

PRINT-X IMPULS-XM PISTOL SUPPRESSOR

OPERATOR MANUAL



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WARNING!



Suppressed firearms produce less noise than non-suppressed firearms, but it should still be remembered that it is a firearm. It is essential to follow the same safety rules as for a non-silenced firearm.

Failure to follow the operating instructions may result in serious injury to the user and damage to the firearm. Suppressors are devices that are attached to a muzzle, a flash hider or a compensator. A requirement for safe operation is the mounting of the suppressor as described in these operating instructions.

Under normal conditions any suppressor will become very hot. This is especially true when fired in full automatic mode. For your safety it is important to allow the suppressor to cool down before touching it in any way, this includes removing the suppressor from the weapon. It is also important not to let the suppressor touch any material or equipment while hot, such as nylon webbing or ammunition pouches.

EYE PROTECTION MUST BE WORN!



SAFETY GOGGLES MUST BE WORN WHEN DISASSEMBLING AND REASSEMBLING THE GUN. PARTS CAN GET INTO THE EYES IF HANDLED INCORRECTLY.

EAR PROTECTION MUST BE WORN!



SUITABLE HEARING PROTECTION MUST ALWAYS BE WORN WHEN SHOOTING WITH A FIREARM.

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1. General rules

READ MANUAL BEFORE USE.

1.1 Safety rules

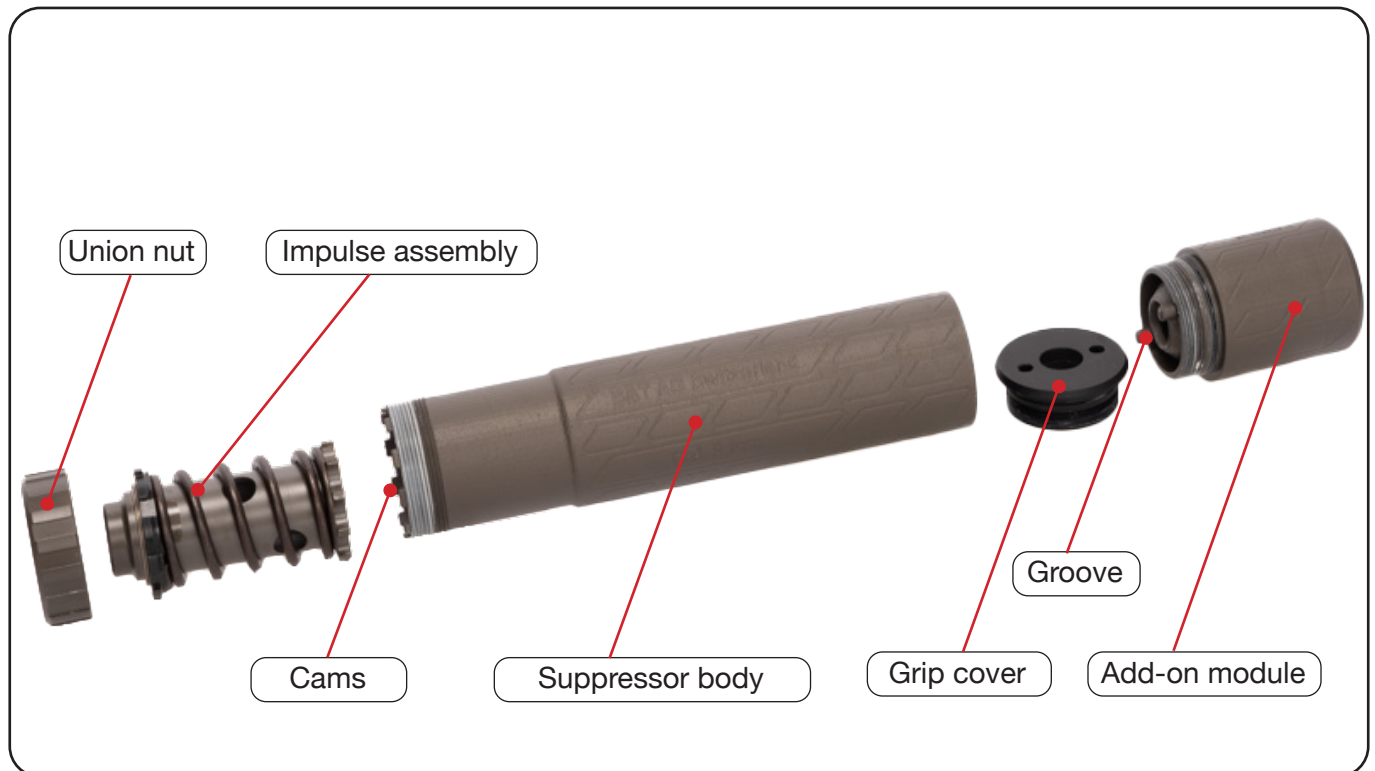
1. Consider every weapon loaded until checked personally by the individual operator.
2. The installation or removal of the suppressor must be accomplished in accordance with the instructions contained in this manual.
3. Serious injury to the user may result from an improperly installed suppressor.
4. Always wear eye and ear protection when shooting.
5. Check the suppressor for tightness before each use.
6. Do not touch the suppressor directly after shooting.

