip plate (544 06 00-02) and press out the crankshaft with the puller.

Press out the crankshaft from the other crankcase half in the equivalent manner.



Connecting rod

Check that there is no radial play on the connecting rod by the crankshaft journal.

Connecting rod

Check that there is no radial play on the connecting rod by the crankshaft journal. If this is the case the whole unit must be replaced.

Clean the gasket surfaces

Carefully clean the gasket surfaces.

Clean the gasket surfaces

Carefully clean the gasket surfaces. No gasket residue must remain.



Filled balance weights

The balance weights on both sides of the crank can be removed and replaced.

Filled balance weights

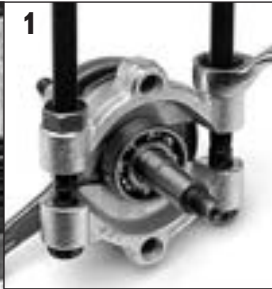
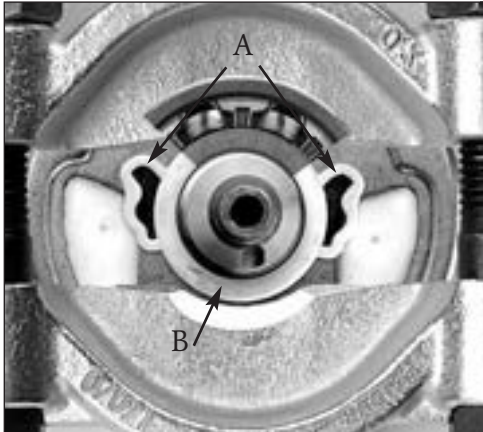
The balance weights on both sides of the crank can be removed and replaced. These are important for the function of the engine and must not be forgotten when reassembling.



If the bearing releases from the crankcase

Normally the bearing should release from the crankshaft during dismantling. The bearing is dismantled from the crankshaft using the puller 531 00 48-67.

1. First fit the puller plate behind the bearing. Exercise care so that the plastic components on the balance weights are not damaged, see "IMPORTANT!"
2. Fit the puller unit and press the bearing off of the crankshaft.



IMPORTANT!

Turn the puller plate so that the "ears" (A) are free. The jaws must not be screwed together further than to the centre ring (B), otherwise the plastic ring will be damaged.



Main bearing

Tools

Use the tool kits opposite to change the main bearing.



Dismantling

Note The tubular guides for the crankcase halves must be removed!

Place the crankcase halves against a flat piece of wood or the like. Heat around the bearing with a hot air gun, max. 300 °F/150 °C. Place the sleeve in the tool kit against the bearing and knock this out with a large plastic mallet.



Assembly

Use the tool kit 506 37 61-02 for bearing assembly in both crankcase halves.

Place the bearing on the support plate and hold it under the crankcase half. Insert the screw through the washer and fit the screw in the support plate.

Lock the screw and turn the nut until the bearing reaches the stop in the crankcase half.

Crankshaft

Tools

Use the tool kit 544 10 36-02 to press the crankshaft into the bearing, after first fitting this in the relevant crankcase half. The threaded mandrel for the clutch and flywheel side is M10V and M8x1, respectively.

Assembly

Pictures 1 and 2.

Secure the crankcase half with the cylinder base plane facing downwards so that the connecting rod is not forced against the crankcase while working. Slide the crankshaft in the bearing.

Picture 3.

Position the sleeve from the tool kit against the crankcase half. Screw the threaded mandrel on the crankshaft by hand until it bottoms. Note that the crankshaft has a left-hand thread on the clutch side.

Picture 4.

Lock the threaded mandrel's movement and press in the crankshaft by turning the nut until the bearing reaches the stop in the crankcase half. Make sure that the connecting rod is not held against the crankcase half.

Picture 5.

Fit the guides.

Picture 6.

Fit the new crankcase gasket.

Picture 7.

Assemble the other crankcase half using the same method as the first. Change to the other threaded mandrel.

IMPORTANT! Pay attention to the position of the connecting rod while tightening so that this does not get jammed in position. Also align the guides in time so that the crankcase gasket is not damaged. Prefit the screws before the crankcase halves are brought together to guide the gasket into place.

Picture 8.

Fit the screws and tighten these crosswise to a torque of 8-9.5 lbf-ft/ 11-13 Nm.

Check that the crankshaft runs free after assembly. Knock the ends of the shaft using a small plastic hammer usually releases any tension.

