Service Manual
Cutquik
TS 360, 350 AVE

Only the assemblies and components typically featured in the TS 360, 350 AVE are described in this Service Manual. All other repair work is described in Manual 08 S.

You should make use of the illustrated parts list while carrying out repair work. They show the installed positions of the individual components and assemblies. Microfilmed parts list are always more up to date than printed lists!

A fault on the machine may have several causes. Consult the "troubleshooting charts" when tracing faults.

Refer to the "Technical Information Bulletins" for engineering changes which have been introduced since publication of this service manual.

Service manuals and technical information bulletins describing engineering changes are intended exclusively for the use of STIHL servicing dealers and staff and must not be passed on to third parties.

The STIHL Special Tools manual lists all special servicing tools currently available from STIHL.

Always use original STIHL replacement parts.
Original STIHL parts can be identified by the STIHL part number, the STIHL logo and the STIHL parts symbol . The symbol may appear alone on small parts.

STIHL

CONTENTS

1. Tightening torques

Fastener	Thread size	For component	Torque Nm	Remarks (kpm)	
Self-tapping cheese-head screw	IS-B4,2x9,5	Rubber vibration buffer/ handle frame	3.0	(0.3)	
Flat head screw	M4x12	Guard for cutting wheel	3.3	(0.33)	
Cheese-head screw	IS-M4x16	Module plate	4.0	(0.4)	
Cheese-head screw	IS-M5x33	Fan housing	5.0	(0.5)	
Cheese-head screw	IS-M5x30x22	Fan housing	5.0	(0.5)	
Countersunk screw	M6x12	Limit stop/bearing	7.0	(0.7)	1)
Cheese-head screw	IS-M6x18	Filter housing	6.5	(0.65)	
Cheese-head screw	IS-M6x18	Buffer ring	7.0	(0.7)	
Cheese-head screw	IS-M6x24	Buffer ring/handle frame	7.5	(0.75)	
Cheese-head screw	IS-M6x40	Support/handle frame	7.5	(0.75)	
Locking screw	M8	Filter cover	12.0	(1.2)	
Nut	M10X1	Flywheel	27.5	(2.75)	
Nut	M10x1 L	V-belt pulley	32.5	(3.25)	
Nut	M10x1 L	V-belt pulley, front	37.5	(3.75)	
Hexagon bolt	M10x35	Connecting piece	47.5	(4.75)	
Cheese-head screw	IS-M6x20	Connecting piece	8.5	(0.85)	
Nut	M12x0,75	Stop switch	2.7	(0.27)	
	M14x1,25	Spark plug	27.5	(2.75)	

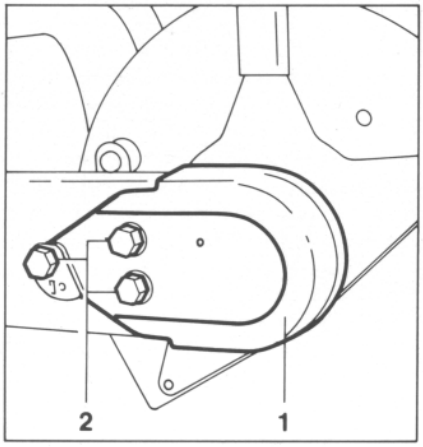
1) Only for USA

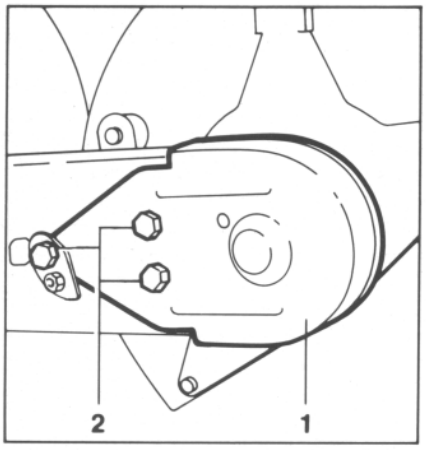
2. DRIVE FOR ABRASIVE BODY

2.1 Bearing with guard

Top:
1 = Guard (new version)
2 = Size 19 fastening bolts for bearing

Bottom:
1 = Guard (former version)
2 = Size 13 fastening bolts for bearing





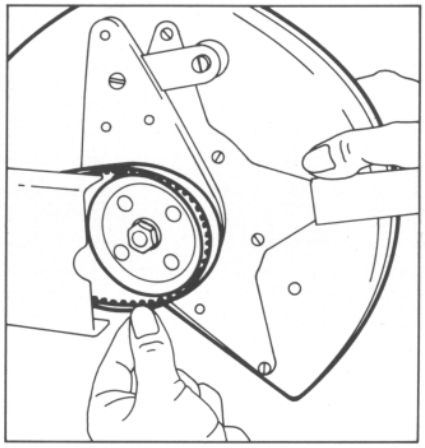
- Check axial and radial truth of running; see 2.2.

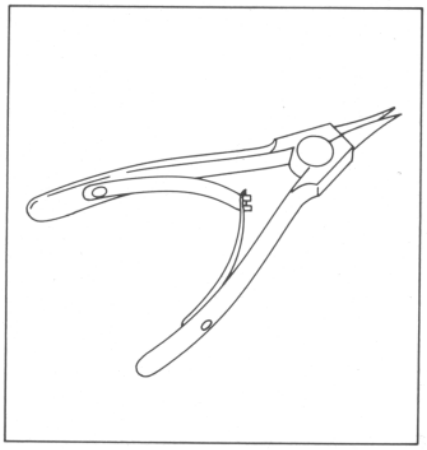
- Unscrew the fastening bolts on the bearing and remove the guard.

Note: The former machine versions feature a steel guard and size 13 hexagon bolts.

Top:
Removing the bearing

Bottom:
Pliers 0811 611 8200





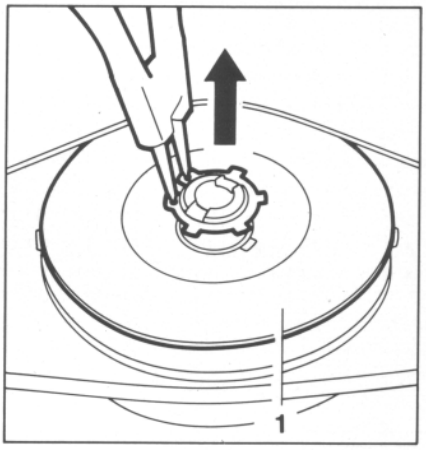
- Lift the bearing with guard out of the V-belt.

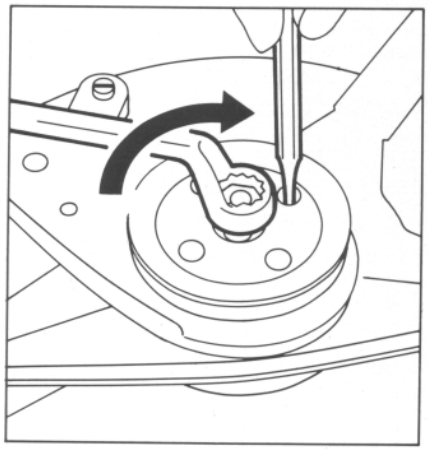
- Draw the axial clamp ring off the shaft.

- Remove the thrust washer.

Top:
Removing the axial clamp ring
1 =Thrust washer

Bottom:
Unscrewing the nut



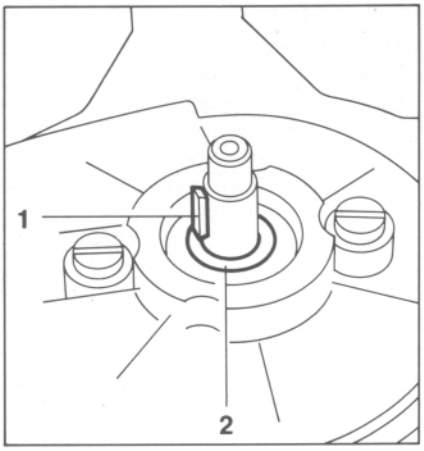


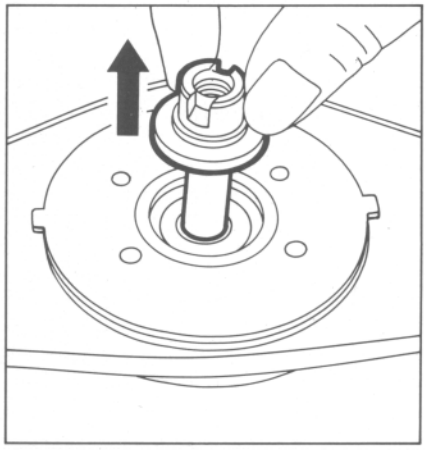
- Lock the V-belt pulley. Unscrew the nut and draw the V-belt pulley off the shaft

Important! The nut has a left-hand thread.

Top:
1 = Woodruff key
2 = Washer

Bottom:
Removing the shaft

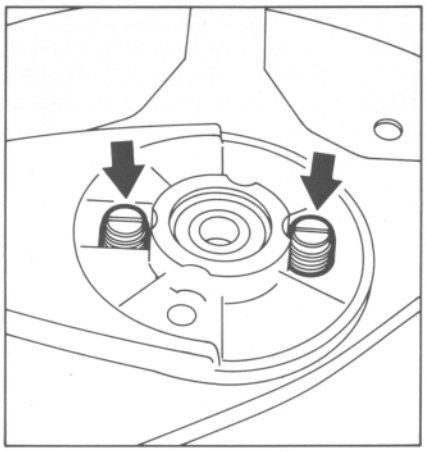


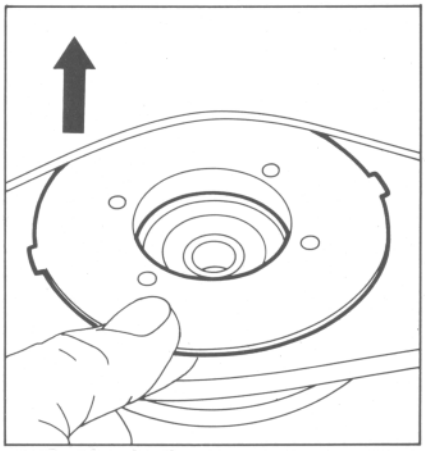


- Remove the Woodruff key from the groove in the shaft.
- Remove the washer from the shaft.
- Draw the shaft out of the deep-groove ball bearings.