1.2 Influence on point of impact

The additional weight of the suppressor at the muzzle and the changed gas conditions directly after the muzzle can change the exit ballistics of the weapon and thus the point of impact. It is therefore important that the location of the meeting point is always checked with the silencer alt is therefore important that the point of impact is always checked and, if necessary adjusted, with the suppressor and the used ammunition before a mission.

2. Technical specifications

2.1 Nomenclature



2.2 General description

Based on a proven and powerful design of the Impuls IIA, this suppressor has been specifically optimized for additive manufacturing (3D printing). State-of-the-art manufacturing technology creates highly complex interior structures that achieve maximum noise regulation while being compact and lightweight.

- » Titanium construction – extremely lightweight, corrosion resistant and highly resilient.
- » Optimized flow control – Reduced gas backlash for better firing characteristics.
- » Add-on module – Allows users to adapt the suppressor to their needs.
- » Proven concept, state-of-the-art manufacturing – Improved performance without losing the proven benefits of the original.

The perfect combination of tradition and innovation – for highest precision and reliability.

2.3 Technical data

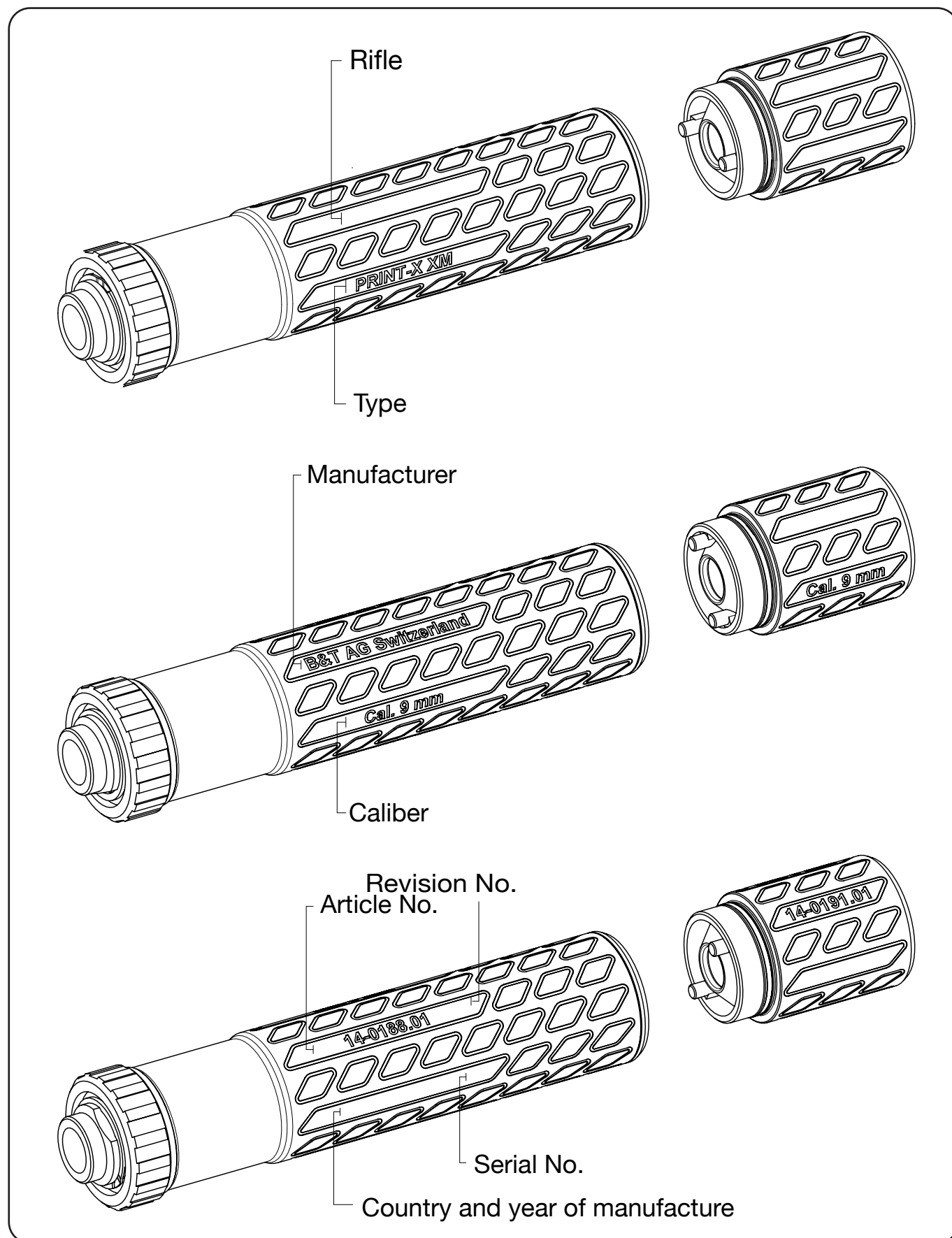