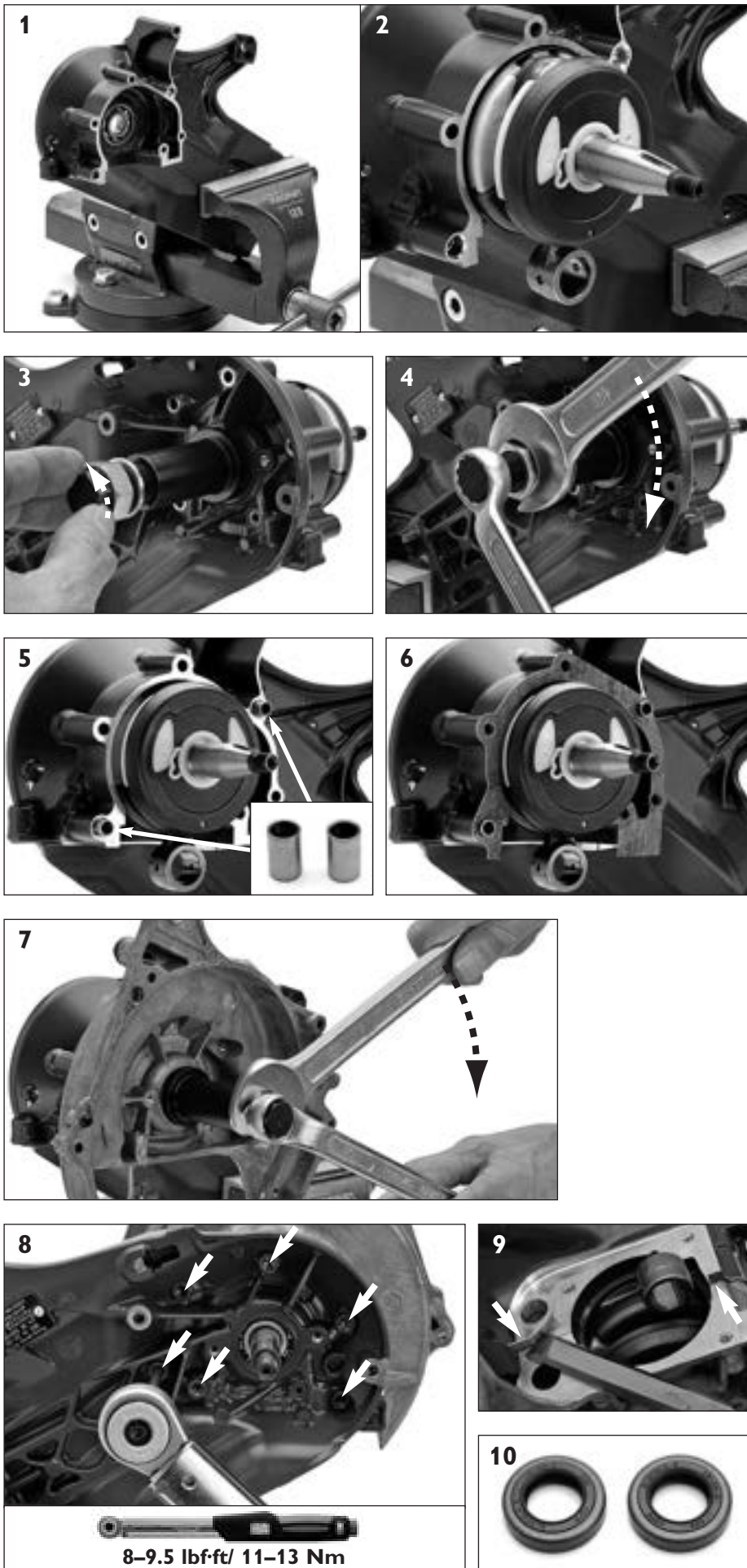
Picture 9.

Cut the gasket at the cylinder face.

Bild 10.

Fit new stuffing boxes (page 36).

Once the cylinder has been assembled the crankcase should be leakage tested.





Dismantling

Dismantle the cutting head, the rear belt guard, the air filter cover, and the filter base.

Fit the piston stop

Lock the crankshaft's travel with the piston stop 504 91 06-05.

Dismantling

Dismantle the cutting head, the rear belt guard, the air filter cover, and the filter base.

Fit the piston stop

Lock the crankshaft's travel by fitting the piston stop 504 91 06-05 instead of the spark plug.



Unscrew the clutch – clockwise

The clutch has a left-hand thread. It is marked with the dismantling direction “Off”.

Unscrew the clutch – clockwise

Note that the clutch has a left-hand thread, thus screw clockwise to dismantle the clutch. The clutch is marked with the dismantling direction “Off”.

Warning!

Never use impact on the puller – this will damage the piston. Even dismantling without the piston stop using a striking tool results in a risk of damage to the flywheel's locking mechanism (keyway/key).



Dismantle the clutch

Dismantle the clutch drum. Note the washer between the clutch and the drum.

Dismantle the clutch

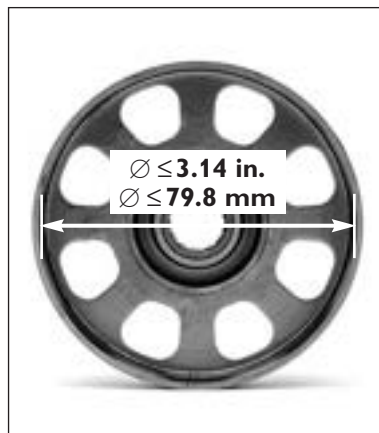
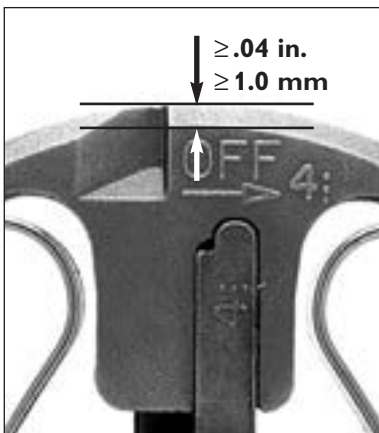
Once the clutch has been dismantled the clutch drum can be pulled from the axle. Note the washer between the clutch and the drum.



Reassembly

Note that the clutch should be turned with the low spanner grip towards the clutch drum.

The clutch should be tightened to a torque of 27-32 lbf-ft/37-43 Nm.



Wear tolerances

Engagement speed – min. 3100 rpm

The clutch must be rectified if the blade starts to rotate at an engine speed below 3100 rpm.