Top:
Flat head screws

Bottom:
Removing the flange





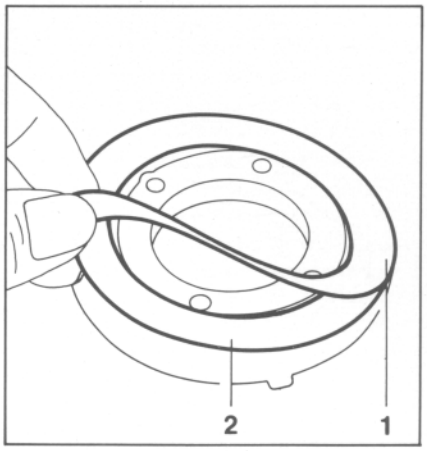
- Unscrew both flat head screws and remove them together with the spring washers.

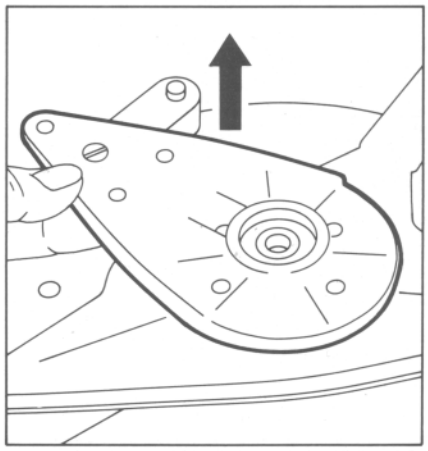
Note: Note the number of spring washers.

- Remove the flange from the guard.

Top:
1 = Rubber washer
2 = Disk

Bottom:
Removing the bearing

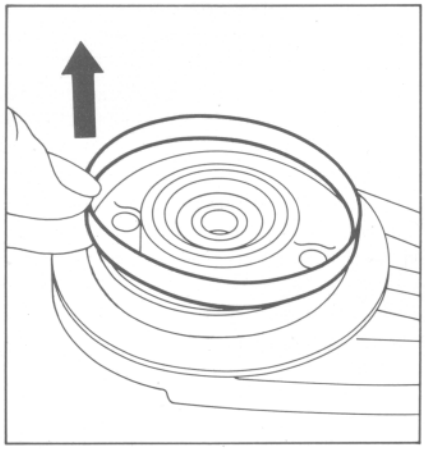


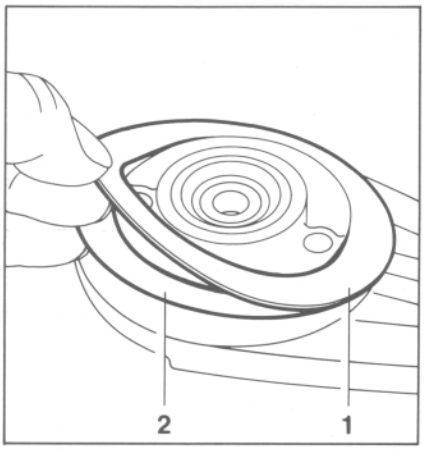


- Remove the disk and rubber washer from the flange and guard.
- Remove the bearing from the guard.

Top:
Removing the rubber ring

Bottom:
1 = Rubber washer
2 = Disk



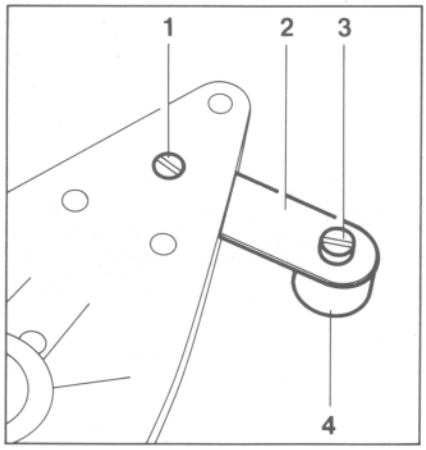


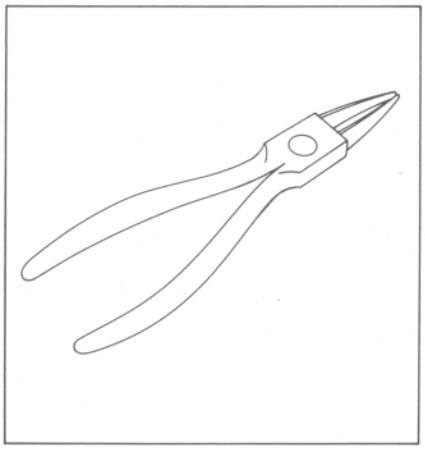
- Remove the rubber ring from the bearing.

- Remove the rubber washer and disk from the bearing.

Top:
1 = Countersunk screw
2 = Limit stop
3 = Cheese-head screw
4 = Rubber vibration buffer

Bottom:
Pliers 0811 641 8380





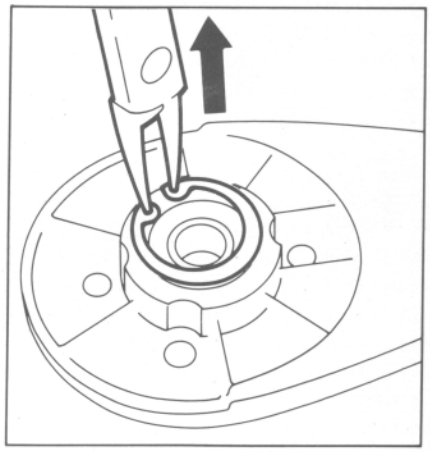
- Unscrew the countersunk screw and remove the limit stop.

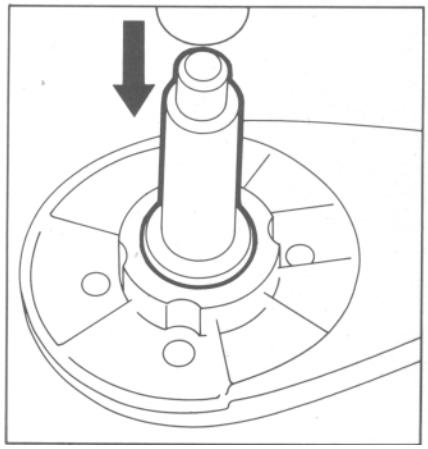
- Unscrew the cheese-head screw in order to replace the rubber vibration buffer.

Note: The limit stop and rubber vibration buffer only feature in machines for the USA.

Top:
Removing a
circlip

Bottom:
Pressing out the deep-groove ball bearings with drift pin 4119 893 7200



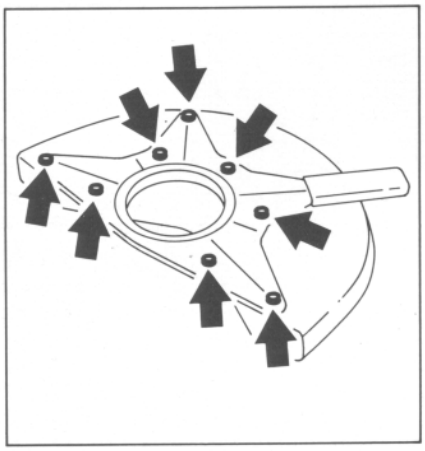


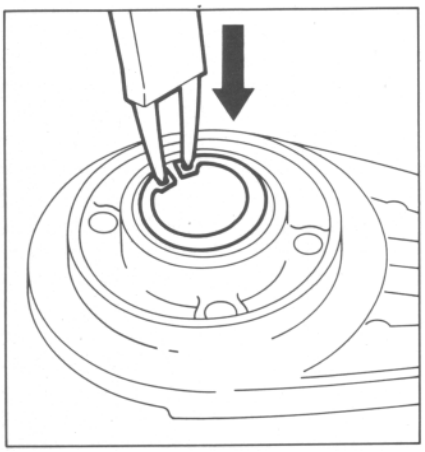
- Remove the circlips from the grooves before removing the deep-groove ball bearings.

- Force both deep-groove ball bearings and the ring out of the bearing with the drift pin.

Top:
Fastening bolts for
the flange

Bottom:
Fitting the circlip
with pliers 0811 641 8380





- Unscrew the fastening screws on the flange and remove the flange from the guard.

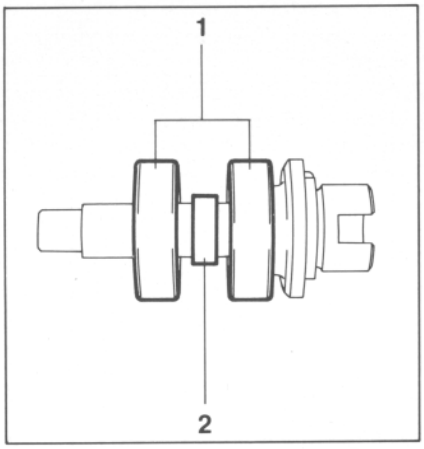
The parts are assembled in reverse order.

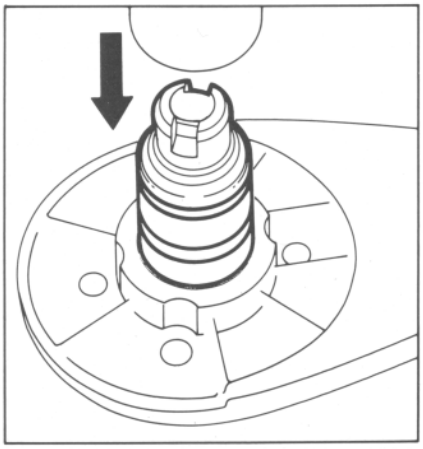
Note: Particular care must be taken when carrying out the following work.

- Place the circlip in one of the bearing grooves.

Top:
1 = Deep-groove ball bearing
2 = Ring

Bottom:
Pressing in the deep-groove ball bearings





- Slide the first deep-groove ball bearing onto the shaft, then the ring and the second deep-groove ball bearing.

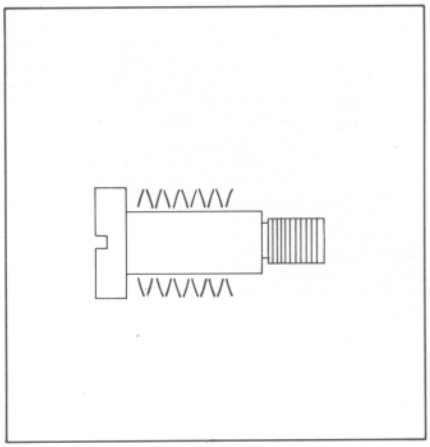
- Position the deep-groove ball bearings and press them in with the shaft until they contact the circlip.

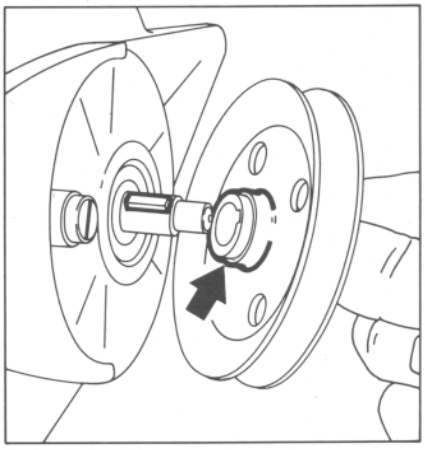
- Draw the shaft out of the deep-groove ball bearings.

