



Captive Bolt Livestock Stunner

caliber 9 x 17 mm

BLITZ cattle stunning apparatus cartridges
registered type approval number **DE-17-MARLIV18-PTB01**

Models:

- Blitz-SD (Standard Blitz)
- Blitz LO-P (penetrating version for small animals)
- Blitz-Max (Bull Blitz)
- Blitz-LO (non-penetrating version for small animals)



with **CE** - conformity mark



Blitz Captive Bolt Stunner

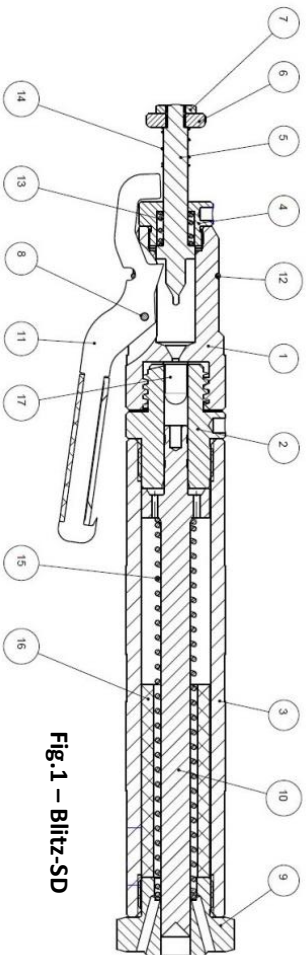


Fig. 1 – Blitz-SD

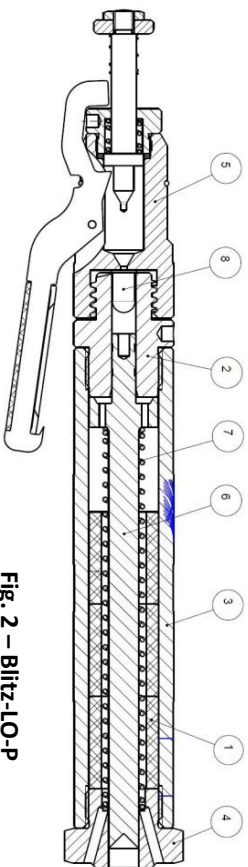


Fig. 2 – Blitz-LO-P

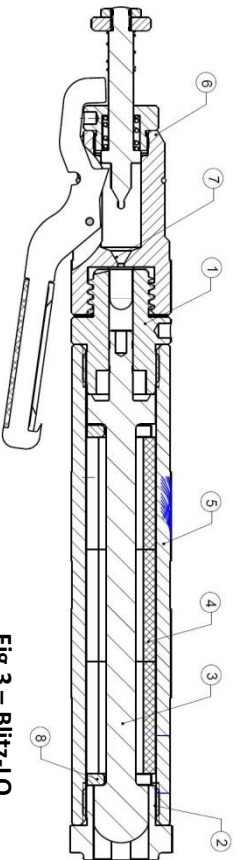


Fig. 3 – Blitz-LO

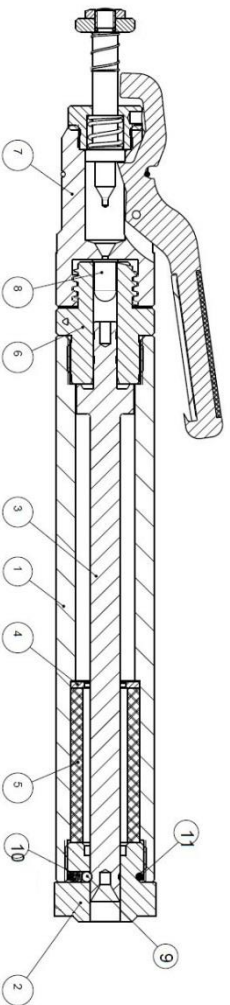


Fig. 4 – Blitz-MAX

Captive Bolt Stunner Blitz



It is imperative that you read this Instruction Manual thoroughly **before** initial use. Ensure that this Instruction Manual is **always** stored together with the apparatus. You may only turn this apparatus over to another person together with this Instruction Manual.