Clutch shoes

The height of the clutch shoe's bevelled section should not be less than .04 in./1 mm. Replace if necessary for the complete clutch. Never replace individual shoes from another clutch – this creates imbalance.

Clutch drum

The inside diameter of the clutch drum must not exceed 3.14 in./79.8 mm. Replace if necessary with a new clutch drum.

Check the clutch components

Take apart and clean the clutch if necessary. Check the state of the springs.



Clutch springs

Dismantling/assembling

Position a large Phillips screwdriver in each spring eye and hold the screwdrivers.

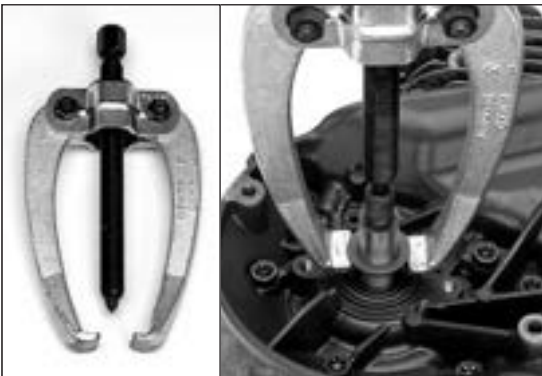
Expand the spring using circlip pliers between screwdriver and lift out the spring.

Clutch springs

Dismantling/assembling

The clutch springs can be dismantled and assembled with the following tool arrangement: Position a large Phillips screwdriver in each spring eye and hold the screwdrivers.

Using circlip pliers between screwdrivers, the spring can be expanded and lifted out of the clutch.



Support ring

Present on machines with needle bearing-mounted clutch.

Clutch with ball bearing has a loose sealing washer.

Dismantling

Dismantle the support ring using a universal puller.

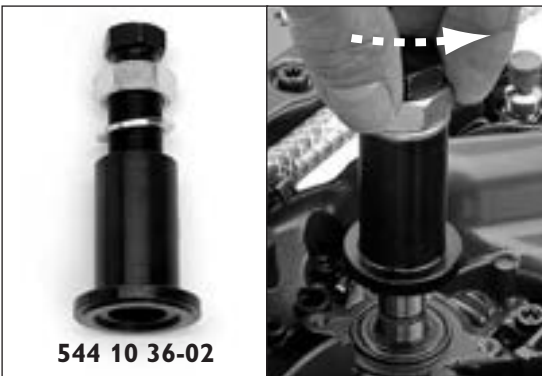
Support ring

The support ring is only present on machines with needle bearing-mounted clutch.

A clutch with ball bearing has a loose-fitting sealing washer next to the crankcase (see page 43).

Dismantling

Dismantle the support ring with a universal puller, 504 90 90-02.



544 10 36-02

Assembly

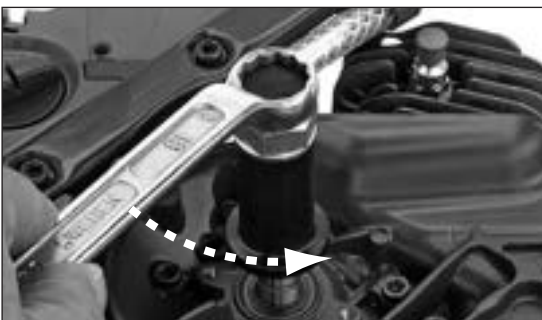
Fit the support ring with the tool intended for assembling the crankshaft in the crankcase.

Fit the piston stop. Position the support ring on the axle and position the tool as illustrated.

Assembly

The support ring is assembled using the tool intended for assembling the crankshaft in the crankcase, 544 10 36-02.

Fit the piston stop (504 91 06-05). Position the support ring on the axle and position the tool as illustrated.



Screw down the tool's centre screw so that it grips fully on the threads of the clutch.

Note that the clutch has a left-hand thread!

First screw down the tool's centre screw so that it grips fully and bottoms on the threads of the clutch.

Note that the clutch has a left-hand thread!



Hold the centre screw in position and turn the tool's nut. Press in the support ring against the stop on the crankshaft.

Hold the centre screw in position and turn the tool's nut clockwise to press the support ring in against the stop on the crankshaft.



Bearing replacement – needle bearing

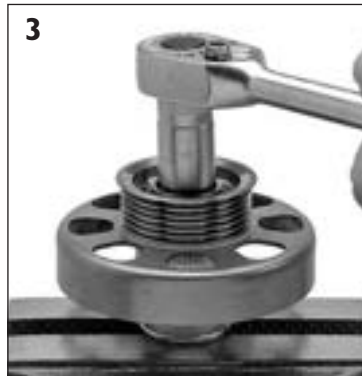
For a long time, a clutch drum with needle bearing has been the standard design on Husqvarna petrol-driven power cutters. The needle bearing is lubricated via a channel in the crankshaft from the crankcase.

In 2007 the needle bearing is being replaced with a ball bearing. Please note that machines with a needle bearing cannot be fitted with a ball bearing as the crankshaft and clutch drum are of different dimensions.