Designation		PRINT-X Impuls-XM cal. 9mm	
Manufacturer		B&T AG, Switzerland	
Product ID		SD-140193-TI	SD-140448-TI
Thread*		M13.5x1 Left	½"-28 UNEF
Caliber		9 mm	
Length	Without add-on module	156 mm	
	With add-on module	192 mm	
Length past barrel	Without add-on module	142 mm	
	With add-on module	179 mm	
Tube diameter		34 mm	
Weight	Without add-on module	~205 g	
	With add-on module	~255 g	
Material		Titanium, aluminum, stainless steel	
Color		Black/Gray - Cerakote coating on request	
Surface treatment		Anodized, Tenifered QPQ	
Sound reduction	Without add-on module	~ 22 dB A	
	With add-on module	~ 28 dB A	
Service life**		Min. 10.000 rounds	
Ambient temperature for use		-45°C...70°C	

* Depending on the firing cycle and maintenance, without wearing parts (springs).

All product specifications are subject to change without notice.

Published data are mean values and therefore not suitable acceptance criteria.

2.4 Type description



3. Mounting & Dismounting suppressor

3.1 Mounting suppressor

SAFETY ADVICE!



Unload the firearm and carry out unloading check, following the operating instructions for the firearm.

- a. Remove the thread protection nut from the barrel (if present). Therefore, turn the nut as follows:
 - » Right-hand thread: Counterclockwise
 - » Left-hand thread: Clockwise
- b. Clean the thread on the barrel and make sure it is free of dirt and damage.