- Place the second circlip in the bearing groove.

Top:
Correctly positioned spring washers

Bottom:
Longer collar on
the V-belt pulley



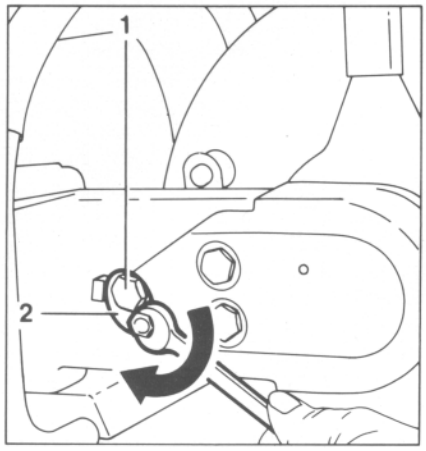


- Slide the same number of spring washers onto the flat head screws as were removed during disassembly, as shown in the drawing.

- Slip the V-belt pulley onto the shaft with the longer chamfered edge first and tighten the nut with a torque of 37.5 Nm (3.75 kpm).

2.2 Check the axial and radial truth of running

Tightening
the segment
1 = Fastening bolts
2 = Segment

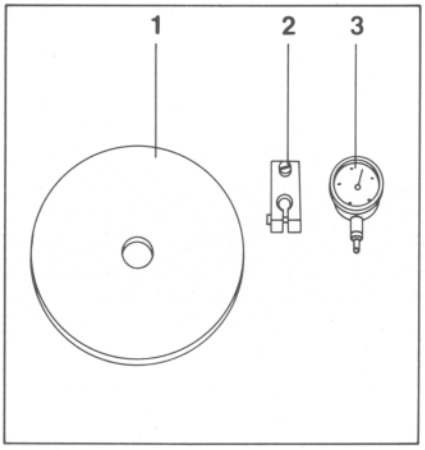


- Place the segment under the rear bolt on the bearing and lightly tighten the bolt.
- Using a size 13 open-jaw wrench, turn the segment clockwise until the V-belt is correctly tensioned.
- Then securely tighten all three fastening bolts, starting with the bolt at the rear (with segment).

Note: The V-belt is correctly tensioned when it can be slightly depressed (5 - 10 mm) by moderately pressing with the fingers in the middle between the two V-belt pulleys.

Important! Excessive tension in the V-belt increases the wear.

1 = Test wheel 5910 851 6100
2 = Gauge holder 5910 850 6000
3 = Dial gauge 0000 890 9100



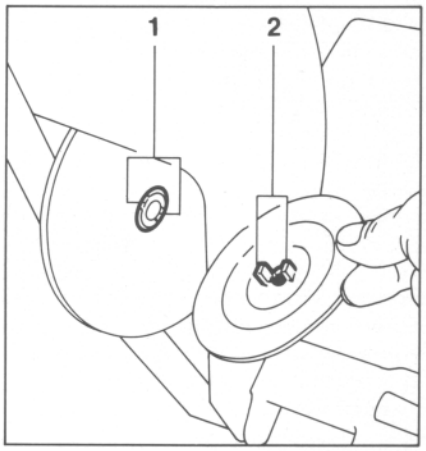
Since changes in the shaft diameter (due to scoring etc.) can affect the radial truth of running of the cutting wheel, it is normally sufficient carefully to inspect the shaft around the cutting wheel mount.

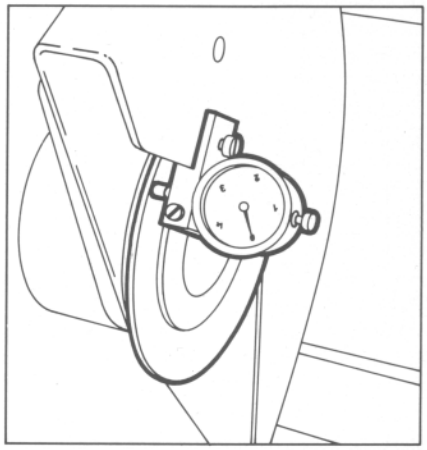
The axial truth of running, on the other hand, depends on the state of various components and must therefore be determined by measurement.

- Fit the test wheel and then position the thrust washer so that the arresting lugs engage in the arresting grooves in the shaft.
- Tighten the screw.
- Secure the gauge holder with dial gauge to the guard cover so that the axial truth of running can be determined for a diameter of approx. 130 mm over one full

Top:
Fitting the test wheel
1 = Arresting grooves
2 = Arresting lugs

Bottom:
Test equipment in position





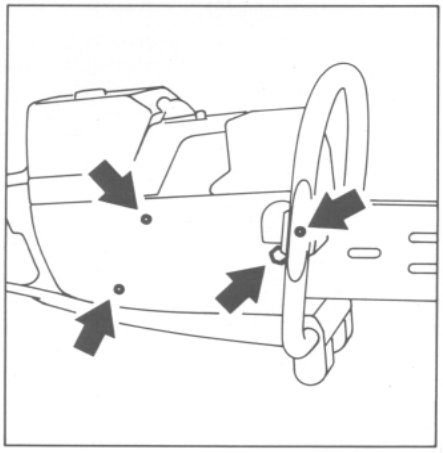
revolution of the wheel. Refer to the table "Test procedure".

- Remove the test equipment after completing the measurement.

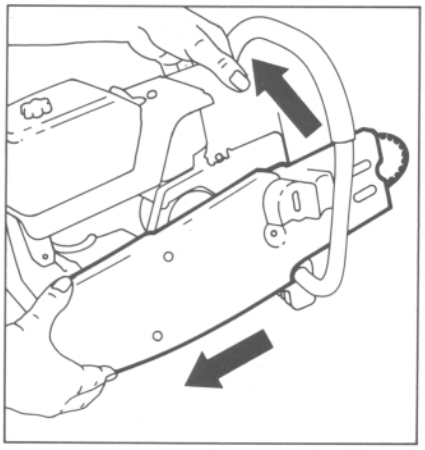
Test procedure	Actual condition	Possible causes	Remedy
Radial truth of running: Visual inspection of the spindle (shaft)	Wear marks or scoring around the cutting wheel mount	Fastening screw loose, use of wrong cutting wheels (diameter of mount > 20 mm or > 22 mm)	Replace the spindle (shaft)
Axial truth of running: Check the axial truth of running with the STIHL test wheel or diamond cutting wheel (over a diameter of 130 mm)	Axial eccentricity ≤ 0.15 mm		None
	> 0.15 mm Damaged or uneven contact surfaces of the thrust washers (especially the inner thrust washer); contact surfaces not plane; genuine STIHL parts have not been used	Dirt; thrust washers or cutting wheel fitted incorrectly; application of force when cutting or during transport	Replace the thrust washers
	Spindle (shaft) damaged	Incorrect handling, use of force	Replace the spindle (shaft)
	Distinct radial play in the bearing seat → spindle bearing defective	Deep-groove ball bearings damaged by exposure to dirt and/or bearing seat worn down at the spindle	Replace the spindle and deep-groove ball bearings

2.3 V-belt

Top:
Fastening screws for the connecting piece and fastening screw on the front handle

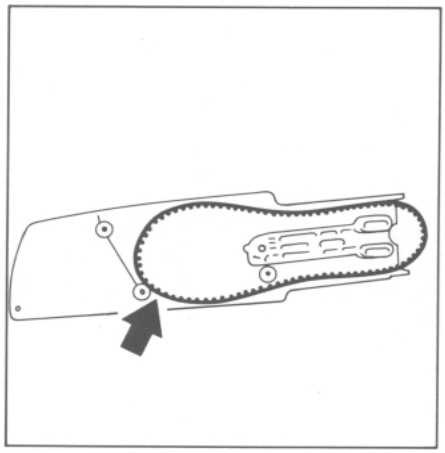


Bottom:
Removing the connecting piece



- Remove the bearing with guard; see 2.1.
- Unscrew the fastening screws on the connecting piece and on the front handle.
- Push the power unit aside slightly and remove the connecting piece.

Connecting piece with V-belt in position



- Remove the V-belt.
- Place a new V-belt in the connecting piece.
- Position the connecting piece and retighten the fastening screws.

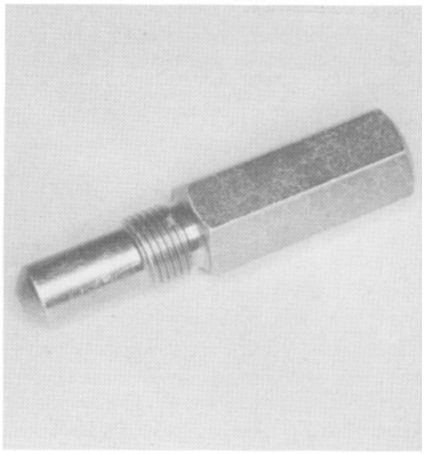
Note: Check the position of the V-belt and that it moves easily before tightening the fastening screws.

Tighten the two cheese-head screws with a torque of 8.5 Nm (0.85 kpm) and the hexagon screw with a torque of 47.5 Nm (4.75 kpm).

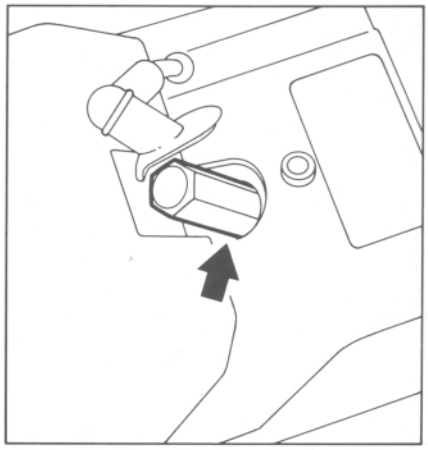
- Replace the bearing with guard; see 2.1.

