Operating Instruction
COMPACTtorque 636CP - REF 0.553.0820 | COMPACTtorque 636P - REF 0.553.0800

KaVo. Dental Excellence.
Contents

Check the amount of water ............................................................................................................................... 23
Check the pressure ........................................................................................................................................... 24
Check the seal ................................................................................................................................................... 26

Operation ..............................................................................................................................................................27
Attach the medical device ................................................................................................................................. 28
Removing the medical device ........................................................................................................................... 29
Insert the milling cutters or diamond grinders ................................................................................................... 30
Removing the milling tool or diamond grinder ................................................................................................... 34

Troubleshooting ....................................................................................................................................................36
Cleaning the spray nozzle. ................................................................................................................................ 36

Setup methods according to DIN EN ISO 17664 ................................................................................................. 38
Preparation at the site of use ............................................................................................................................ 38
User instructions

Dear user,
KaVo hopes that you enjoy your new high-quality product. Following the instructions below will allow you to work smoothly, economically and safely.

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Symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>!</td>
<td>See the section Safety/Warning Symbol</td>
</tr>
<tr>
<td>i</td>
<td>Important information for users and technicians</td>
</tr>
<tr>
<td>Icon</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td><img src="image" alt="Disinfectable with heat" /></td>
<td>Disinfectable with heat</td>
</tr>
<tr>
<td><img src="image" alt="Steam sterilisable up to 135°C" /></td>
<td>Steam sterilisable up to 135°C</td>
</tr>
<tr>
<td><img src="image" alt="CE mark" /></td>
<td>CE mark (Communauté Européenne). A product with this mark meets the requirements of the relevant EC directive, i.e. the applicable standards in Europe.</td>
</tr>
</tbody>
</table>

### Target group

This document is intended for dentists and their assistants. The section on starting up is also intended for service technicians.
Warranty terms and conditions

The following warranty conditions apply to this KaVo medical device:

KaVo provides the end customer with a warranty of proper function and guarantees zero defects in respect of material and processing for a period of 12 months from data of invoice, subject to the following conditions:

In case of justified complaints, KaVo will honour its warranty with a repair or free replacement. Other claims of any nature whatsoever, in particular with respect to compensation, are excluded. In the event of default, gross negligence or intent, this shall only apply in the absence of mandatory legal regulations to the contrary.

KaVo cannot be held liable for defects and their consequences that are or may be due to natural wear, improper handling, cleaning or maintenance, non-compliance with operating or connection instructions, calcination or corrosion, contaminated air or water supplies or chemical or electrical factors deemed abnormal or impermissible in accordance with KaVo's instructions for use or other manufacturer specifications. The warranty does not
usually cover lamps, light conductors made of glass and glass fibres, glas-
sware, rubber parts and the colourfastness of plastic parts.
No liability is assumed when defects or their consequences arise from ma-
ipulations or changes to the product by the customer or a third party.
Service warranty claims will only be accepted if the product is submitted
along with proof of purchase in the form of a copy of the invoice/delivery
note. The dealer, purchase date, unit number or type and serial number
must be clearly visible on this document.
Description of safety instructions

Warning symbol

Structure

The introduction describes the type and source of the hazard. This section describes the potential consequences of non-observance.

- The optional step contains necessary measures for avoiding hazards.

Description of hazardous steps

The safety instructions cited herein with the three levels of danger will help avert property damage and injury.
CAUTION indicates a hazardous situation that can lead to property damage or minor to moderate injury.

WARNING indicates a hazardous situation that can lead to serious injury or death.

DANGER indicates a maximum hazardous situation that can directly cause serious injury or death.
Purpose – Proper use

This medical device is:

▪ Only intended for dental treatment. Any other type of use or alteration to the product is impermissible and can be hazardous. The medical device is intended for the following use: Removal of carious material, cavities and crown preparations, removal of fillings, processing of tooth and restoration surfaces.

▪ A medical device according to relevant national statutory regulations.

According to these provisions, this medical device may only be used for the described application by a knowledgeable user. The following must be observed:

▪ the applicable health and safety regulations
▪ the applicable accident prevention regulations
▪ these instructions for use

According to these regulations, the user is required to:
• Only use equipment that is operating correctly
• use the equipment for the proper purpose.
• to protect himself, the patient and third parties from danger.
• to avoid contamination from the product.
Safety instructions

**CAUTION**
Premature wear and malfunction due to improper storage or longer periods of nonuse.
Reduced product life.
- The medical device should be cleaned, serviced and placed in a dry stored location according to instructions before long periods of non-use.