Tools

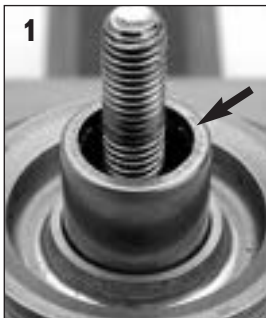
Replace the clutch bearing with the help of:

- socket 29/32 in., 23 or 24 mm
- M8-screw, approximately 3-4 in./80 mm and nut
- washer, outside diameter slightly smaller than 3/4 in. / 19 mm
- washer, diameter approximately 1-1/16 in. / 25-30 mm



Dismantling

1. Secure the screw in a vice and position the socket.
2. Fit the clutch drum. Fit the small washer and fit the nut.
3. Press out the clutch bearing by screwing down the socket.



Assembly

1. Place the new bearing in position with flat, side with text, facing upwards.
2. Fit the large washer and the small washer on top. Fit the nut.
3. Press in the bearing by tightening the nut until the large washer bottoms on the clutch hub.



Bearing replacement – ball bearing

A clutch drum with permanently lubricated ball bearing is being introduced on the K750 in 2007.

The drilled channel in the crankshaft that provided the earlier needle bearing design with lubrication is being discontinued.



Tools

The tool kit 504 56 79-01 is needed to replace the ball bearing of the clutch drum. Use the tool to dismantle and fit the bearing as described below.

The tool kit consists of a support plate for the bearing (A), the sleeve (B) and the cover (C). Note that the cover has different profiles, one side to match the sleeve on dismantling and the other to match the clutch drum on fitting. The kit also contains the screw (D) with washers and nut.

Grease the threads of the screw and the washers.



Dismantling

1. Fit the screw with the large washer against the bearing.
2. Fit the sleeve and cover in position. Fit a washer and nut.
3. It is a good idea to secure the allen key in a vice. Press out the clutch bearing by turning it clockwise in the sleeve.



Assembly

1. Secure the bearing support plate in a vice and put both ball bearings on.
2. Put the clutch drum on. Put the cover on and fit washers and the screw.
3. Press the bearing in by tightening the screw until the bearing reaches the stop in the clutch drum.
4. When refitting, first fit the washer on the crankshaft. Note that the ball bearing-mounted clutch must also have a washer between the clutch drum and clutch.





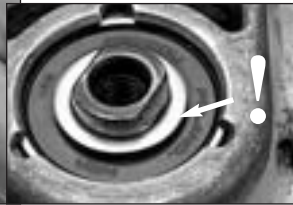
Dismantling

Dismantle the cutting head from the machine.



Lock the belt pulley with a mandrel and dismantle the centre screw.

Lift off the belt pulley. Remove the washer.



Press up bushing with two open ended spanners. Now remove the inner flange washer.



Remove the spacer together with the bearing seal.

Check that the seal is intact.



Remove the screws that hold the blade guard against the bearing housing. Remove the washer.

Dismantling

Dismantle the cutting head from the machine.

This chapter describes dismantling of the cutting head components and has instructions for replacing the blade shaft bearing at the end.

Lock the belt pulley with a mandrel and dismantle the centre screw.

Lift off the belt pulley. Remove the washer between the belt pulley and the bearing.

Tip: Tie on the belt pulley so that it is not lost or forgotten when reassembling.

The centre bush for the blade can be replaced and is available in different diameters.

Press up the centre bush with two open ended spanners. Now remove the inner flange washer.

Remove the spacer together with the bearing seal.

Check that the seal is intact. Dirt under this indicates defective seals and these should be replaced.

The washer and the three screws hold the blade guard against the bearing housing. Remove the screws and the washer.



Lift the blade guard off the bearing housing.

Lift the blade guard off the bearing housing.



Check that the gear rings for the blade guard's locking mechanism are intact.

Check that the gear rings for the blade guard's locking mechanism are intact.

Also check that the rubber ring under the gear ring is in good condition.

Also check that the rubber ring under the gear ring is in good condition. The rubber ring acts as a spring to keep the gears engaged.

The notched ring of the bearing housing is secured with two screws.



Bearing replacement

Tools

To replace the blade shaft bearing a special tool is needed, 506 37 61-02. Use the tool both for dismantling and assembly.

The tool's round threaded plate is the support plate for the bearing that is to be fitted. Use the plate with the smaller diameter for the K750.

Use the round chamfered washer when assembling the inner bearing. Use the triangle when assembling the outer bearing. Here, the triangle is applied directly against the two bearing races of the previously assembled bearing.

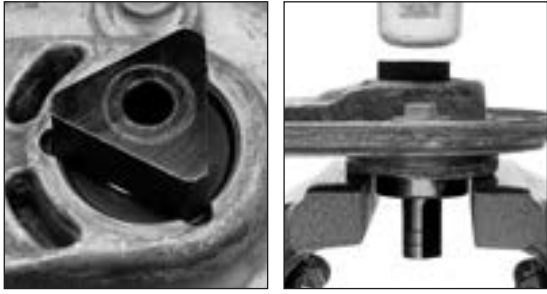


Dismantle the bearing unit

Use a vice as a counterhold when dismantling the bearing unit.

Dismantle the bearing unit

Use a vice as a counterhold when dismantling the bearing unit. Make sure that the bearing runs free of the jaws.



Place the triangle of the special tool in the cut-out of the bearing housing intended for it.

Knock out the entire bearing unit with a plastic hammer, supplement with a suitable extension bar.



Bearing unit

The complete bearing unit consists of the axle, two ball bearings with spacer ring for the inner bearing races and a spacer washer against the belt pulley.



Split the bearing unit

Use the vice as a counterhold.

Fit the screw on the special tool in the axle and knock the axle out of both bearings.

Alternatively a brass punch can be used.