- c. Slide the suppressor onto the muzzle thread and tighten it until it is finger-tight on the thread.
 - » Right-hand thread: Turn clockwise
 - » Left-hand thread: Turn counterclockwise



3.2 Dismounting suppressor

SAFETY ADVICE!



Unload the firearm and carry out unloading check, following the operating instructions for the firearm.

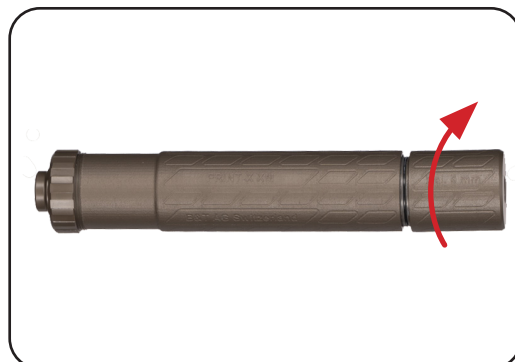
- a. Loosen and remove the suppressor.
 - » Right-hand thread: Turn counterclockwise
 - » Left-hand thread: Turn clockwise
- b. Mountthread protection nut from the barrel (if present) and tighten it hand-tight.
 - » Right-hand thread: Turn clockwise
 - » Left-hand thread: Turn counterclockwise




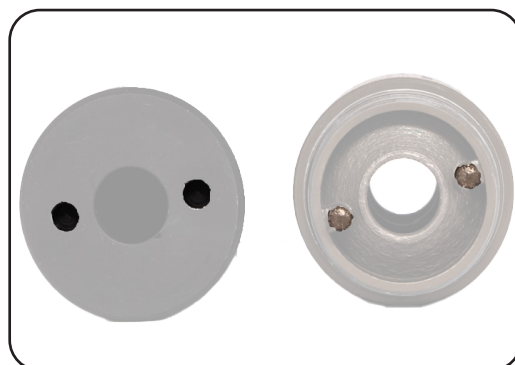
4. Mounting & Dismounting add-on module

4.1 Dismounting add-on module & cover


- a. Unscrew the add-on module clockwise.

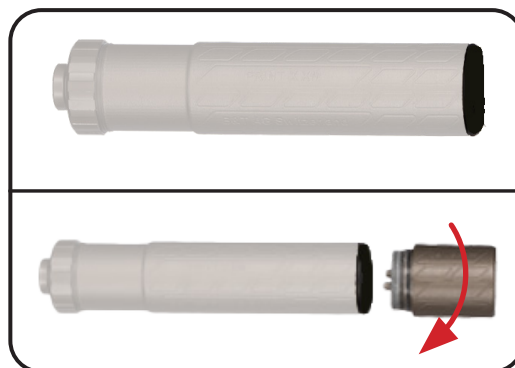


Advice	
	The grooves of the add-on module act as a counterpart to the cover, which makes tightening easier.



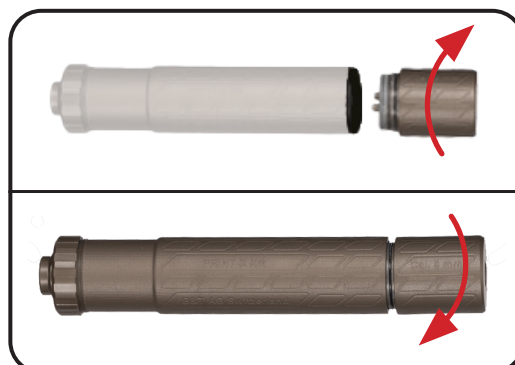
- b. Place the cover on the suppressor
c. Tighten the cover counterclockwise using the add-on module.

Cover should remain permanent	
	If the add-on module is no longer needed, apply Rocksett® to the thread, then tighten the cover using the add-on module.




4.2 Mounting add-on module

- a. Unscrew the cover clockwise using the add-on module.
b. Screw on the add-on module counterclockwise.

