



# TORNADO

# TORNADO PRO

EN	Rotary cleaning kit	User manual	2
DE	Rotationsreinigungsset	Benutzerhandbuch	8
IT	Kit di pulizia a centrifuga	Manuale dell'utente	15
FR	Kit de nettoyage rotatif	Manuel d'utilisation	23
ES	Kit rotativo de limpieza	Manual del usuario	23
PT	Kit de limpeza rotativa	Manual do utilizador	23
SE	Roterande rengöringssats	Bruksanvisning	23
NO	Roterende rengjøringssett	Bruerveiledning	23
FI	Pyörivä puhdistussarja	Käyttöohje	23
EE	Pöölev puhastuskomplekt	Kasutusjuhend	23
LV	Rotācijas tīrīšanas komplekts	Lietotāja rokasgrāmata	23
LT	Rotacinis valymo rinkinys	Naudojimo instrukcija	23
PL	Obrotowy zestaw czyszczący	Instrukcja obsługi	23
UA	Роторний набір для очищення димоходу	Інструкція з експлуатації	23
SK	Rotačná čistiaca súprava	Používateľská príručka	23
CZ	Rotační čisticí set	Návod k použití	23
RU	Ротационный комплект для чистки дымоходов	Руководство пользователя	23
RO	Kit rotativ de curățare	Manual de utilizare	23
BG	Ротационен комплект за почистване	Ръководство за употреба	23

Thank you for purchasing HANSA rotary cleaning kit TORNADO/ TORNADO PRO.

Prior to starting using it, please carefully read the instructions for use and observe operation and safety recommendations.

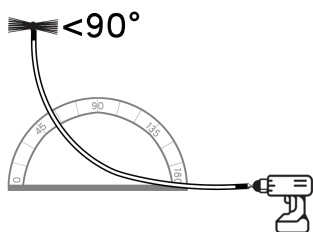
We wish you the best experience in using the rotary cleaning kit TORNADO/TORNADO PRO!

### IMPORTANT!

#### WARRANTY INFORMATION FOR ROTARY CLEANING KIT

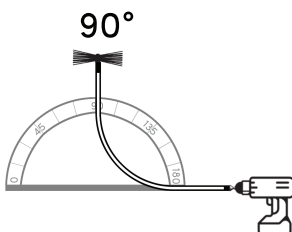
Rods are not covered from gradual or accidental damage. HANSA does not warranty failure of rod or any part due to operator error. Be sure to read all operating instructions and safety precautions before operating any of the tools. To avoid rod breakage, never spin rods in sharp/tight bend angles at  $90^\circ$  or smaller angle!

ATTENTION: Always use a "Forth & Back" motion while spinning rods to prevent rods from heating up and becoming weak, and to prevent screws in flue pipe or sharp edges of masonry from cutting through rods.



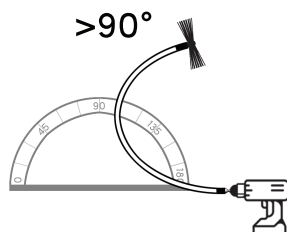
**CORRECT!**

Try to use the rods at the lowest possible angle.



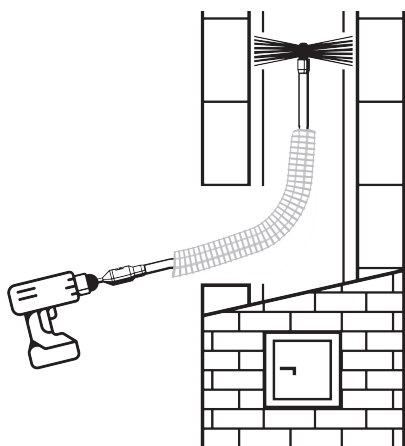
**NOT RECOMMENDED!**

The rods may break at steep angle.



**DON'T!**

The rods will break using a sharp angle.



Rod protective tube is used to ensure that during chimney sweeping through the heating appliance opening, the rods are protected from mechanical damage that may be caused due to friction against the heating appliance edges.

## TORNADO/TORNADO PRO additional parts

### Flexible rod

1-meter length flexible rod, 12- or 17-mm diameter.

### Universal brush

Aluminum brush head with nylon bristles,  $\varnothing$  45 cm diameter.

### Chimney brush with cable

Aluminum brush head with stainless steel cable,  $\varnothing$  35 cm diameter. Used to remove creosote and tar deposits from chimneys and flues.

### Chimney brush with chain

Aluminum brush head with stainless steel chain,  $\varnothing$  30 cm diameter. Used to remove creosote and tar deposits from chimneys and flues. Use only in masonry chimneys.

### Ventilation brush

Aluminum brush head with nylon bristles,  $\varnothing$  45 cm diameter. Used for narrow chimneys and ventilation duct cleaning.

### Pellet brush

Brush head with nylon bristles, 20 cm diameter. Used for pellet stoves, narrow chimneys and ventilation duct cleaning.

### Drill adapter

### Carrying bag

### Protective tube

### Sturdy rod

Minimal flexibility and solid rods are ideally suited for blocked chimneys or hard residues cleaning.