2.4 V-belt pulley (clutch drum)

Top:
Stop screw 1107 191 1200



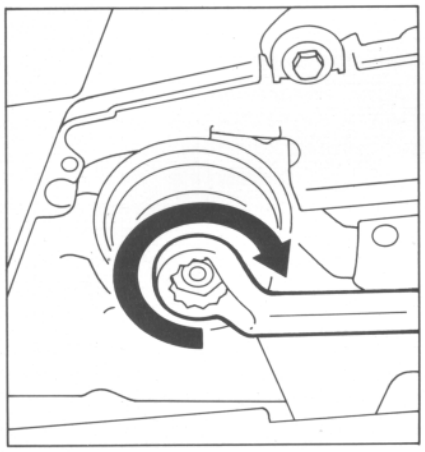
Bottom:
Stop screw in cylinder

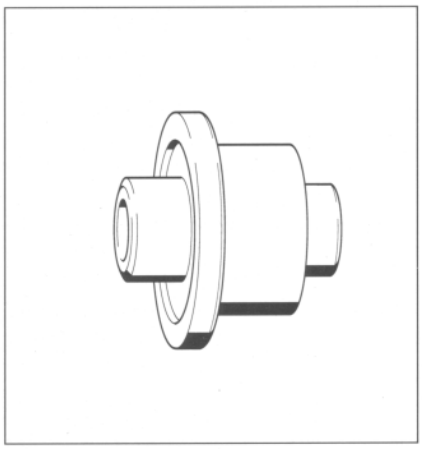


- Remove the V-belt; see 2.3.
- Unplug the ignition lead.
- Unscrew the spark plug and screw in the stop screw instead, turning it into the cylinder as far as possible, so that the crank shaft is arrested.

Top:
Unscrewing the fastening nut

Bottom:
Assembly pin 1119 893 7200





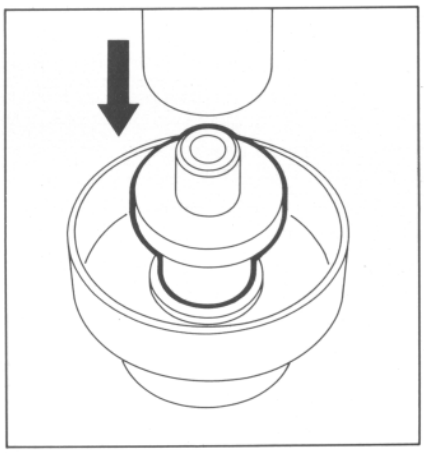
- Unscrew the fastening nut from the V-belt pulley

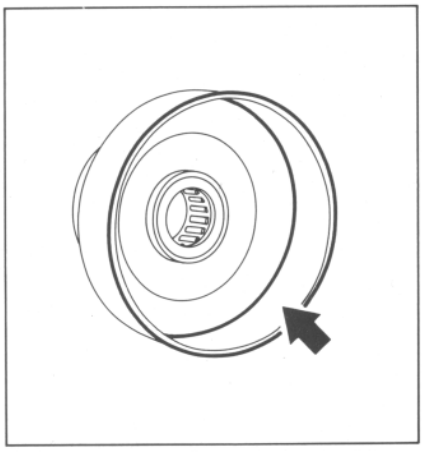
Important! The nut has a left-hand thread.

- Draw the V-belt pulley off the crank shaft journal.

Top:
Forcing out the needle sleeve

Bottom:
Friction surface of the clutch drum





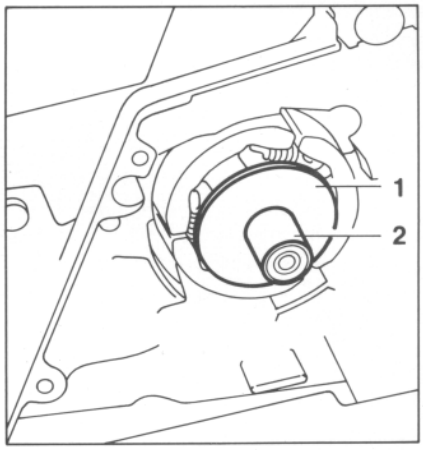
- Check the needle sleeve and force it off the V-belt pulley from the clutch side using an assembly pin if necessary.

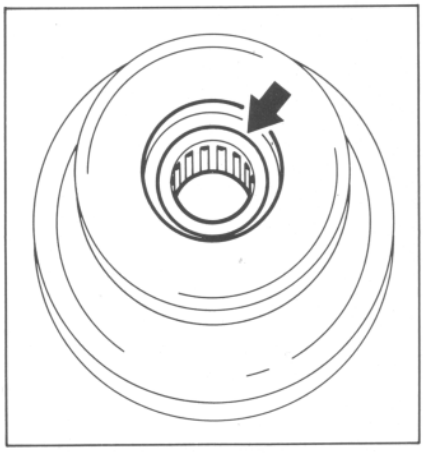
- Check the clutch drum; it must not show any major signs of wear or scoring. Replace the V-belt pulley if necessary.

- Draw the bushing and disk off the crank shaft journal.

Top:
1 = Disk
2 = Bushing

Bottom:
Correctly positioned needle sleeve





The parts are assembled in reverse order.

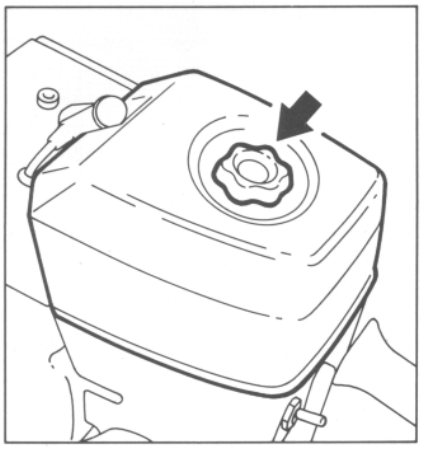
Note: The assembly pin must be positioned on the thicker, beaded side of the needle sleeve and forced in from the clutch drum side until it is flush with the inner edge of the V-belt pulley. Tighten the fastening nut with a torque of 32.5 Nm (3.25 kpm).

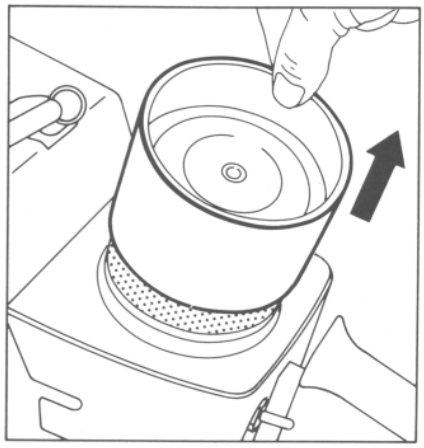
3. AIR FILTER

3.1 Air filter

Top:
Screw plug on top of the filter

Bottom:
Removing the prefilter





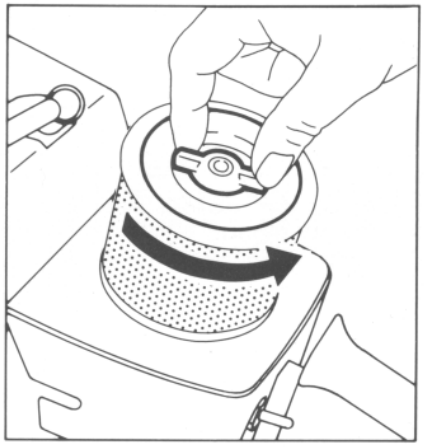
The purpose of the air filter is to collect the dirt entrained with the combustion air and thus minimize the amount of wear in the power unit.

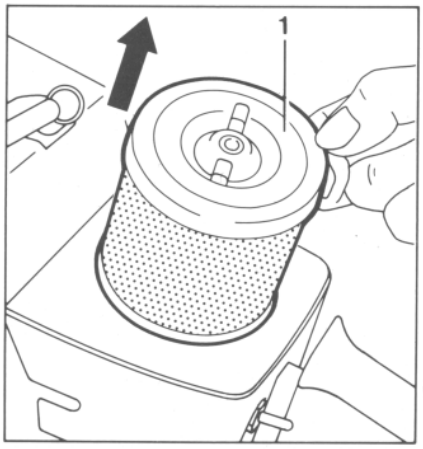
Clogged filters reduce the engine efficiency, increase the fuel consumption and make it more difficult to start the equipment.

For this reason, the air filter must always be cleaned as soon as the engine power deteriorates.

Top:
Unscrewing the wing nut

Bottom:
Removing the main filter
1 = Cover lid



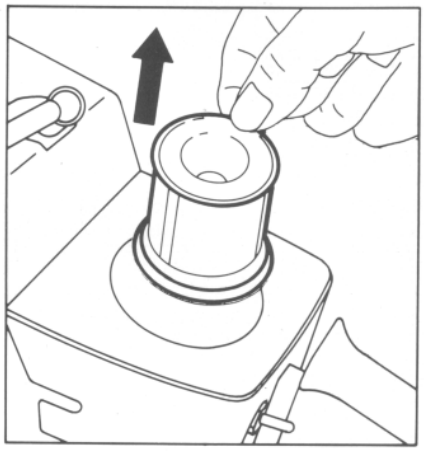


- Before removing the filter, close the choke shutter so that dirt cannot enter the carburetor. This is done by drawing out the choke.

- Unscrew the screw plug on the filter cover and remove the filter cover.

- Remove the prefilter from the main filter and knock it clean.

Removing the auxiliary filter



- Rinse the prefilter in clean naphtha if it is extremely dirty.

Note: The prefilter must be completely dry before it is replaced.

- Unscrew the wing nut on the screw plug

- Remove the main filter and press the cover lid out of the main filter.

Note: The main filter must be replaced if it is soiled.

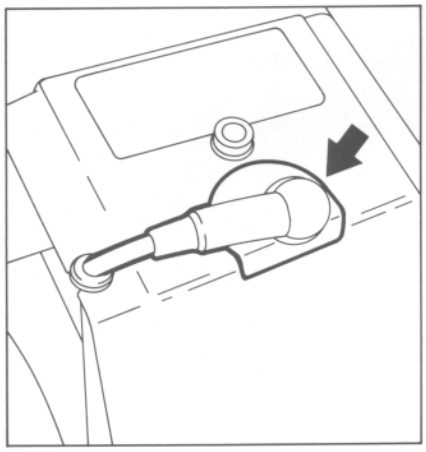
- Draw the auxiliary filter off the flange bolt, gently tap it clean and rinse in a clean, non-flammable solution (such as hot soapy water).

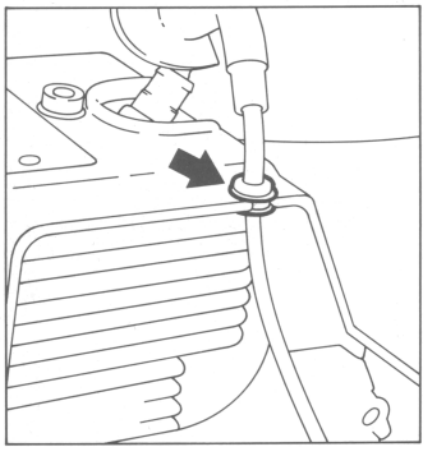
Note: The auxiliary filter must be replaced immediately if the flock coating is defective.