Components of Blitz-SD (see Fig.1 p. 2)

<u>Position</u>	<u>Name</u>
1	Header
2	Spacer
3	sleeve
4	Header nut
5	Firing pin
6	Firing pin nut
7	Counternut
8	Pin
9	Locking piece
10	Bolt
11	Release jaw
12	Annular spring
13	Firing pin spring
14	Counterspring
15	Bolt spring
16	Rubber buffer
17	Cartridge Caliber 9x17

Components of Blitz-MAX (see Fig.4 p. 2)

<u>Position</u>	<u>Name</u>
1	sleeve
2	locking piece
3	firing pin
4	sliece
5	rubber buffer
6	spacer
7	header complete
8	cartridge caliber 9x17
9	clamping ball (3x)
10	pressure spring (3x)
11	O-ring

Components Blitz-LO-P (see Fig.2 p. 2)

<u>Postion</u>	<u>Name</u>
1	rubber buffer (3x)
2	spacer
3	sleeve
4	locking piece
5	header complete
6	firing pin
7	firing pin spring
8	cartridge caliber 9x17

Components Blitz-LO (see Fig.3 p. 2)

<u>Position</u>	<u>Name</u>
1	spacer
2	locking piece
3	firing pin
4	rubber buffer (3x)
5	sleeve
6	header complete
7	cartridge caliber 9x17
8	spacer disc

Table of contents

1.	General Notes	page 5
2.	Description	page 6
3.	Cartridges	page 7
4.	Technical Data	page 8
5.	General Safety Instructions	page 9
6.	Initial Use	page 10
7.	Using the stunner.....	page 11-14
8.	Maintenance and Care	page 15
9.	Troubleshooting	page 16



1. General Notes

Signal words and their meaning

WARNING: For a potentially dangerous situation, which could result in serious injuries or death.

ATTENTION: For a potentially dangerous situation, which could lead to light injuries or property damage:

1.1 Pictograms

			
Attention	Hot surface	Wear Ear Protection	Adhere to the Instruction Manual

The „Apparatus“ designated in this text is invariably and exclusively the shooting instrument Blitz **DE-17-MARLIV18-PTB01** in his particular design.

1.2 Location of identification details on the instrument

Header: manufacturer, year of production, serial Number,
DE-17-MARLIV18-PTB01

sleeve: serial Number, product name, manufacturer, type of
ammunition

1.3 Transcribe the following information into your Instruction Manual, and **always** use this information in reference to any questions you should have, or when submitting the apparatus for its periodic inspection:

Year of manufacture:

Serial Number:

2. Description

The Blitz shooting instrument may only be exclusively used to stun slaughter animals. The user must adhere to the regulations valid in their country.

You have to store this instrument as it is secured against unwarranted initial operation and use.

After the projectile load is ignited in the cartridge chamber (centerfire), the bolt is accelerated, exits the shaft at a defined length, is drawn back into the housing and remains in the apparatus.

Centerfire cartridges, caliber 9x17, are exclusively used as cartridges. To be safely used in this apparatus, the cartridges **must** meet the requirements of the respective C.I.P (International Proof Commission) type approval tests.

Mode of operation

The energy of the cartridge is conveyed to the bolt and accelerates it in such a manner that it is driven through the cranium, penetrating the animal's brain. The bolt's speed is braked to zero and drawn back into the apparatus via the integrated bolt spring and rubber buffer. To achieve both optimum effect and spare the apparatus, the cartridge energy (-> refer to cartridges) is adapted to the animal. In version Bullen Blitz there is no bolt spring but rather a restraint system.

3. Cartridges

The instrument has been specially configured for centerfire cartridges (special closed and waterproof-sealed, caliber 9x17) – only these cartridges may be used. The cartridges are available in different load strengths for the various slaughter animal species. When selecting cartridges, particular attention must be paid to the individual species and size of the individual slaughter animal. Selecting the proper cartridge strength in view of the individual slaughter animal ensures species-appropriate stunning and helps reduce wear-and-tear in the bolt spring and rubber buffer. The imprint, the color of the label and that of the primer cap indicate the cartridge's load strength.