## **TOOLS YOU MAY NEED FOR CLEANING (not supplied by HANSA)**

To ensure smooth chimney sweeping procedure, prior to starting the cleaning, obtaining the following accessories is recommended:

- Variable speed power drill;
- Safety goggles;
- Respirator;
- Rod protective tube;
- Protective gloves;
- Foam rubber (or other stuffing material) to seal chimney opening;
- va• Customized vacuum cleaner.

## PREPARATION FOR CHIMNEY SWEEPING

Please note that soot is a hazardous substance. **Make sure** that during the entire cleaning process you use safety goggles, respirator, and protective gloves to protect your eyes, skin, and respiratory system from contact with soot. Do not use rubber gloves, because they can bond to rods and cause wrist injuries. When working, do not wear loose clothing, because the tools rotating at high speed may catch your clothes in.

Chimneys can be swept only when heating appliance has cooled. It is recommended to start chimney cleaning operations at least 24 hours after last use of your heating appliance.

To protect your floor from soot, please lay a polyethylene film on the floor in front of your heating appliance. Please remove from your heating appliance the combustion damper (if such is installed) located at the chimney connection point, as well as any other removable components of the appliance.

**NOTE:** If a chimney is completely blocked, prior to starting using the TORNADO/TORNADO PRO kit, please remove any obstructions from the chimney.

## CHIMNEY CLEANING METHODS

With the emergence of rotary chimney cleaning technology, the number of chimney cleaning methods has significantly increased: it is possible to sweep chimneys from the top of roof; depending on the chimney structure, it is possible to clean it from external side, through the heating appliance opening. We will describe the above technique in more detail.

### CHIMNEY SWEEPING THROUGH THE OPENING OF HEATING APPLIANCE

Take the rod and attach to it an appropriate brush.

Rod protective tube is used to ensure that during chimney sweeping through the heating appliance opening, the rods are protected from mechanical damage that may be caused due to friction against the heating appliance edges. Advance the rod attached to the brush through the rod protective tube. Insert this cleaning system in the cleaning opening and using foam rubber (or other stuffing material) seals the hole of the cleaning opening. The foam rubber-sealed cleaning opening will scaffold the rod protective tube in place and protect your room from entering of the crumbling off deposits. Attach the second rod to the one inserted in the cleaning opening. Make sure, the rods are securely connected. Attach and secure your drill adapter to the unused of the rod. Insert and secure the adapter in a drill

Having not turned on the drill, advance the chimney cleaning system into the chimney as far as possible, thus making sure that there are no obstructions in the chimney; return the system to its initial position and turn on the drill. During the sweeping procedure, having slowly moved the rods upwards and downwards, advance the chimney cleaning system upwards the chimney. Having cleaned up a section equal to the rod length, turn off the drill.

Disconnect the drill adapter and attach another rod instead. **NOTE:** please connect **only** one rod at a time! As in the previous step, connect drill adapter with the drill to the unused rod; make sure there is no obstruction in the chimney, and continue sweeping. Repeat the above-described steps until you reach the top of the chimney.

If your chimney is an open type, without a chimney cap on the top, when the brush sticks out of the chimney, you will feel easy moving of the brush. If there is a chimney cap installed on the top of your chimney, when you reach it, you will feel that the brush cannot move any further. If there is a possibility, removing the chimney cap and cleaning it separately is recommended.

When you reach the top of your chimney, switch the drill to rotate the different direction. Moving of your brush's chain / bristles different direction will facilitate cleaning the chimney areas that are more difficult to access. Having slowly moved the rods upwards and downwards, drag the chimney cleaning system downwards the chimney. Having pulled out the rod at its entire length, turn off the drill and disconnect the drawn-out rod.

Having finished the deposit cleaning from the chimney, remove the foam rubber from the cleaning opening. Using the customized vacuum cleaner, remove from the cleaning opening the built-up soot. If you have not ash vacuum cleaner adjusted for soot cleaning, you can also remove the soot by conventional means. However, please be careful and do not use fast movements, to make sure the soot will not spread out in the room. If your chimney is an elbow-type, you should also remove soot from the elbow.

Thoroughly ventilate the room.

Re-install the removed components in the heating appliance (it is recommended to clean the components before re-installing). Clean the used parts of the kit with warm water.

## USAGE TIPS

- Please pay attention and make sure you do not clean one section of your chimney for too long.
- Due to rod friction against flue bends, the rods may heat up, and cause rods losing their mechanical properties and increase the probability of rod breaking.
- Attempt changing the leading rod (the rod on which the brush is attached). Due to heavy loads, using one rod as a leading one reduces its mechanical properties and may cause rod breaking.
- Cleaning of the chimneys with less than 90° angle significantly increases the probability of rod breaking and therefore, is not recommended.
- For cleaning of chimneys without inserts or for older ones, it is recommended to use lower drill rotations, thus making the cleaning process less aggressive. When cleaning a highly contaminated chimney, it is recommended to use higher drill rotations, thus making the cleaning process more aggressive.