3.2 Filter housing

Top:
Plug on ignition lead

Bottom:
Grommet

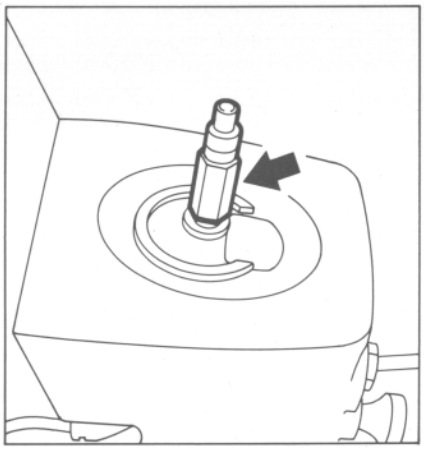


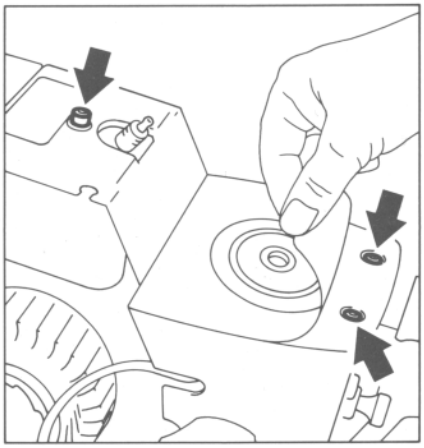


- Remove the air filter; see 3.1.
- Remove the fan housing; see 4.1.7.
- Disconnect the ignition lead from the spark plug.
- Draw the grommet for the ignition lead out of the filter housing.

Top:
Locking screw

Bottom:
Fastening screws for the filter housing





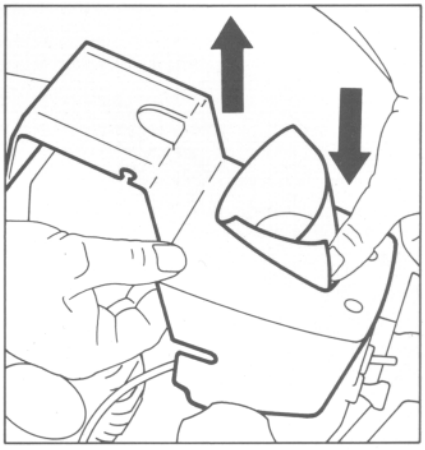
- Unscrew the locking screw from the filter housing.
- Unscrew the fastening screws from the filter housing.

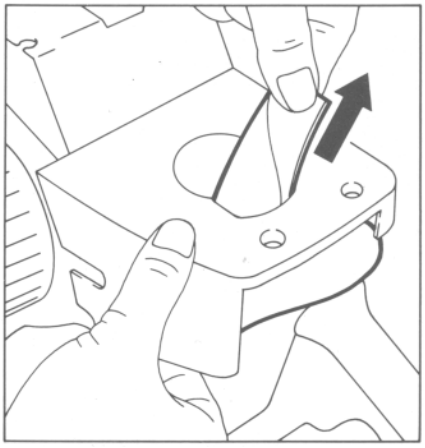
Note: The screws at the rear are located below the manifold.

- Draw the filter housing upwards, pressing the manifold out through the opening at the same time.

Top:
Removing the filter housing

Bottom:
Positioning the filter housing





The parts are assembled in reverse order.

Note: Draw the manifold through the opening before positioning the filter housing and tighten the fastening screws with a torque of 6.5 Nm (0.65 kpm). Coat the thread of the locking screw with Loctite (see 6.2) and tighten with a torque of 12.0 Nm (1.2 kpm).

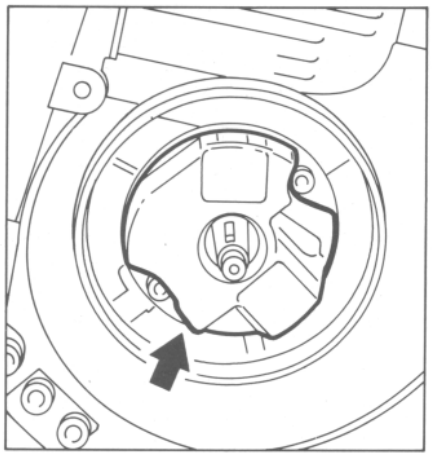
4. IGNITION SYSTEM

Important! Utmost care must be taken both during troubleshooting and when carrying out maintenance and repair work on the ignition system. The high voltages may cause fatal accidents!

4.1 Repairing the components

4.1.1 Spark plug

Module plate



The STIHL Cutquiks TS 360, 350 AVE are fitted with a transistorized (breakerless) magneto-ignition system that is not dependent on external power supplies (battery, dynamo, etc.).

The ignition system basically comprises the module plate and flywheel and is easily accessible.

Troubleshooting in the ignition system should always start with the spark plug.

First check the spark plug designation if the machine refuses to start, if the engine power is unsatisfactory or if the ignition cuts out, etc. Only Bosch spark plugs of type WSR 6 F or NGK BPMR 7 A may be used. Other types of spark plug and plugs made by other manufacturers cannot be used on account of the large electrode size.

Spark plug blackened or charred:

- Clean with brass wire brush and then blow through with compressed air.

Note: Do not use a steel wire brush.

Spark plug covered with oil:

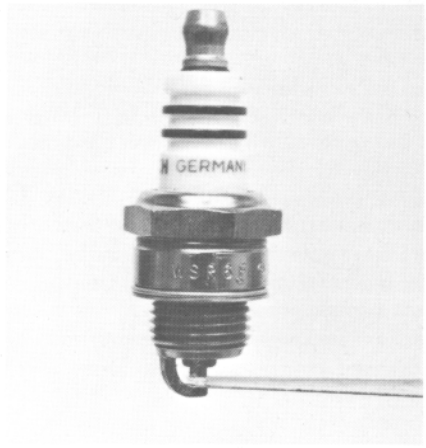
- Wash the insulator nose with a grease solvent and then blow through with compressed air.

Electrode gap:

The gap between electrodes increases as a result of the natural burn-off.

Top: Checking the electrode gap with a caliper gauge

Bottom: Adjusting the ground electrode with a Bosch setting gauge



- The electrode gap must be checked regularly with a caliper gauge. The gap must be equal to 0.5 mm.

- The ground electrode must be adjusted accordingly if necessary.

Important! A new spark plug must be fitted without fail if the electrodes have burned down severely.

Checking the spark plug:

The spark plug can only be checked correctly with the aid of a spark plug tester.

As a provisional measure, the spark plug can also be inserted in the ignition lead plug and connected to ground after being dismantled and cleaned. Considerable sparking must be evident at the electrodes when the starter is pulled.

Important! Never touch live parts: the high voltages can cause fatal accidents.

Note: If in doubt, install a new spark plug in place of the old one.

The cable connections must then be checked if sparking is not observed although the spark plug is in perfect condition.

Note: Frayed insulation on the ignition and stop switch leads can cause short-circuits to ground preventing the engine from starting or causing it to malfunction.

Installation of the spark plug:

- Clean the spark plug and check that the gasket is undamaged.

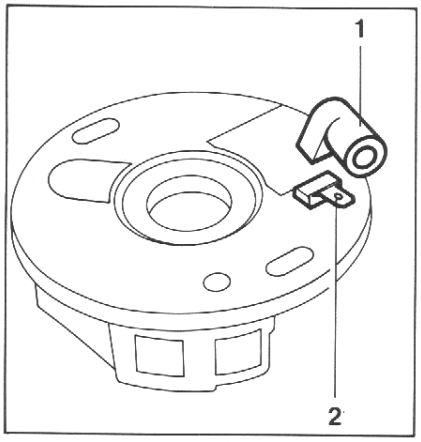
- Screw in the spark plug and tighten with a torque of 27.5 Nm (2.75 kpm).

The appearance of the insulator nose, the "face of the spark plug", is a major source of information on the effects of different operating conditions:

Condition of the insulator nose		Examples of corresponding operating conditions
Normal:	Greyish-yellow to brown, dry	Engine OK, correct spark plug (heat range as specified)
Charred:	Velvety, dull black layer of soot	Mixture too rich, lack of air (air filter clogged, choke partly closed), electrode gap too large, wrong spark plug (heat range too high)
Covered with oil:	Layer of damp carbon oil and soot	Fuel mixture contains too much oil
Overheated:	Beading on the insulator nose, corroded electrodes	Mixture too lean, spark plug loose, wrong spark plug (heat range too low)

4.1.2 Module plate

1 = High-voltage output
2 = Tab



The module plate contains all the functional parts required for ignition timing control. Only two electrical connections emerge from the coil assembly:

1. The high-voltage output
2. The tab for connecting the stop switch lead

Correct functioning of the module plate can only be checked with the aid of a complex test unit. For this reason, the workshop tests should be limited exclusively to checking the sparking. The complete module plate must be replaced if there is no spark (although the leads and stop switch are intact).

4.1.2.1 Ignition timing

In electronically controlled (breakerless) magneto-ignition systems, the ignition timing has been set at 2.1 mm before the UDC at n = 8000 rpm and cannot be adjusted. Taking into account the permissible variation in the elelctronic circuit, this value may range from 1.9 to 2.5 mm before the UDC at n = 8000 rpm.

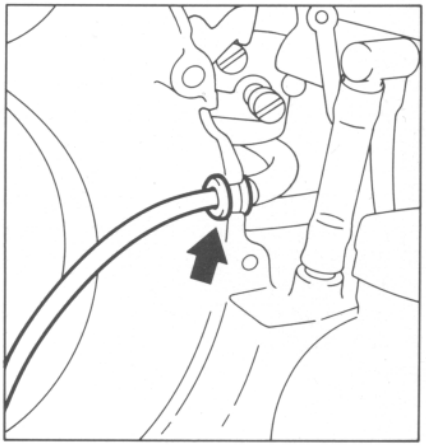
Since these systems are not subject to mechanical wear, the ignition timing does not change during operation.

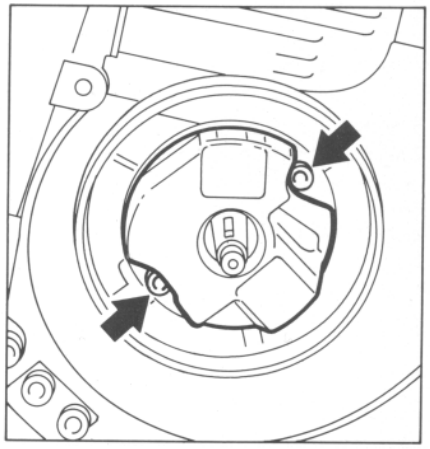
However, defects inside the circuitry may cause the timing to change in such a way as to produce positive spark control although the timing itself is outside the permissible range so that the starting and operating characteristics deteriorate.

4.1.2.2 Removal and installation

Top:
Grommet

Bottom:
Fastening bolts for the module plate





- Remove the flywheel; see 4.1.7.