Check

Check that the axle and the bearing seating in the cutting arm are not damaged.



Prepare bearing replacement

The bearing is fitted vertically. The bearing housing must be accessible both from the upper and the underside.

Using a vice with soft jaws to hold it works well.

Place the triangle of the special tool in the cut-out of the bearing housing intended for it.

Knock out the entire bearing unit with a plastic hammer. Supplement with, e.g. a round piece of wood to reach the last bit with the hammer.

Bearing unit

The complete bearing unit consists of the axle, two ball bearings with spacer ring for the inner bearing races and a spacer washer against the belt pulley.

Split the bearing unit

Use the vice as a counterhold.

Fit the screw on the special tool in the axle and knock the axle out of both bearings.

Alternatively a brass punch can be used to drive out the axle.

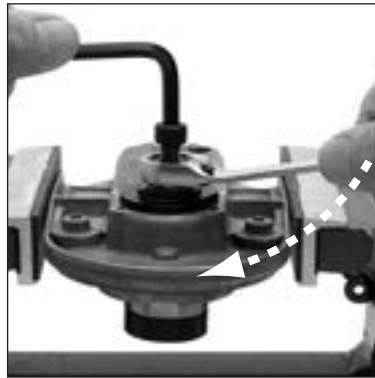
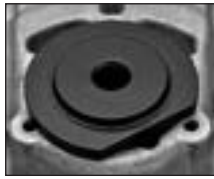
Check

Check that the axle and the bearing seating in the cutting arm are not damaged. If the bearing is seriously damaged so that it has been scored, in all probability the axle or cutting arm must be replaced due to the damage a seized bearing causes to the bearing seating or the axle.

Prepare bearing replacement

The bearing housing must be secured so that the bearing can be fitted vertically. The bearing housing must be accessible both from the upper and the underside.

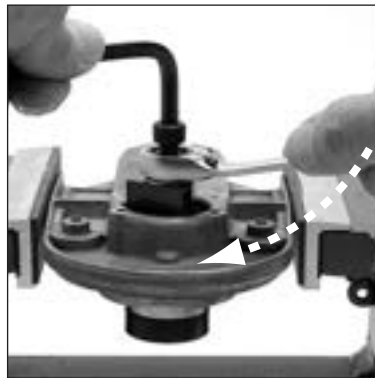
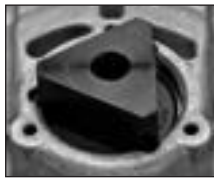
Using a vice to hold it works well. Use soft jaws to prevent damage to the bearing housing.



Assembling the inner bearing

Place the bearing on the support plate and hold it under the bearing housing. Insert the screw through the washer on the upper side and assemble the screw in the support plate on the underside.

Lock the screw and turn the nut until the bearing reaches the stop in the bearing housing.

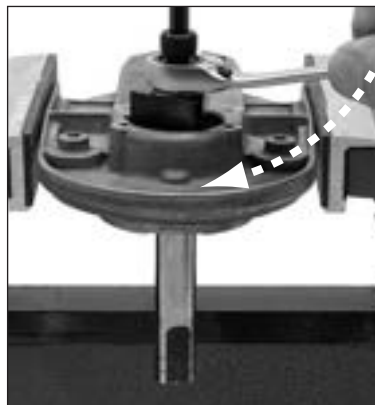
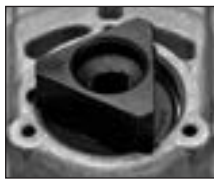


Assembling the outer bearing

Position the bearing **and spacer** on the support plate and hold it under the bearing housing.

Note the position of the triangle! The triangle should be directly butted up to the bearing fitted first.

Pull in the outer bearing until the spacer ring touches.



1. Assembling the axle

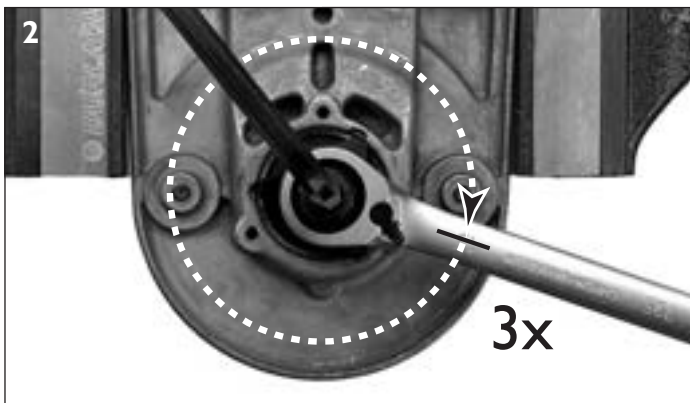
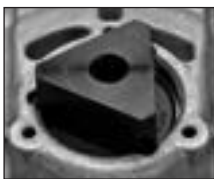
First check that the spacer ring between the bearings is centred.

The following procedure gives good results:

Turn the triangle with the smooth side facing downwards. Hold the axle on its underside and screw in the screw of the tool along with the large washer.

Note that the triangle lies directly against the bearing fitted first.