- Green: low charge (Blitz-SD, Blitz-LO-P, Blitz-LO)
for young sheep and small animals like piglet, calves, lambs, fowl
- Yellow: medium charge (Blitz-SD) for older sheep, cows, easy oxen, pigs
- Blue: high charge (Blitz-SD) for pigs, cows, and heavy animals like average oxen and young bulls
- Red: very high charge (Blitz-SD, Blitz-MAX) for large pigs and heaviest animals like horses, heavy oxen and bulls

To ensure that the instrument functions well, use the projectiles that we have tested and approved. Please place your order for cartridges with your specialized dealer.

The cartridges must be stored in such a manner that they are safeguarded against unauthorized operation and use.

Cartridges

Item Number	Name
35-302	Cartridges green (low charge)
35-305	Cartridges yellow (medium charge)
35-301	Cartridges blue (strong charge)
35-304	Cartridges red (power charge)

4. Technical Data Captive Bolt Stunner Blitz

Technical Data/ name of model	Blitz Kerner	Bullen-Blitz	Kleiner Blitz	Blitz Schlag
Weight	2,20kg	3,15kg	2,25kg	2,20kg
Instrument length	330mm	360mm	330mm	330mm
Shaft diameter	40mm			
Maximum fire rounds	17 shots/hour			
Cartridges	9x17mm			
Power adjustment	1-4*	4*	1*	1*

*) 1=cartridge green, 2=cartridge yellow, 3=cartridge blue, 4=cartridge red

Noise measurement procedure for fastener driving tools – Accuracy Class Procedures 2. German Version EN 12549:1999+A1:2008 (460 mg propellant charge)	
Acoustic pressure level on the measuring surface	98 dB(A)
Emission acoustic pressure level at the work place Max. 17 shots/hour	82 dB(A)
Acoustic capacity level	111 dB(A)
Peak acoustic pressure level	139 dB(A)

Key parameter referred to EC 1099/2009 Speed +/- 2m/s for cartridge:	
1 – green	42m/s
2 – yellow	46m/s
3 – blue	48m/s
4 – red	50m/s

Vibration measurements with red cartridges (460mg propellant charge) in accordance with DIN EN ISO 5349-1, 20643 and DIN ISO/TS 15694 and 8662-11	
Total vibration value at 17 shots/hour	2,5 m/s ²

5. General Safety Instructions

5.1 Fundamental Safety Precautions

Apart from the safety instructions detailed in the individual chapters of this Instruction Manual, you must invariably adhere to the following regulations.

5.2 Intended Use

The apparatus **exclusively** serves the purpose of stunning slaughter animals. Should the cartridge not be ignited, you must wait 30 seconds before unloading.

5.3 Inappropriate Use



The apparatus **may not be modified**.

You may only use original turbocut spare parts.

Exclusively use either original cartridges or those of equivalent quality. Adhere to the stipulations detailed in the Instruction Manual in regard to operation, care and maintenance. Never aim the apparatus at yourself or other persons.

Do not press the apparatus against your hand or other body parts.

It is imperative that you avoid dry firing.

5.4 Technological Status

The instrument was designed and manufactured in accordance with the latest Technology. The instrument could incorporate a risk of danger should it be used by untrain persons in an unauthorized or inappropriate manner.

5.5 Appropriate Operational Conditions and Use



Provide for good lighting (Arbeitsstättenverordnung beachten).

The instrument is exclusively intended for hand-operated use.

Ensure that you are properly positioned and always maintain your balance. Avoid abnormal posture and bearing.

Ensure that other persons are not allowed to come within distance to the working area.

Ensure that the apparatus is kept dry, clean and free of oil and grease.

5.6 General Risks of Danger



The apparatus may only be operated for its intended use when it is in perfect condition.

Never leave a loaded apparatus unattended.

Always unload the apparatus prior to cleaning, maintenance or storage.

Unused cartridges and apparatus that are not in use must be protected from moisture and excessive heat when stored.

The apparatus and cartridges must be stored in such a manner that they are safeguarded against unauthorized operation & use:

5.7 Hot Surface



Do not exceed the stipulated maximum fire rounds (number of rounds shot per hour).

Do not dismantle the apparatus when it is hot.

5.8 Requirements made on the User

The instrument is only intended for use by professional users.