- Remove the filter housing; see 3.2.

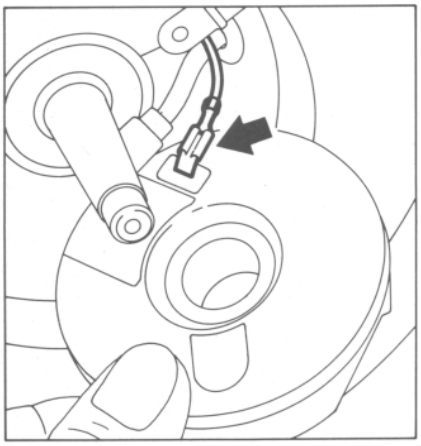
- Remove the grommet for the ignition lead from the mount of the crank case.

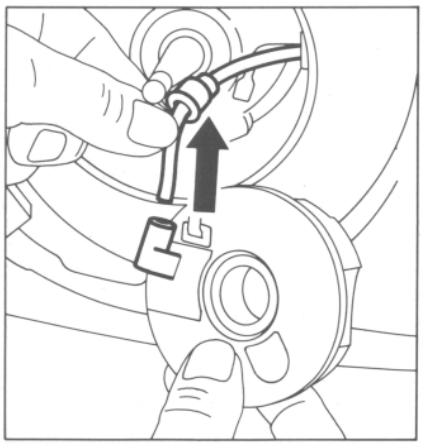
- Unscrew the fastening bolts from the module plate.

4.1.3 Ignition lead plug

Top:
Stop switch lead

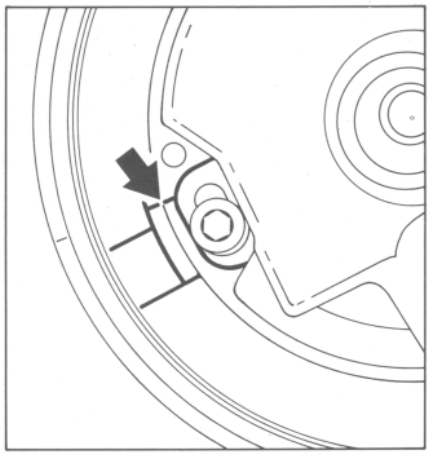
Bottom:
Drawing the unscrewed ignition lead out of the high-voltage dome





- Remove the module plate from the crank shaft journal and disconnect the stop switch lead from the module plate.
- Draw the module plate slightly forwards, pulling the ignition lead out of the grommet in the housing at the same time.
- Remove the protective sleeve from the high-voltage dome.

Markings on the module plate and crank case



- Unscrew the ignition lead from the contact pin and draw it out of the high-voltage dome.

Note: The high-voltage dome must be filled with STIHL multipurpose grease (0781 120 1109) before screwing in the ignition lead.

Important! Graphite (Molykote) grease and silicone insulating paste must not be used.

- Slide the protective sleeve over the high-voltage dome.
- Replace the module plate and loosely screw in the screws.

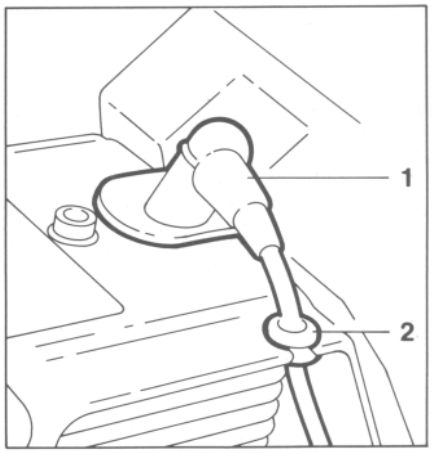
Important! A washer must be placed under the head of each screw.

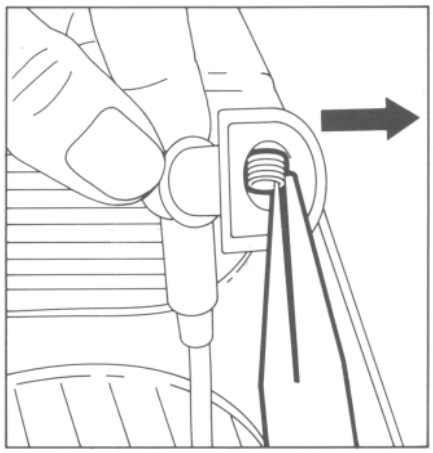
- Align the module plate so that the markings match. Tighten the fastening screws with a torque of 4.0 Nm (0.4 kpm).

The remaining parts are assembled in reverse order.

Top:
1 = Ignition lead plug
2 = Grommet

Bottom:
Removing the spiral spring from the ignition lead plug



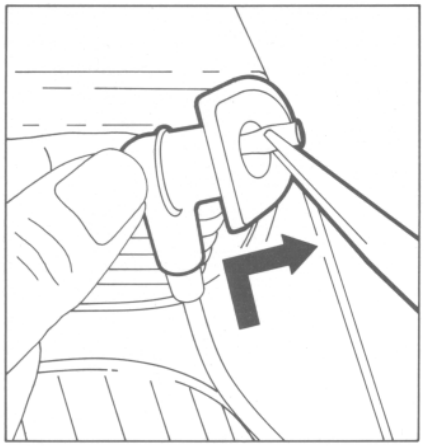


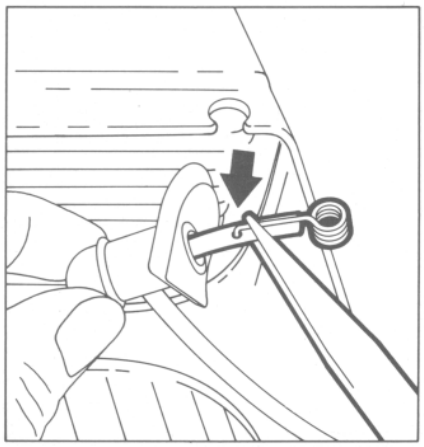
- Remove the fan housing; see 4.1.7.
- Disconnect the ignition lead from the spark plug and draw the grommet out of the filter housing.
- Grip the spiral spring with suitable pliers and draw it out of the ignition lead plug.

4.1.4 Ignition lead

Top:
Drawing the ignition lead into its plug

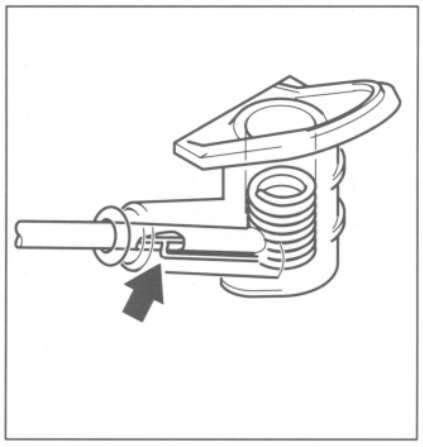
Bottom:
Inserting the spiral spring





- Remove the spiral spring from the ignition lead and draw the plug off the lead.
- Coat the end of the ignition lead with oil over a length of approx. 20 mm.
- Slip the plug onto the ignition lead.
- Grip the ignition lead with suitable pliers and draw it out of its plug.

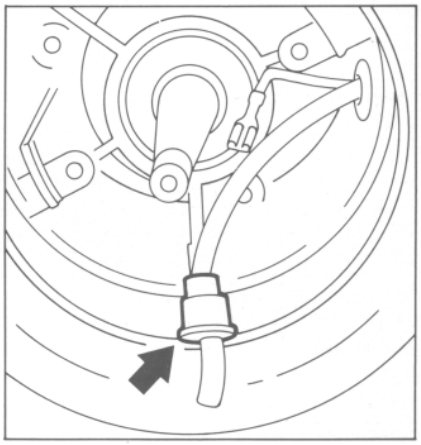
Correct position of the spiral spring in the recess of the ignition lead plug.

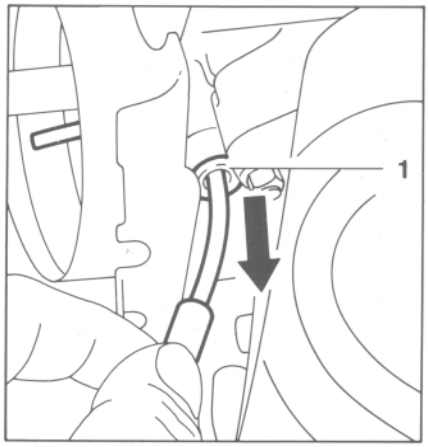


- Press the hook of the spiral spring into the middle of the conductor cross-section approx. 15 mm from the end of the ignition lead.
- Pull back the ignition lead until the spiral spring is located in the recess of the ignition lead plug.
- Press the grommet into the mount in the filter housing and slide the spark plug terminal onto the spark plug.
- Replace the fan housing; see 4.1.7.

Top:
Protective grommet

Bottom:
Removing the ignition lead
1 = Grommet



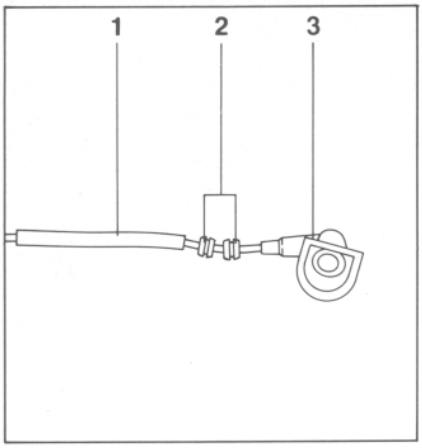


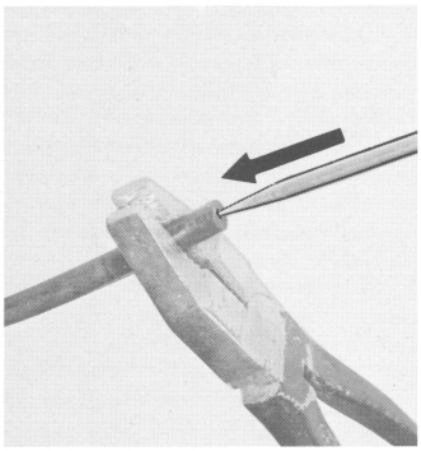
- Remove the module plate; see 4.1.2.2.
- Draw the protective grommet off the ignition lead.
- Draw the ignition lead out of the grommet in the crank case.

4.1.5 Stop switch lead

Top:
1 = Insulating tube
2 = Grommets
3 = Ignition lead plug

Bottom:
Piercing the centre of the ignition lead





- Draw the insulating tube and grommets off the ignition lead.