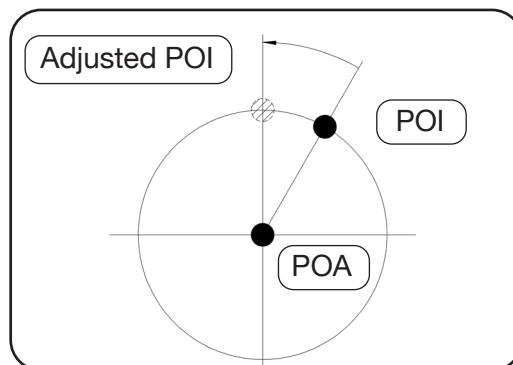


5. Adjusting the suppressor

If the Point of Impact (POI) and the Point of Aim (POA) do not match, this can be set by the user. The adjustment can be made with the suppressor attached. Unload the weapon first.

SAFETY ADVICE!	
	Unload the firearm and carry out unloading check, following the operating instructions for the firearm.

- Loosen the cap nut and unscrew it from the suppressor body.
- Pull the suppressor body away from the impulse assembly in the direction of firing so that the cams on the suppressor body no longer engage with the grooves on the impulse assembly.
- Rotate the suppressor body in the direction in which the point of impact (POI) is to be adjusted. Turning one groove corresponds to 36° POI shift.
- Push the suppressor body back onto the impulse assembly so that the cams engage with the grooves (see chapter “6.2 Assembly of the suppressor” page 11).
- After adjusting, mark the impulse assembly and suppressor body to return to the desired position after disassembly and cleaning.
- Tighten the cap nut.



6. Disassembly & Assembly of the suppressor

6.1 Disassembly of the suppressor

- a. Turn the cap nut counterclockwise.



- b. Remove the impulse assembly backwards from the suppressor body.



SAFETY ADVICE!



The spring locking ring must not be removed! This can result in severe injury!

6.2 Assembly of the suppressor

- a. Reassemble in reverse order of disassembling. When inserting the impulse assembly, it is essential to ensure that the cams are in the correct direction with respect to the grooves in the suppressor.



- b. The cams must fit into the grooves.



7. Maintenance

7.1 Storage

Store weapons with the suppressor installed upside down so that the barrel points downwards. This is especially important after cleaning the suppressor to prevent any cleaning fluid remaining from flowing into the barrel.



7.2 Field maintenance

Field maintenance shall be performed in the following sequence:

- » Before use and after a longer period of non-use.
- » Daily for regular use.
- » Immediately after any impact on the suppressor.



Regular maintenance in the field includes the following measures:

1. Visual inspection of the inside for foreign bodies and cracks.
2. Visual inspection of the external surfaces for cracks and dents, especially in the muzzle area.
3. Shake the suppressor to detect broken or detached inner parts.
4. Check the suppressor for proper assembly and disassembly.
5. Lubricate the threads of the firearm with a film of oil.
6. Check suppressor for tight fit.

SAFETY ADVICE!



If the suppressor has cracks, dents, damage in the muzzle area, loose parts, excessive contamination by carbon particles or other irregularities, it may no longer be used and must be presented to the firearms technician or manufacturer immediately.

7.3 Workshop maintenance

Perform periodic maintenance in the workshop if one or more of the following criteria are met:

- » If sand, mud, water or other liquids got inside the suppressor and then had to be fired without being able to remove the residue from the inside.
- » Immediately after any impact on the suppressor.
- » 1500 rounds have been fired or every 2 years at the latest.
- » The sound reduction declines noticeably.

To carry out a correct inspection of the suppressor, it must be removed from the weapon in any case see chapter “3.2 Dismounting suppressor” page 8.