**CAUTION**
Injury or damage due to wear.
Irregular running noise, significant vibration, overheating, imbalance or insufficient grip
- Stop work and seek service support.
### Note
For safety reasons, we recommend that the tool holder system be checked annually after the warranty period expires.

### CAUTION
**Burning hazard from hot instrument cover.**
If the instrument overheats, burns may arise in the oral area.

- Never contact soft tissue with the instrument head.

### CAUTION
**Risk due to incorrectly stored instrument.**
Injury and infection caused by chucked drill bits or burs.
Damage to clamping system from dropping the instrument.

- After treatment, place the drill bit or bur properly in the cradle without the tool.
Hazard from contraindication.
If the soft tissue in the oral cavity is injured, the compressed air may enable septic substances to enter the tissue.
▶ Treatment must be discontinued with instruments operated by compressed air when soft tissue is damaged in the oral cavity.

The following individuals are authorised to repair and service KaVo products:
▪ The technicians of KaVo branches throughout the world
▪ Special technicians especially trained by KaVo

To ensure proper function, the medical device must be handled in accordance with the setup procedure in the KaVo instructions for use, and the care products and systems listed there must be used. KaVo recommends specifying a service interval at the dental office for a licensed shop to clean, service and check the functioning of the medical device. This service interval should take into account the frequency of use.
Service may only be provided by repair shops that have undergone training by KaVo and that use original KaVo replacement parts.
COMPACTtorque 636 P (Mat. no. 0.553.0800)
COMPACTtorque 636 CP (Mat. no. 0.553.0820)
### Technical data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum pressure</td>
<td>2.1 bar (30 psi)</td>
</tr>
<tr>
<td>Drive pressure</td>
<td>2.1 to 2.3 bar (30 - 33 psi)</td>
</tr>
<tr>
<td>recommendation</td>
<td>2.1 bar (30 psi)</td>
</tr>
<tr>
<td>Air consumption</td>
<td>35 (1.24) to 40 (1.41) Nl/min. (cfm)</td>
</tr>
<tr>
<td>Idle speed</td>
<td>350,000 to 400,000 rpm</td>
</tr>
<tr>
<td>Recommended operating pressure</td>
<td>2 (0.45) to 3 (0.68) N (lbs)</td>
</tr>
</tbody>
</table>

COMPACTtorque 636 P turbines can be attached to all hoses with Borden 2-hole connections.

COMPACTtorque 636 CP turbines can be attached to all hoses with 4-hole connections.
## Transportation and storage conditions

Starting up the medical device can be hazardous after it has been stored in an excessively cold location. The medical device can malfunction.

- Products that are very cold must be warmed to 20°C (68°F) to 25°C (77°F) before use.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>-50 °C (-58 °F) to 80 °C (176 °F)</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>Non-condensing</td>
</tr>
<tr>
<td>Air pressure</td>
<td>700 hPa (10 psi) to 1060 hPa (15 psi)</td>
</tr>
<tr>
<td>Protect from moisture</td>
<td></td>
</tr>
</tbody>
</table>
First use

**WARNING**

Hazard from nonsterile products.
Infection danger to the care provider and patient.
▶ Before first use and after each use, sterilise the medical device.

**CAUTION**

Damage from soiled and moist cooling air
Contaminated and moist cooling air can cause malfunctions and lead to premature bearing wear.
▶ In general, ensure dry, clean uncontaminated cooling air according to EN ISO 7494-2.
Mounting the permanent connection

- Connect the medical device to the supply hose, and screw the union nut tight clockwise.

Depending on the hose connection, the amount of water in the spray can be adjusted by turning the regulator on the hose coupling.
Check the amount of water

**The tooth may overheat from insufficient water.**
Thermal damage to the pulp.
▶ Set the amount of water for spray cooling to at least 50 cm³/min.!