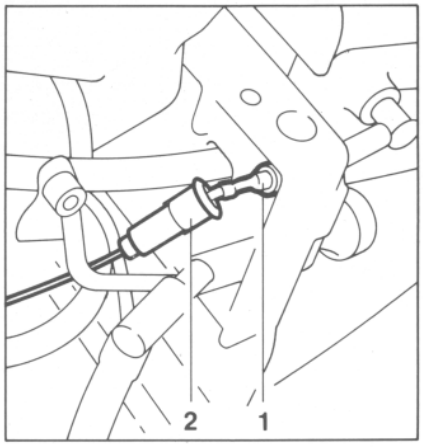
- Remove the ignition lead plug; see 4.1.3.

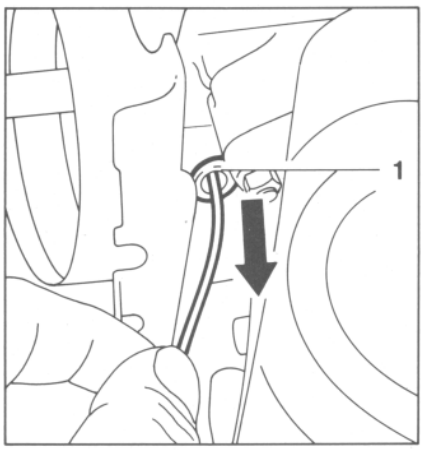
- Cut the new ignition lead to the required length (length as specified in the spare parts list or equal to that of the old lead).

Note: The centre at the end of the lead which is screwed into the ignition module must first be pierced with a sharp tool.

Top:
1 = Contact sleeve
2 = Protective grommet

Bottom:
Removing the stop switch lead
1 = Grommet





- Remove the ignition lead; see 4.1.4.

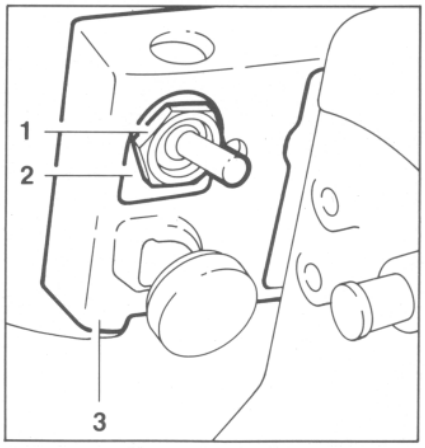
- Slide the protective grommet back a little and draw the contact sleeve of the stop switch lead out of the stop switch.

- Draw the stop switch lead out of the grommet in the crank case.

The parts are assembled in reverse order.

4.1.6 Stop switch

1 = Fastening nut
2 = Plate
3 = Adapter



- Remove the filter housing; see 3.2.

- Draw the contact sleeve of the stop switch lead out of the stop switch; see 6.1.5.

- Unscrew the fastening nut on the stop switch and remove the plate.

- Remove the stop switch from the adapter.

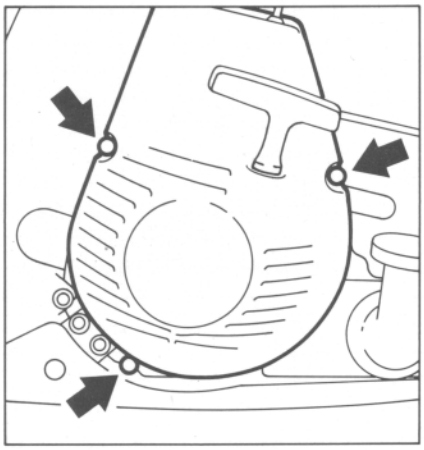
The parts are assembled in reverse order.

Note: The stop switch must be positioned so that the groove in the threaded insert points upwards. Tighten the fastening nut with a torque of 2.7 Nm (0.27 kpm).

4.1.7 Flywheel

Top:
Fastening bolts on the fan housing

Bottom:
Fastening nut on the flywheel

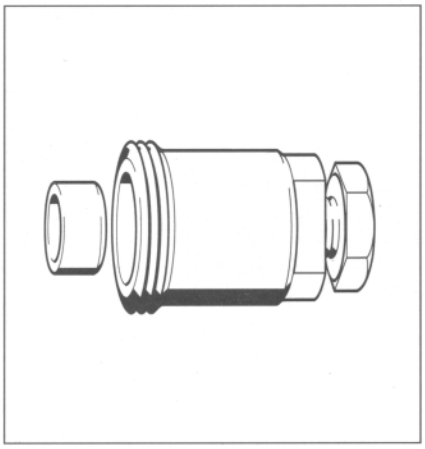


Removing the flywheel:

- Use the stop screw to arrest the piston; see 2.4.
- Unscrew the fastening bolts from the fan housing and remove the fan housing.
- Unscrew the fastening nut for the flywheel from the crank shaft.

Top:
Extractor 1106 890 4501

Bottom:
Extracting the flywheel



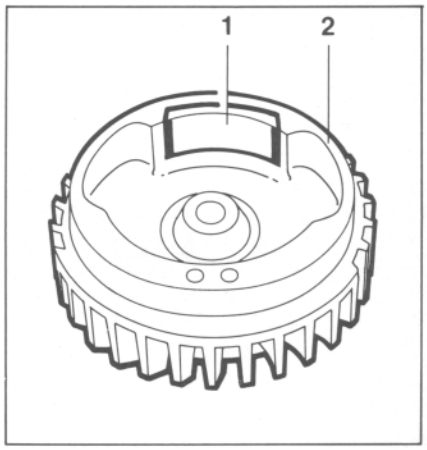
- Screw the extractor onto the flywheel and draw the flywheel off the crank shaft.
- There must not be any signs of cracking or other damage on the flywheel and magnet pole, otherwise the flywheel must be replaced.

Installing the flywheel:

- Ensure that the Woodruff key is fitted correctly.

Top:
1 = Magnet pole
2 = Flywheel

Bottom:
Woodruff key for flywheel



Important! The journal of the crank shaft and the hole in the flywheel hub must be degreased with a commercial solvent-based degreasing agent without chlorinated or halogenated hydrocarbons.

- Position the flywheel.
- Fit the fastening nut and tighten with a torque of 27.5 Nm (2.75 kpm).

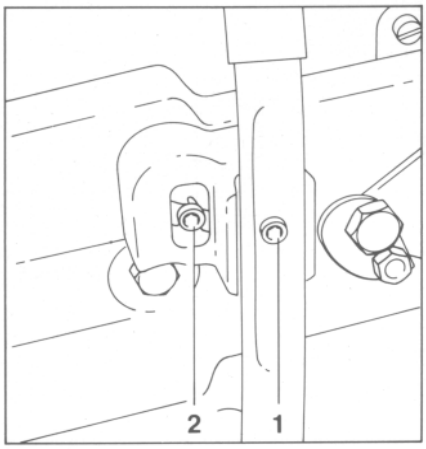
The remaining parts are assembled in reverse order.

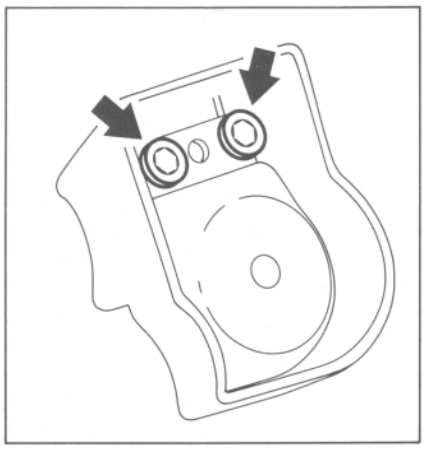
5. AV HANDLE SYSTEM/ FRAME

5.1 Buffer ring

Top:
1 = Fastening screw on the front handle
2 = Middle screw

Bottom:
Fastening screws on the buffer ring



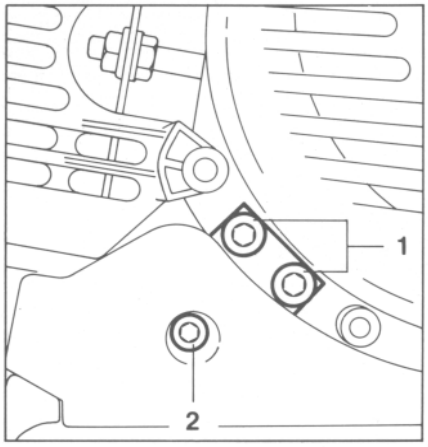


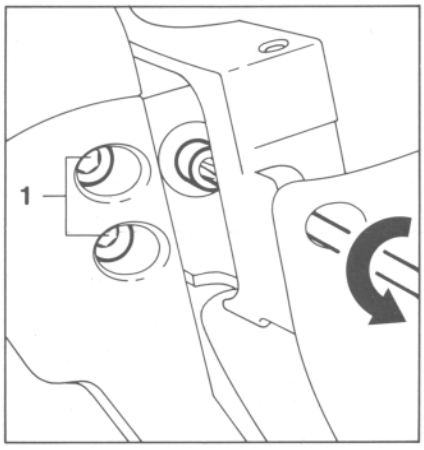
The crank case, handle frame and front handle are connected by means of ring-shaped rubber vibration buffers. Damaged buffers (buffer rings) must always be replaced.

- Unscrew the fastening screw for the front handle from the handle bracket.
- Unscrew the middle screw from the connecting piece and remove the handle bracket.

Top:
1 = Fastening screws in the buffer ring (fan side)
2 = Middle screw

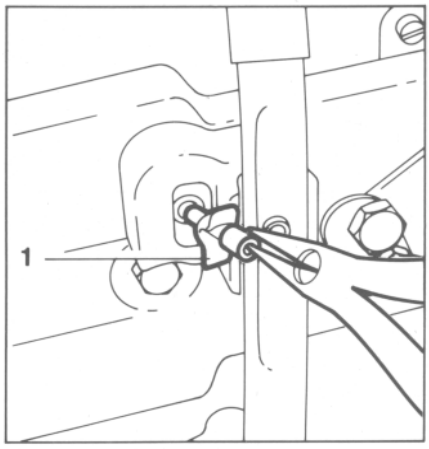
Bottom:
Unscrewing the middle screw
1 = Fastening screws in the buffer ring





- Unscrew the fastening screws in the buffer ring and remove the buffer ring from the handle bracket.
- Unscrew the middle fastening screw in the buffer ring and remove it together with the tear guard.
- Unscrew the fastening screws in the buffer ring and remove the buffer ring.

Fitting the middle screw
1 = Tear guard



- Remove the filter housing in order to replace the buffer ring on the handle; see 3.2.
- Unscrew the middle screw and the fastening screws in the buffer ring, then remove the buffer ring.