The instrument may only be used and cleaned by authorized and trained personnel.

Always be fully concentrated when working. Be prudent and refrain from using the instrument when you are not concentrated or distracted. Interrupt the work should you feel ill.

Closely observe the animal and be prepared for potential evasive movements

5.9 Personal Protective Equipment



When the instrument is being used, both the user and persons abiding in the vicinity must wear appropriated ear protection.

6. Initial Use

6.1 Inspecting the instrument

(prior to & following each usage):

Ensure that no cartridge is in the cartridge chamber. The active components mustn't have a corrosion! Check the bolt's position. To do so, hold the instrument at a vertical angle, pointing the muzzle downwards. The bolt must be located at least 4-5 mm within the shaft, and must independently remain there (refer to Troubleshooting).

Inspect the rubber buffer and bolt spring for wear-and-tear.

6.2 Alternatives

Check the instrument with the reference block and/or with a tester for speed and log it.

7. Using the stunner



Read Instruction Manual carefully before initial use and use images 1 - 4 on page 2 for better understanding.



Wear (users and persons in the vicinity) ear protection. Hearing can be damaged if the noise level is too high.



Never aim the instrument at yourself or other persons!

Be prepared for the animal's evasive movements!

7.1 Loading

For the following instructions, please refer to the diagram on Page 2. Unscrew the head piece, insert the cartridge (caliber 9x17 centerfire) into the intermediate piece (cartridge chamber), ensuring that the primer cap upwards. Using clockwise turns, securely fasten the head piece. Make sure that the annular spring is still properly positioned. The annular spring's opening must be opposite to the trigger.

7.2 Straining

Pull out the striking pin on the striking pin nut until the trigger audibly catches.

The instrument is now ready-for-use.

While loading the instrument with the cartridge and cocking the striking pin, you must hold it in such a manner that it is not aimed at persons or your own body.

The striking pin may not be cocked until immediately prior to ignition.



The apparatus may not be held by its muzzle. Under no circumstances may the lower end of the apparatus (from which the bolt exits) be held against the body – not even when searching for possible malfunctions (-> refer to Troubleshooting).

Loaded apparatus must be unloaded unless they are to be immediately used!

7.3 Shooting

When preparing to shoot, the instrument must be securely held in your guide hand and the lock positioned on the animal's skull. The shot is triggered by applying pressure to the trigger via your trigger finger– pull it completely through – the shot is triggered.

The diagrams 5-11 on pages 13 and 14 show the locations, where the instrument must be positioned on the individual animal species.

The instrument is to be positioned on the weakest place of the skull, and held as vertically as is possible. It may not be tilted when the shot is fired, as the bolt could potentially get lodged in the skull bone and could thus not be drawn back via the bolt spring.



It is imperative that dry firing is avoided. Only carry out trial shots against sufficiently hard and permanently mounted wooden base. Should the ammunition fail, the igniting mechanism must again be triggered after approximately a half-minute. Should ignition again fail, unscrew the head piece and carefully remove the ammunition



The striking pin bolt may not be cocked.



Inspecting the striking pin bolt: When the head piece is unscrewed, it must be ensured that the striking pin bolt rod out of the head piece, as this could otherwise result in premature ignition. If necessary, the striking pin spring and exterior striking pin spring must be replaced. Their replacement may only be performed using the entire Spring Set.



Maintenance work may only be carried out by the manufacturer or their authorized staff, unless within the scope of his repair work, the user exclusively installs spare parts stipulated by the manufacturer

7.4 Removing the cartridge case

After you have unscrewed the head piece, remove the cartridge case with your fingers. Should the cartridge case be stuck, it can be removed using the extractor located at the end of the trigger, by inserting it into the groove on the cartridge chamber (intermediate piece).

The cartridge chamber must subsequently be immediately cleaned using the small brush.