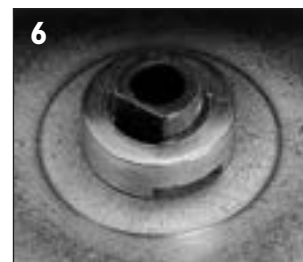
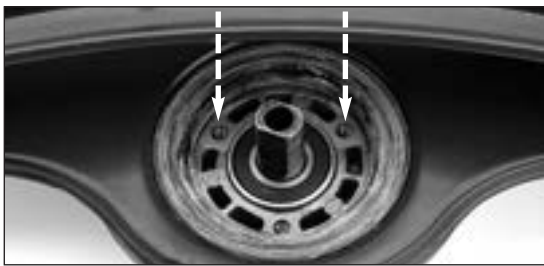
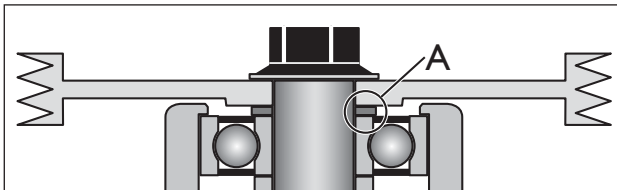
Pull the axle in until it bottoms against the flat underside of the triangle.



2. Adjusting the axle level

The axle must be adjusted upwards to just under 3 mm from the level of the bearing, in other words from the level resulting from stage 1.

Fit the triangle with the convex side facing downwards. Tighten the nut by three turns.



Fit the belt pulley

Note that the axle and the belt pulley have a profile that means that the belt pulley must be turned correctly when assembling.

Do not forget the washer between the bearing and the belt pulley!

1. Fit the washer.
2. Fit the belt pulley on the axle.

3. Tighten the centre screw so that the axle slides up towards the belt pulley and the washer (A) is pressed between the bearing and the belt pulley.
Tightening torque 28-31 lbf-ft/38-42 Nm.

Note: If the belt pulley is dismantled and reassembled, before assembly the axle must be driven down approx. 1 mm to obtain the position as per paragraph 3 above.

Bearing housing/blade guard

Check that the rubber seal is fitted properly against the bearing housing and blade guard.

Turn the bearing housing so that the screw hole becomes accessible from the top with the tool.

Tighten the three screws crosswise so that the washer is not unevenly loaded and risks being deformed. Tighten the screws fully.

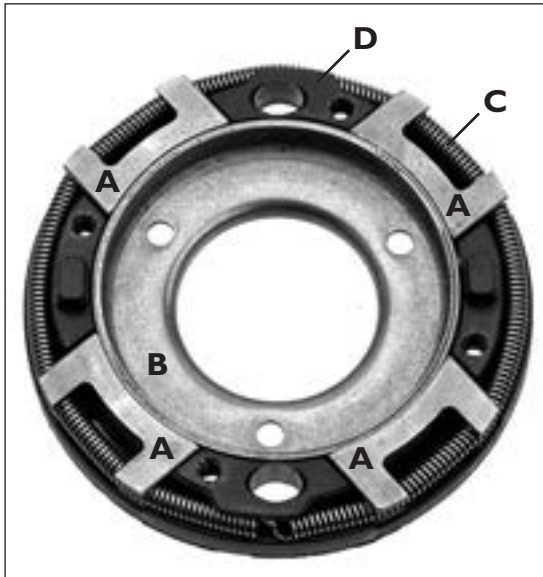
Fit the seal with spacer ring.

Centre bush

Never hit the centre bush into position, the axle will then be offset!

Fit as follows:

1. Position the inner flange washer.
2. Position the centre bush.
3. Fit the screw for the blade's attachment.
4. Press down the bush until the screw bottoms.
5. Dismantle the screw and place it on the other flange washer "turned the wrong way". Refit the screw and press down the bush against the inner flange washer.
6. The bush is fitted.



The friction retarder is being introduced as standard equipment on the K750 in 2007.

Function

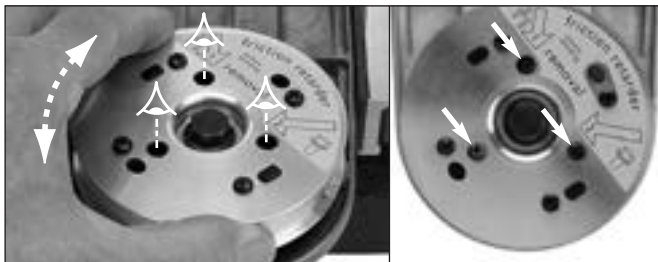
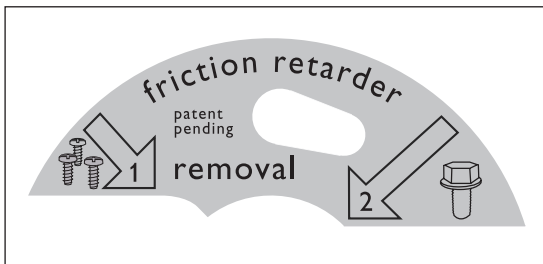
The design is a centrifugal brake where the brake shoes (A) are pressed against the brake drum (B). The spring (C) transmits a braking effect to the brake shoes. The units are held in place by the guide plate (D).

The friction retarder slowly brakes the blade until it comes to a standstill after cutting. The retarder is activated when the disc speed is lower than the working speed. When the throttle is pushed in and the speed increases, the brake shoes are pressed out from the brake drum by the centrifugal force, and the braking effect ceases.

Replacement

The friction retarder consists of a number of loosely assembled parts that are held together by the spring. In the event of replacement, replace the entire unit, as in the picture.

The brake drum is fitted against the bearing housing with three screws. The centrifugal unit is secured against the belt pulley with four screws.



Dismantling

Procedure

To be able to handle the friction retarder as a single coherent unit, it is important that dismantling and assembly are carried out in the correct order.