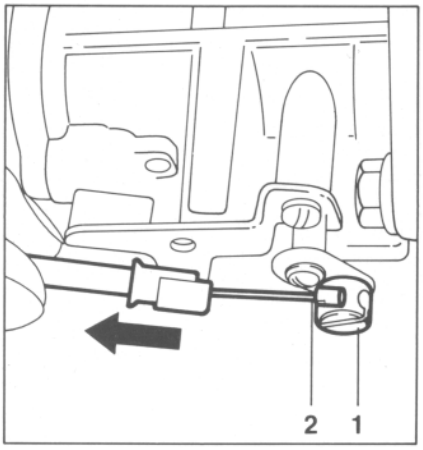
The parts are assembled in reverse order.

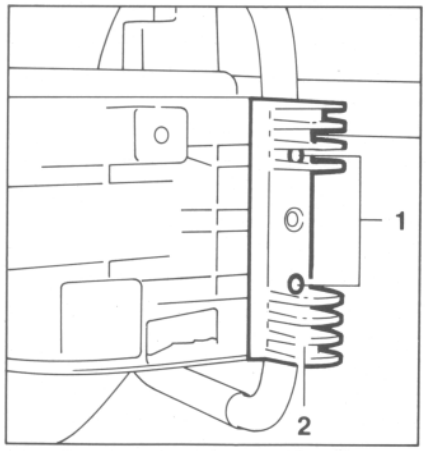
Note: The tear guard must be fitted under the middle screw on the side of the connecting piece and fan side. Tighten the fastening screws of the buffer rings with a torque of 7.0 Nm (0.7 kpm).

5.2 Handle frame

Top:
Removing the end sleeve
from the guide plate
1 = Slit pin
2 = Nipple on the throttle cable

Bottom:
1 = Fastening screws
2 = Support

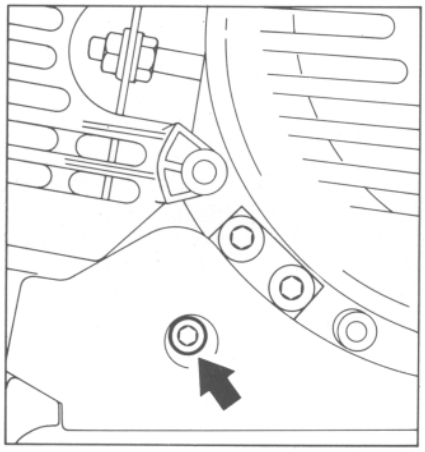


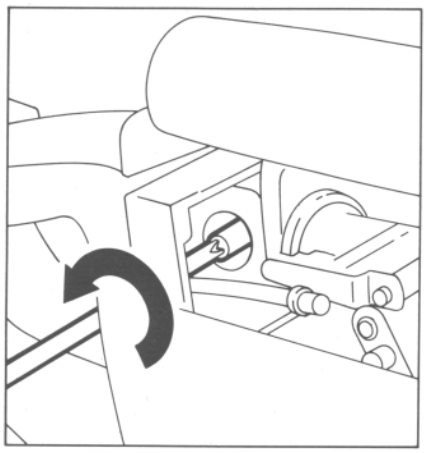


- Remove the filter housing; see 3.2.
- Disconnect the nipple on the throttle cable from the slit pin and draw the end sleeve out of the guide plate.
- Unscrew the fastening screws from the bottom support.

Top:
Middle screw of the buffer ring
(fan side)

Bottom:
Unscrewing the middle screw in the
buffer ring (on the handle)

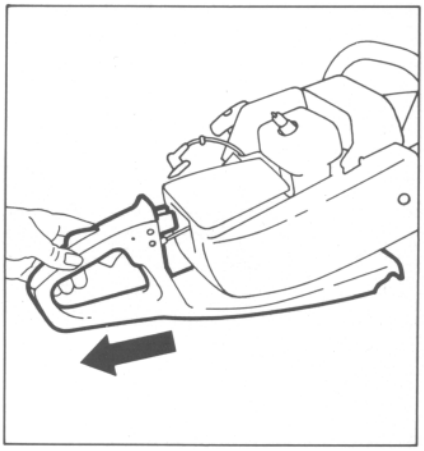


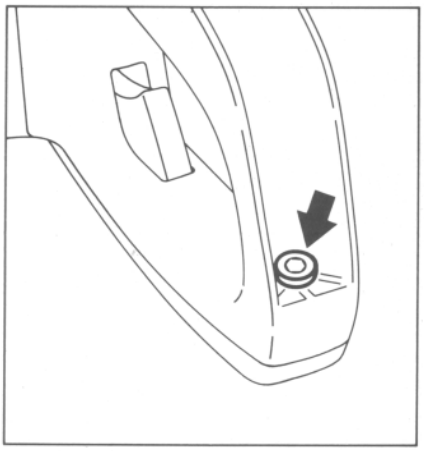


- Unscrew the middle screw in the buffer ring on the fan side.
- Unscrew the middle screw in the buffer ring on the handle.

Top:
Removing the handle frame

Bottom:
Fastening screw in the handle moulding





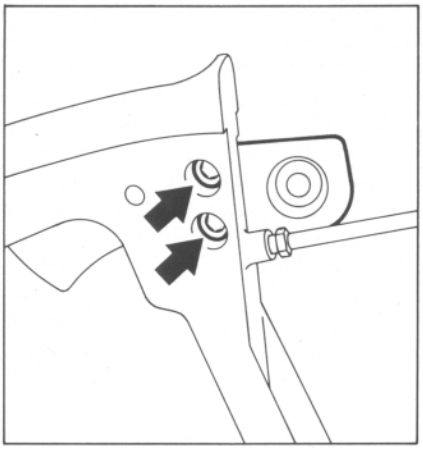
- Draw the handle frame to the rear and off the machine.

Note: The following steps are required in order to replace the handle frame.

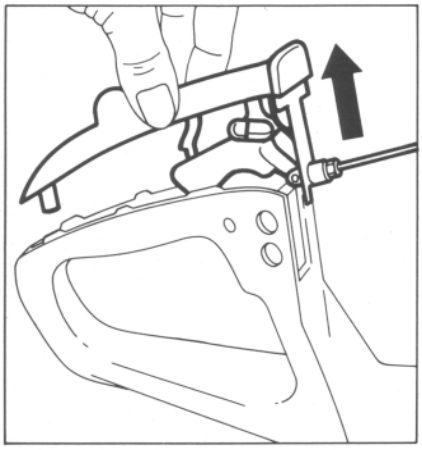
- Unscrew the fastening screw in the handle moulding.

Top:
Fastening screws
for the buffer ring

Bottom:
Removing the handle moulding



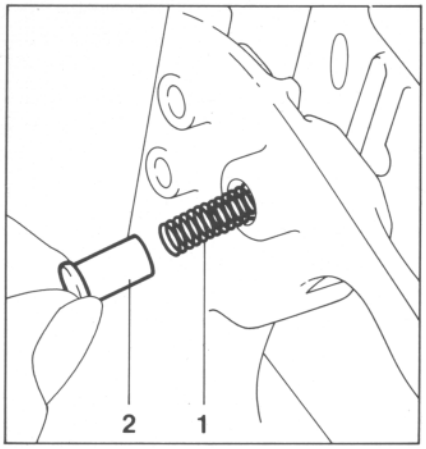
- Remove the fastening screws from the buffer and then remove the buffer ring itself.



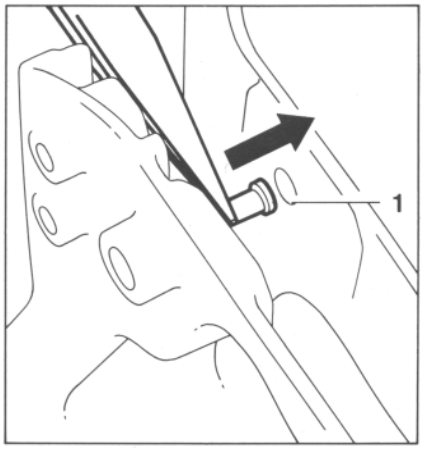
- Draw the handle moulding up and off the handle frame.

Top:
1 = Helical spring
2 = Starting throttle button

Bottom:
Removing the pin
1 = Hole

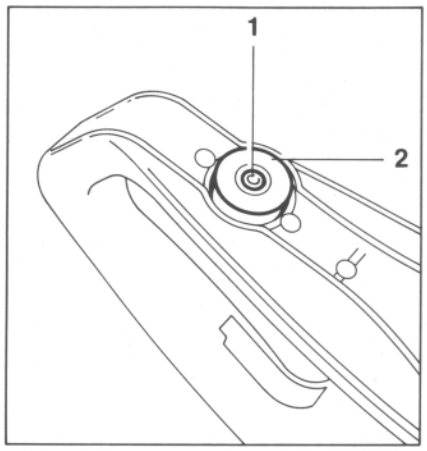


- Draw the starting throttle button off the pin and remove the helical spring.



- Push the pin inwards and out of the handle frame through the hole on the other side.

1 = Fastening screw
2 = Rubber vibration buffer



- Unscrew the fastening screw from the rubber vibration buffer and remove the buffer.

The parts are assembled and refitted in reverse order.

Note: Press the starting throttle button onto the pin until it engages. Tighten the fastening screws of the buffer ring with a torque of 7.0 Nm (0.7 kpm), the fastening screws in the support with a torque of 7.5 Nm (0.75 kpm) and the fastening screw in the handle moulding with a torque of 3.0 Nm (0.3 kpm).

6. Special servicing tools and aids

6.1 Special servicing tools

No.	Part name	Part No.	Application
1	Pliers A 10	0811 611 8200	Outer circlip on the thrust washer
2	Pliers C 19	0811 641 8380	Inner race of the bearing
3	Test wheel	5910 851 6100	Checking the radial truth of running of the cutting wheel mount
4	Gauge holder	5910 850 6000	Checking the radial truth of running
5	Dial gauge	0000 890 9100	Checking the radial truth of running
6	Stop screw	1107 191 1200	Arresting the crank shaft
7	Assembly pin	1119 893 7200	Forcing the needle sleeve into and out of the V-belt pulley
8	Extractor	1106 890 4501	Extracting the flywheel
9	Size 13 insert	5910 893 5608	Crank shaft nut
10	Size 17 insert	5910 893 5610	Hexagon bolt of the connecting piece
11	Torque wrench	5910 890 0301 5910 890 0302	
12	Torque wrench	5910 890 0311 5910 890 0312	
13	Insert I-5 x 150	0812 542 2104	Tightening the cheese-head screws with internal star
14	Screwdriver with T-handle QI-5x150	5910 890 2400	For all hexagon socket head screws

6.2 Servicing aids

No.	Part name	Part No.	Application
1	Commercial solvent-based degreasing agent without chlorinated and halogenated hydrocarbons		Cleaning the crank shaft journal
2	Lubricating grease	0781 120 1111	Needle sleeve
3	Solid adhesive (Loctite 270)	0786 111 1109	Locking screw for air filter