**Hazard from insufficient amount of spray water.**
Insufficient spray water can cause the medical device to overheat and damage the tooth.
▶ Check the spray water channels and clean the spray nozzles with the nozzle needle **Mat. no. 0.410.0931** if necessary.
Check the pressure

**Connecting to devices**
Dirty and moist compressed air causes premature bearing wear.

- In general, ensure dry, clean uncontaminated compressed air according to EN ISO 7494-2.

A minimum drive pressure of 2.1 bar (30 psi) is required for operating the medical device.

The air consumption is 35 (1.24) to 40 (1.41) Nl/min. (cfm).
First use

- Use test manometer (Mat. no. 0.411.8531) for the 636P or test manometer (Mat. no. 0.411.8651) for the 636P and check the following pressures:
  - Drive air: 2.1 to 2.3 bar (recommended: 2.1 bar), 30 to 33 psi (recommended: 30 psi)
  - Return air: < 0.5 bar (7 psi)
  - Water: 0.8 to 2.5 bar (11 to 36 psi)
  - Spray air: 1.0 to 4.0 bar (14 to 57 psi)
Check the seal

Missing or damaged seal
When the seal is damaged, it can cause malfunctions or premature failure.
▶ Check if the medical device is sealed and undamaged.
Operation

Note
At the beginning of each work day and before each patient, rinse the water and air channels for approx. 20 to 30 seconds.
Attach the medical device

- Connect the COMPACTtorque turbine with the hose, and screw it tight clockwise.
Removing the medical device

- Hold the COMPACTtorque turbine, and screw the hose connection anticlockwise to loosen it.
Insert the milling cutters or diamond grinders

Note
Only use carbide cutters or diamond grinders that correspond to DIN EN ISO 1797-1 type 3, are made of steel or hard metal and meet the following criteria:
- Shaft diameter: 1.59 to 1.60 mm
- Overall length: max. 25 mm
- Shaft clamping length: min. 11 mm
- Blade diameter: max. 2 mm

Use of impermissible carbide cutters or diamond grinders.
Injury to the patient or damage to the medical device.
▷ Observe manufacturer instructions and use the drill bit properly.
▷ Only use carbide cutters or diamond grinders that do not deviate from the indicated data.
**CAUTION**

Injury from using worn carbide cutters or diamond grinders. Cutters or grinders can fall out during treatment and injure the patient.
- Never use cutters or grinders with worn shafts.
- Follow the instructions for use supplied by the cutter or grinder manufacturer!

**DANGER**

Use the carbide cutters or diamond grinders properly observing the manufacturer's instructions. Cutters or grinders with worn shafts can fall out during treatment and cause injury.
- Do not use cutters and grinders and burs with worn shafts. Tools that deviate from the above data may not be used.
Injury hazard from carbide cutters or diamond grinders.
Infections or cuts.
▷ Wear gloves or fingerstalls.

▷ Forcefully press the push button with your thumb and simultaneously insert the drill bit until the stop.

▷ Check that the drill bit is seated by pulling on it.
Hazard from defective chucking system.
The tool can fall out and cause injury.
▶ Pull on the tool to check if the chucking system is functioning properly and that the tool is firmly clamped. Wear gloves or a thimble to check, insert, or remove the bits to prevent injury and infection.
Removing the milling tool or diamond grinder

Hazard from rotating tools.
Lacerations.
▶ Avoid unintentionally touching rotating tools.

▶ Once the bit has stopped rotating, firmly press the pushbutton with your thumb and pull the bit out at the same time.
WARNING

Do not press the pushbutton while the drill bit or burr is rotating. If you press the pushbutton when the drill bit or burr is rotating, it can damage the chucking system and cause injury.

▶ Never touch soft tissue with the head or tip since it may be hot and cause a burn.
▶ After treatment is over, remove the drill bit or bur from the contra-angle handpiece since injury and infection may result from putting it away when the drill and bur are inserted.
Cleaning the spray nozzle.

Hazard from insufficient amount of spray water.
Insufficient spray water can cause the medical device to overheat and damage the tooth.
▶ If the amount of spray water is insufficient, unplug the spray nozzles.
Clean the water passage in the spray nozzles by using the nozzle needle Mat. no. 0.410.0921.
Preparation at the site of use

Hazard from nonsterile products.
An infection hazard exists from contaminated medical devices.
▶ Observe suitable personal protective measures.