Fig.5
pigs / piglet

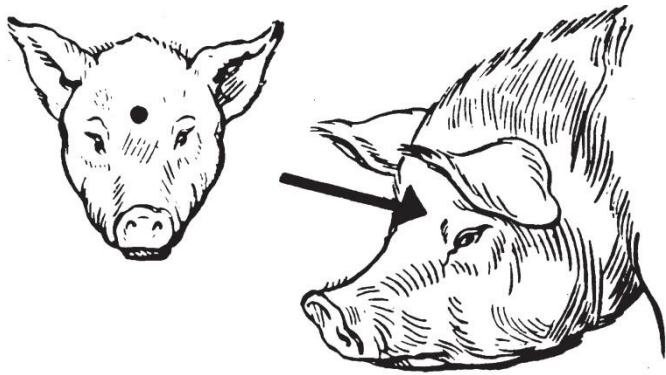


Fig.6
Sheep

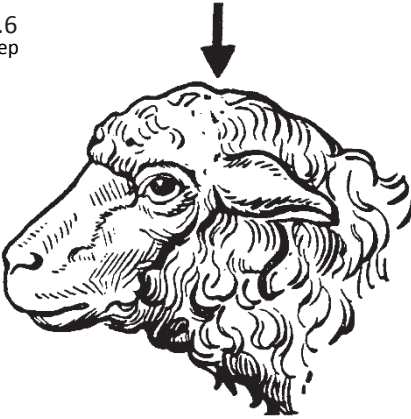


Fig.7
calves



Fig.8
cows, oxen und bulls

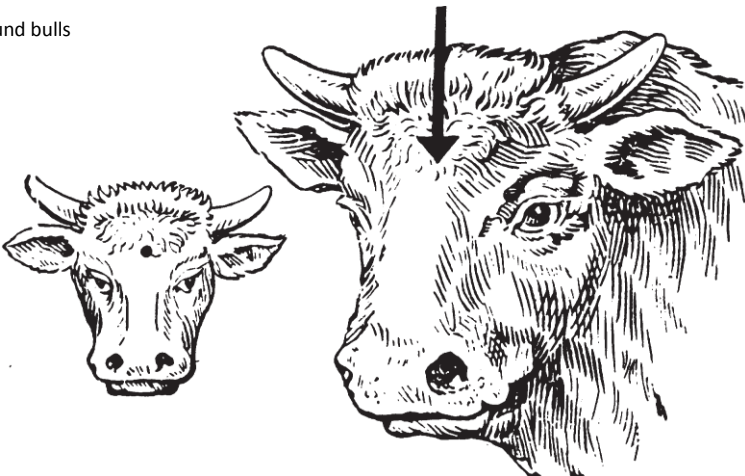


Fig.9
Horses

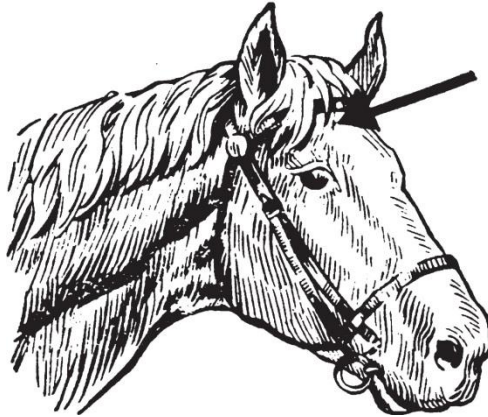


Fig.10
Fowl

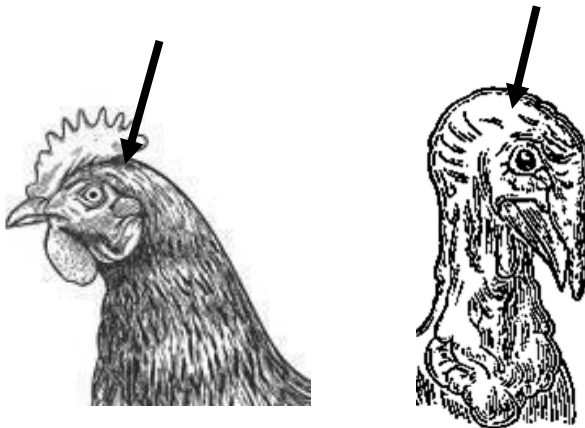


Fig.11+12
Goats

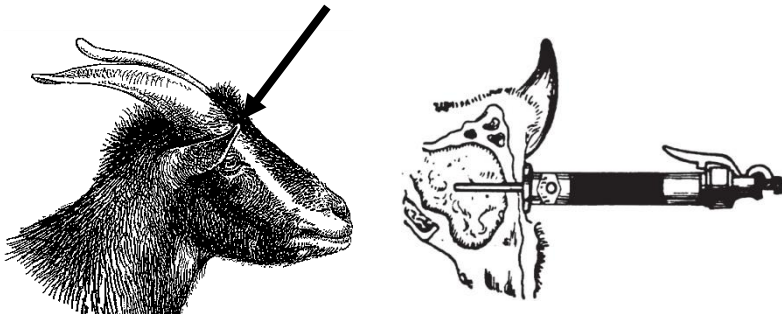


Fig.12 shows the bolt penetrating the brain

8. Maintenance and Care

After use, the apparatus must be carefully cleaned on a daily basis to avoid powder residues and rusting. Under certain circumstances, this could lead to malfunctioning and damage. When cleaning the apparatus, adhere to the respective Hazardous Substance Regulations in view of labeling and instructions pertaining to the agents used.

How to proceed (see Fig.1 – 4 on page 2)

Unload the instrument and unscrew the head piece.

Unscrew the locking piece.

Remove the bolt spring, rubber buffer and the bolt.

Using the brushes provided, which are screwed onto the cleaning rod, carefully clean the inner-shaft wall, the bolt, the boreholes in the intermediate piece (cartridge chamber), the apparatus' exterior, as well as the remaining components. If necessary, soften any rust and debris with an oil (e.g. Ballistol). Especially check the bolt on corrosion, because rust degrades the penetration power and can lead to embrittlement or capillary cracks. If the bolt is corroded, he has to be replaced.

When the components are dry, lightly lubricate them using machine oil. Make sure that the rubber buffer is kept free of oil. Inspect the rubber buffer and bolt spring for cracks and lengths. Reinsert the bolt, rubber buffer and spring bolt in this order, and screw on the lock. The bolt has to reserve at least 3 - 4mm of the locking piece.

It is recommended that you do not dismantle the head piece, but wash it out in oil (e.g. Ballistol) and subsequently lightly lubricate it.

You can check the proper functioning of the apparatus by inserting the cleaning rod provided (without the brushes), instead of a cartridge, into the intermediate piece (cartridge chamber) and push out the bolt against the pressure of the spring. The bolt must then visibly appear at the lower end of the apparatus, and when the pressure abates (via the cleaning rod), it must fully recede.