Turn the belt pulley so that the three screws that hold the brake drum against the bearing housing become accessible.

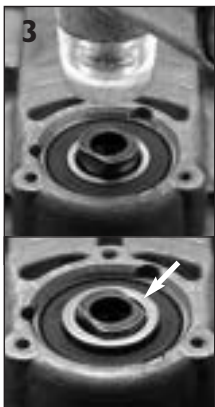
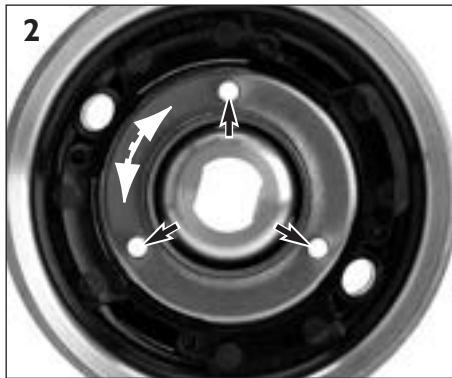
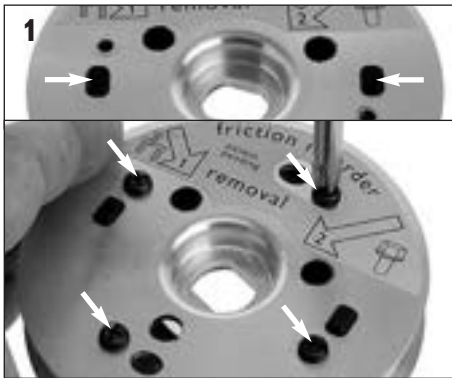
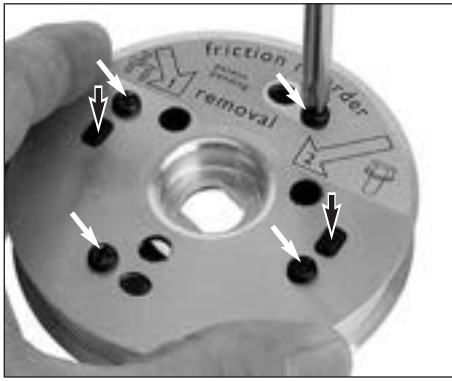
Remove the brake drum screws with a Phillips PH 2 screwdriver or a slotted screwdriver.

Tip: A magnetic screwdriver will make the job easier.

Dismantling the belt pulley

Lock the belt pulley with a mandrel or a screwdriver. Remove the central belt pulley screw. The belt pulley can now be lifted off together with the brake unit.

The picture on the right shows the assembly in the belt pulley.



Dismantling the retarder

Remove the four screws that hold the centrifugal unit against the belt pulley.

Release the centrifugal unit from the belt pulley by pressing the guides down (black and white arrows).

Use compressed air to clean off dust, as required. Note that the retarder must not be lubricated.

Assembly

1. Align the guides of the centrifugal unit against the belt pulley. Fit the four screws.

2. Turn the brake drum so that its holes line up with the holes in the belt pulley.

3. Drive the axle down about 1 mm to get a tight fit between the ball bearing, washer and belt pulley. See page 48 "Fit the belt pulley".

Fit the washer.

4. Lock the belt pulley with a mandrel and fit the washer and center screw. Tightening torque: 28-31 lbf-ft/38-42 Nm.

5. Turn the belt pulley so that the brake drum mounting hole lines up correctly against the bearing housing. Fit the three screws.

Assembly of the centrifugal unit

Normally the unit is handled without dismantling it. If needed, carry out assembly of the parts in the following manner:

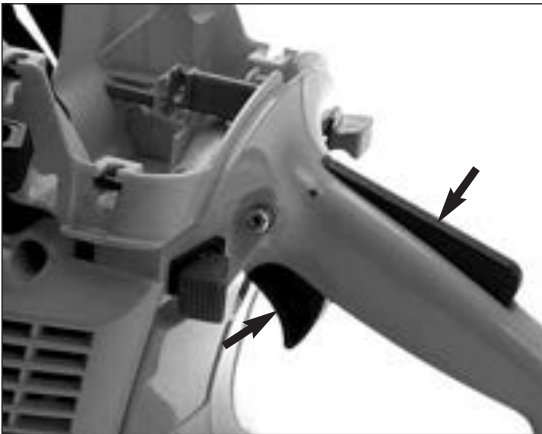
1. Place the spring in position in the guide plate. Note where the spring ends should be located.

2. Locate the brake drum in its position.

3. Assemble the brake shoes by stretching the spring with a screwdriver and then locating the brake shoe in position.

4. The complete centrifugal unit.



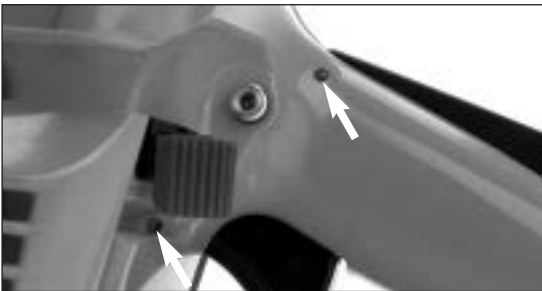


Rear handle

Throttle trigger lock

Check the function of the lock. Faulty function must be rectified.

The carburettor unit must be dismantled to carry out a service on the controls.



Dismantling

The throttle and throttle lock are both located in the handle by a 3 mm spindle. The spindles must be pressed out to the right-hand side and pressed in from the same side when assembling.