▶ Remove residual cement, composite or blood at the site of use.
▶ The medical device must be dry when transporting it to be prepared. Do not place it in a solution or the like.
▶ The medical device should be prepared as close to the treatment time as possible.
▶ Remove carbide cutters or diamond burs from the medical device.
Cleaning

Malfunctions from cleaning in the ultrasonic unit.
Defects to the product.
▶ Only clean manually or in the thermodesinfector!
Cleaning: Manually cleaning the outside

Necessary accessories:
- Tap water 30°C ± 5°C or a 60 to 70% alcohol solution
- Brush such as a medium-hard toothbrush

▶ Brush off under flowing tap water, or clean with a 60-70% alcohol solution.
Cleaning: Manually cleaning the interior

To effectively set up, the inside of the machine must be cleaned automatically in a cleaning and disinfection unit in accordance with ISO 15883-1. (The interior of this product is not to be cleaned manually).
Cleaning: Mechanically cleaning the exterior and interior

KaVo recommends thermodesinfectors in accordance with DIN EN ISO 15883 such as the Miele G 7781/ G 7881.

(Validation was performed with the program "VARIO-TD", the cleaner "neodisher® mediclean", the neutraliser "neodisher® Z" and rinse "neodisher® mielclear").

- The program settings and cleansers and disinfectants that must be used can be found in the instructions for use of the thermodisinfector.
- Directly after automated cleaning, treat the medical device with the care products and systems provided by KaVo.
Disinfection

Malfunctions from using a disinfectant bath or chlorine-containing disinfectant. Defects to the product.
- Only clean manually or in the thermodesinfector!
Disinfection: Manually disinfecting the exterior

KaVo recommends the following products based on material compatibility. The microbiological efficacy must be ensured by the disinfectant manufacturer.

▶ Microcide AF by Schülke&Mayr (liquid or cloths)
▶ FD 322 by Dürr
▶ CaviCide by Metrex

Required tools:
Cloths for wiping off the medical device.
Spray the disinfectant on a cloth then wipe the medical device and let it work according to the disinfectant manufacturer.

**Note**
Observe the instruction for use for the disinfectant.
Disinfection: Manual disinfection of the interior

To effectively set up, the inside of the machine must be cleaned automatically in a cleaning and disinfection unit in accordance with ISO 15883-1. (The interior of this product is not to be disinfected manually).
Disinfection: Mechanically disinfecting the exterior and interior

KaVo recommends thermodesinfectors in accordance with DIN EN ISO 15883 such as the Miele G 7781/ G 7881.

(Validation was performed with the program "VARIO-TD", the cleaner "neodisher® mediclean", the neutraliser "neodisher® Z" and rinse "neodisher® mielclear").

▶ The program settings and cleansers and disinfectants that must be used can be found in the instructions for use of the thermodisinfector.
▶ Directly after automated cleaning, treat the medical device with the care products and systems provided by KaVo.
Drying

Manual drying

- Blow off the outside and inside the compressed air until no water drops are visible.

Machine drying

The drying procedure is normally part of the cleaning program of the thermodisinfector.

Note
Please follow the instructions for use of the thermodisinfector (compressed air quality - see the Warning under "Start-up").
Care products and systems – Servicing

**CAUTION**

*Sharp tool in the medical device.*

Injury hazard from sharp and/or pointed tool.

▶ Remove the tool.

**CAUTION**

*Premature wear and malfunction from improper service and care.*

Shortened product service life.

▶ Regularly service the device properly!

**Note**

KaVo only guarantees that its products will function properly when care products are used that are listed by KaVo in the accessories since they were tested for proper use on KaVo products.
Care products and systems – Servicing: Care of the COMPACTtorque 636P with KAVOspray

KaVo recommends spraying the product twice daily (at noon and in the evening after closing) and before each sterilisation.

▶ Unscrew the COMPACTtorque turbine from the hose.
▶ Cover the product with the Cleanpac bag.
▶ Insert the tip of the spray nipple into the large tube, and press the spray button for one second.
Care products and systems – Servicing: Care of the COMPACTtorque 636CP with KAVOspray

KaVo recommends spraying the product twice daily (at noon and in the evening after closing) and before each sterilisation.