9. Troubleshooting

Cartridge does not ignite

In this case, the striking pin bolt could be deformed or the striking pin bolt tip damaged. The parts must be replaced.

Bolt movement could be hindered due to dirt. This necessitates cleaning.

However, the most common source of malfunction is to be found in the cartridge. Moisture can lead to a complete failure – or considerably reduced performance. Check the cartridge for rust; inspect the impact of the striking bolt pin tip on the primer cap. Use appropriate cartridges.

Bolt does not penetrate deeply enough

Check whether the correct cartridge load strength has been selected, or whether the instrument's interior is extremely dirty. Should the latter be the case, then clean it thoroughly. After removing the bolt spring and rubber buffer, you must be able to easily move the bolt back and forth.

Hold the apparatus at a vertical angle, pointing the muzzle downwards -> the bolt must independently be located at least 4-5 mm within the shaft. Should it move up to the muzzle's rim or already protrude, the rubber buffer and bolt spring must be immediately replaced. Should the animal make an evasive move, or the instrument has not been positioned on its head with enough force, this could result in a misfired shot.

Bolt does not recoil

The stunning apparatus was tilted when fired so that the bolt is lodged in the skull. The bolt spring and rubber buffer could be worn out. Replace both parts.

Bolt spring and rubber buffer wear out prematurely

This is most often caused by using cartridges that are more powerful than stipulated. This can also occur when inappropriate ammunition is used. Use animal species suitable cartridges.

Trigger can no longer be pulled

The annular spring is no longer properly positioned. The annular spring opening must always be located opposite to the trigger. The release mechanism spring is defective or the release jaw is distorted. Immediately send in the instrument for a check.