Dismantle the starter.

Use a round rod with a diameter of .08-.01 in./2-2.5 mm and approximately 4 in./10 cm in length to drive out the spindles.



Note how the controls' springs are fitted.



Rear handle

Throttle trigger lock

Check the function of the lock. The throttle should be locked in idling mode. Not until the lock on top of the handle is pressed in should the throttle be released. Faulty function must be rectified.

The carburettor unit must be dismantled to carry out a service on the controls.

Dismantling

The throttle and throttle lock are both located in the handle by a 3 mm spindle. The axles sit with the press fit towards the left-hand side and must therefore be pressed out to the right-hand side and pressed in from the same side when assembling.

Dismantle the starter.

Drive mandrels with dimensions under 3 mm are usually too short for dismantling the throttle spindle. Use a round rod instead with a diameter of .08-.01 in./2-2.5 mm and approximately 4 in./10 cm in length.

Note how the controls' springs are fitted if these are to be replaced.

Assembly

Fit the throttle first. Insert the control from the carburettor compartment and make sure that the spring comes out through the handle. Assemble the axle from the right-hand side.

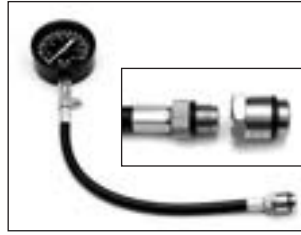
The spring should lie on the right-hand side (clutch side) of the throttle lock pin. Place the spring in the throttle lock and lower it parallel with the handle. Assemble the axle from the right-hand side.

The picture to the right shows the assembly from the carburettor compartment.

● = Service action



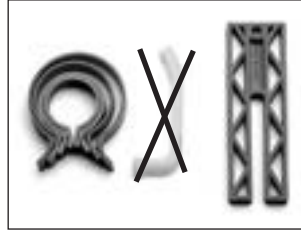
- 506 38 26-01**
Combination spanner
 (Supplied with the machine)
- The vibration dampers' inner screw, Torx T27. Blade diameter 5 mm.



- 531 03 16-86**
Compression tester
- Compression test, cylinder.



- 502 71 27-02**
Workshop key Torx T27
- Universal use for all Torx T27, except the vibration dampers' inner screw. See the tool above.



- 502 50 70-01**
Kit for piston service
 Consisting of piston ring compressor, piston stop and support plate. Use piston stop 504 91 06-05 for K750.
- Piston service.



- 502 71 13-01**
Test spark plug
- Test of the ignition system and the spark plug's function.



- 504 91 06-05**
Piston stop
 Locks the crankshaft's rotation.
- Dismantling the clutch.



- 502 51 34-02**
Air gap gauge
 Gauge for the air gap between the ignition module and the flywheel.
- Assembly of the ignition module.



- 505 38 17-05**
Gudgeon pin punch
- Dismantling and assembling the gudgeon pin.



- 502 51 49-02**
Flywheel puller
 Puller for the flywheel. Fits all petrol-driven Husqvarna cutters.
- Dismantling the flywheel.



- 531 03 06-23**
Pressure tester
 Kit consisting of pump with pressure gauge and nozzles, hose and sealing plug for universal use.
- Leakage testing the crankcase.



- 502 71 14-01**
Tachometer
 Instrument for measuring the engine's speed.
- Idle setting.
 - Checking the maximum speed.



- 544 10 33-01**
Cylinder seal
 Seals for the cylinder's inlet ports, exhaust ports and plug for the decompression valve.
- Leakage testing the crankcase.



- 501 56 27-01**
Pressure tester
- Test of carburettor functionality.
 - Test of fuel lines.
 - Test of non return valve in the tank ventilation.



- 503 55 22-01**
Sealing plug
 Replaces the decompression valve. (Included in 544 10 33-01).
- Leakage testing the crankcase.



● = Service action



**504 91 40-01
Puller**

- Dismantling the crankshaft's sealing rings in the crankcase.



**506 37 61-02
Bearing press**

- Main bearing assembly.
- Dismantling and assembly of blade shaft bearing and axle.



**505 38 17-23
Assembly taper**

- Assembly of the crankshaft's sealing ring on the clutch side.



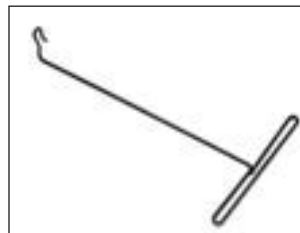
**504 56 79-01
Bearing press**

- Dismantling and assembly of the clutch drum ball bearing.



**502 50 82-01
Assembly punch**

- Assembly of the crankshaft's sealing rings in the crankcase.



**502 50 83-01
"Hose catcher"**

Tool for catching the fuel hose in the tank and drawing out the fuel filter for servicing.

- Fuel filter and hose.



**504 90 90-02
Universal puller**

- Dismantling the clutch's support washer on the crankshaft.
- Splitting the crankcase, in combination with 544 06 00-02.



**501 60 02-03
Special screwdriver for the idle screw**

- Adjustment of the idle speed.



**544 06 00-02
Grip plate**

- Splitting the crankcase, in combination with 504 90 90-02.



**531 00 48-67
Bearing puller**

- Dismantling the main bearing from the crankshaft.



**544 10 36-02
Bearing press**

- Dismantling the main bearing.
- Assembly of the crankshaft.
- Assembly of the clutch's support washer on the crankshaft.



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