Periodic maintenance in the workshop includes the following measures:

1. Visual inspection of the interior for foreign particles and cracks.
2. Visual inspection of the external surfaces for cracks and dents, especially in the muzzle area.
3. Shake the suppressor to detect broken or detached inner parts.
4. Check the thread on the muzzle for damage, clean with a small brush and remove grease / oil.
5. Disassemble the impulse assembly see chapter “6.1 Disassembly of the suppressor” page 11.
6. Clean the impulse assembly with a clean cloth and a small brush and apply a light film of oil.
7. Close the suppressor with a plug and fill it with «SchleTek Suppressor-Cleaner Evolution» (or another suitable solvent) for at least 8 hours.
8. Flush out the suppressor with warm water.
9. Blow out the suppressor with compressed air.
10. Reinstall the assembly unit on the suppressor body (see chapter “6.2 Assembly of the suppressor” page 11).
11. Grease the thread on the muzzle and the outside of the suppressor with a film of oil.

SAFETY ADVICE!



If the suppressor has cracks, dents, damage in the muzzle area, loose parts, excessive contamination by carbon particles or other irregularities, it may no longer be used and must be presented to the firearms technician or manufacturer immediately.


7.3.1 Avoiding corrosion in the suppressor


Moisture inside a suppressor can occur if it is exposed to high humidity (e.g. water, rain...) or if a change in temperature causes condensation inside the suppressor. This moisture is not visible, but can never be completely excluded, even if you did not actually shoot at all and the suppressor was only mounted on the weapon for some time.

This moisture or condensed water, in combination with powder residues, can form a corrosive substance that can damage the suppressor. If this corrosive substance enters the weapon, it can also be damaged. Strong corrosion, including pitting, is hardly to be expected with appropriate care of the suppressor, but in extreme cases could lead to a structural weakening of the suppressor, which is why it must be avoided.


To prevent damage to the suppressor and the weapon due to corrosion, it is important to observe some safety rules:

- a. Always store and transport the weapon and suppressor separately from each other, i.e. do not leave the suppressor on the weapon after use; remove it whenever possible.
- b. If it is not possible to remove the suppressor from the weapon after use, the weapon should be temporarily stored with the muzzle or suppressor down to avoid that corrosive substances from the suppressor enter the muzzle thread and the weapon.
- c. Always keep the inside and outside of the suppressor dry; in case of doubt dry the suppressor before storing it, e.g. putting it in upright position on a radiator (please note weapon legislation!).
- d. When cleaning the weapon and suppressor, always remove the suppressor from the weapon first.
- e. Clean the suppressor regularly with a suitable cleaning agent (e.g. SchleTek Evolution).

SAFETY ADVICE!	
	<p>If these rules are not followed, the suppressor can be structurally weakened by corrosion and, in extreme cases, burst when the shot is fired!</p> <p>If these rules are not followed, the weapon may become corroded on the muzzle thread, the compensator or the flashhider, inside the barrel as well as in the weapon itself!</p>

SAFETY ADVICE!	
	<p>If there is any uncertainty as to whether the suppressor is still to be shot, present it to the fire-arms technician or manufacturer for inspection.</p>

8. Accessories
8.1 Cleaning agent

Pos.	Item no.	Description
	SCT-1986	SchleTek Suppressor-Cleaner Evolution

9. **Warranty statement**

Warranty claims on behalf of the client are to be explicitly declared as such. During the legal warranty period, B&T provides warranty cover solely for defects that arise as a result of faulty materials, construction errors or poor workmanship. If a warranty claim is justified, B&T will, at its own discretion, either repair or replace the defective good. Costs incurred in transporting the defective good to B&T are borne by the client. Spare parts fitted and replaced become the property of B&T.

Inasmuch as is legally permitted, any other liability of B&T is excluded, in particular liability for damages arising either directly or indirectly from the delivered good itself, from its use or from its defects merchandise is covered by the warranty provisions of the manufacturer. Parts that are naturally subject to wear and tear, damage arising from insufficient maintenance work, non-compliance with operating regulations and cases of force majeure are all excluded from warranty cover. Warranty claims lapse if the client itself or third parties alter or repair the delivered good without the prior written consent of B&T. All product specifications are subject to change without prior notice. Published data are mean values and therefore not suitable acceptance criteria.

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