- Unscrew the COMPACTtorque turbine from the hose.
- Cover the product with the Cleanpac bag.
- Insert the tip of the spray nipple into the smaller of the two large tubes, and press the spray button for one second.
Chuck care with KAVOspray

KaVo recommends cleaning and servicing the chucking system once weekly.

- Remove tool, place the spray nipple tip in the opening and spray.

Note
For the care procedure, see the section "Care with KAVOspray."
Care products and systems – Servicing: Care of the COMPACTtorque 636P with KAVO SPRAYrotor

▶ Unscrew the COMPACTtorque turbine from the hose.
▶ Cover the product with the Cleanpac bag.
▶ Insert the tip of the spray nipple into the large tube, and press the spray button.

See also: Instructions for use KaVo SPRAYrotor.
Care products and systems – Servicing: Care of the COMPACTtorque 636CP with KAVO SPRAYrotor

▸ Unscrew the COMPACTtorque turbine from the hose.

▸ Cover the product with the Cleanpac bag.

▸ Insert the tip of the spray nipple into the smaller of the two large tubes, and press the spray button.

See also: Instructions for use KaVo SPRAYrotor.
Care products and systems – Servicing: Care with KaVo QUATTROcare

Note
Only useful for the COMPACTtorque 636CP. The COMPACTtorque 636P cannot be adapted in the QUATTROcare!

Cleaning and care unit with expansion pressure for thorough cleaning and care

KaVo recommends servicing the project twice daily (at noon and in the evening after hours), after each time the machine is cleaned, and before each sterilisation.

▶ Removing the tool.
▶ Servicing the product.
KaVo QUATTROcare plus spray can

KaVo recommends cleaning and servicing the chucking system once weekly.

See also: Instructions for use KaVo QUATTROcare.

- Remove tool, place the spray nipple tip in the opening and spray.
- Subsequently treat with the care products and systems listed below.
Packaging

Note
The sterilisation bag must be large enough for the instrument so that the bag is not stretched.
The quality and use of the packaging of the items to be sterilised must satisfy the applicable standards and be appropriate for sterilising.

▶ Individually weld the medical device in the sterilised item packaging (such as KaVo STERIclave bags Mat. no. 0.411.9912)!
Sterilisation

Sterilisation in a steriliser in compliance with DIN EN 13060

Premature wear and malfunctions from improperly care and service shortens the service life of the product.
Shortened product life.
▶ The medical device must be serviced with KaVo care products before each sterilisation cycle.

Contact corrosion from moisture.
Damage to the product.
▶ Immediately remove the product from the steam steriliser after the sterilisation cycle!
The medical device has a max. temperature resistance of 138°C. KaVo recommends for example:
- STERIclave B 2200/2200P by KaVo
- Citomat/K-series by Getinge

Autoclave three times with an initial vacuum for at least 4 minutes at 134°C ± 1
Autoclave using the gravitation method for at least 10 minutes at 134°C ± 1
Autoclave using the gravitation method for at least 60 minutes at 121°C ± 1
Follow the manufacturer's instructions for use.
Storage

Prepared products should be stored protected germ-free from dust in a dry, dark and cool room.

Note
Observe the expiration date of the sterilised item.
## Accessories

Accessories obtainable from dental and medical suppliers.

<table>
<thead>
<tr>
<th>Material summary</th>
<th>Mat. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement turbine with key</td>
<td>0.553.8931</td>
</tr>
<tr>
<td>Replacement turbine without key</td>
<td>0.553.8911</td>
</tr>
<tr>
<td>Cleanpac 10 units</td>
<td>0.411.9691</td>
</tr>
<tr>
<td>Nozzle needle</td>
<td>0.410.0921</td>
</tr>
<tr>
<td>KAVOspray 2112 A</td>
<td>0.411.9640</td>
</tr>
<tr>
<td>ROTAspray 2142 A</td>
<td>0.411.7520</td>
</tr>
<tr>
<td>QUATTROcare plus Spray 2108 P</td>
<td>1.005.4525</td>
</tr>
<tr>
<td>LIFETIME Spray 2118 A</td>
<td>0.411.9700</td>
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<tr>
<td>MULTIflex spray head (nozzle)</td>
<td>0.411.9921</td>
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<tr>
<td>STERIclave bags</td>
<td>0.411.9912</td>
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