



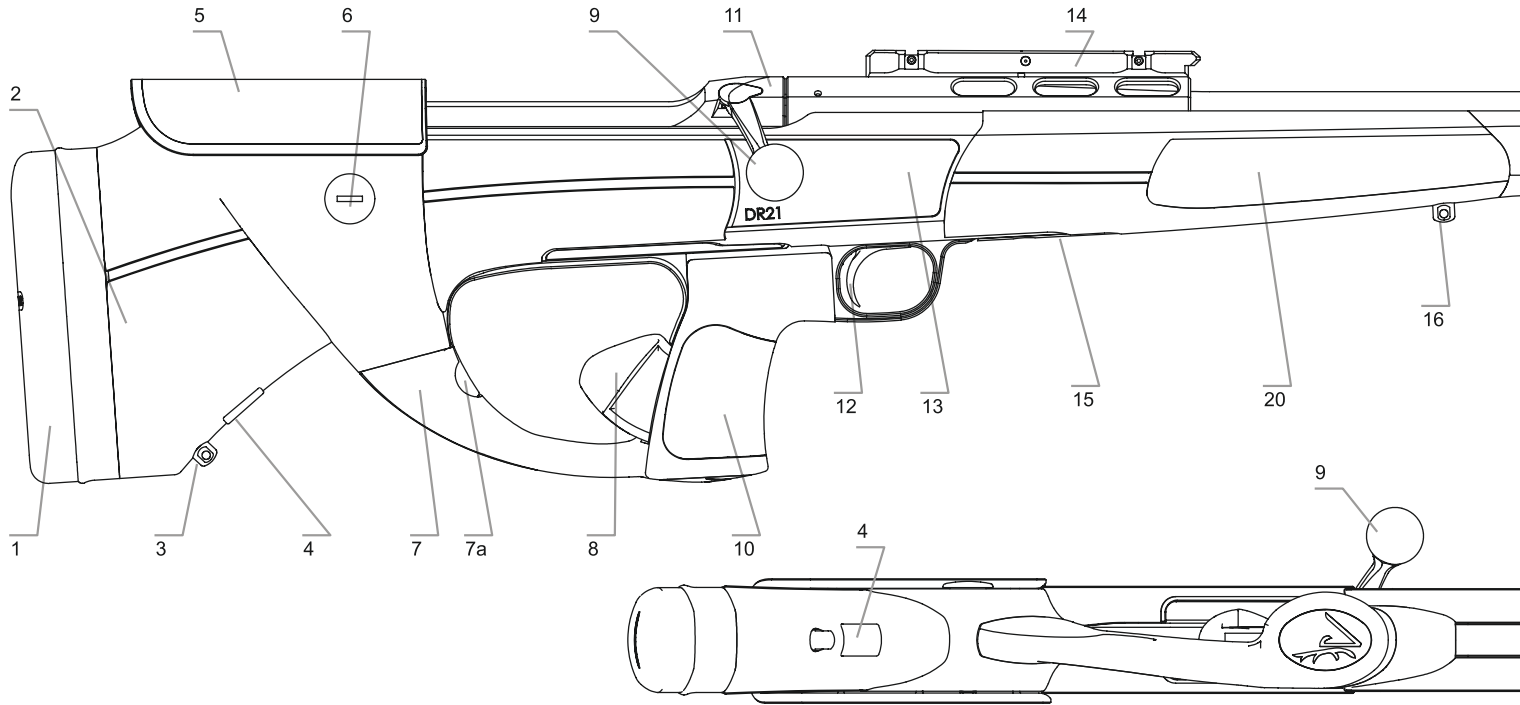
DENTLER

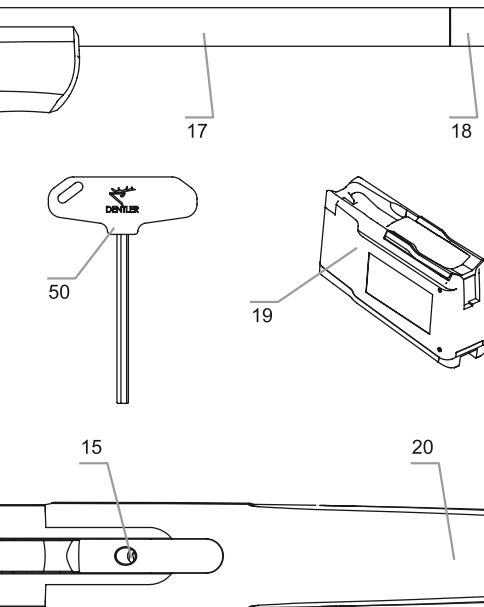
INNOVATION JAGD

DR21[®] Bolt Action Rifle

INSTRUCTION MANUAL

The professional tool for hunting
EASY TO HANDLE | ACCURATE | SAFE





- | | | | |
|---|--|----|--|
| 1 | Fixed butt plate 355/365/385mm
(optional: buttstock length adjustment & recoil absorption integrated) | 9 | Bolt handle |
| 2 | Total buttstock | 10 | Pistol grip |
| 3 | Buttstock sling swivel | 11 | Bolt |
| 4 | Cap (optional: buttstock length adjustment lock) | 12 | Trigger |
| 5 | Removable/height-adjustable cheek piece | 13 | System housing |
| 6 | Cheek piece height adjustment clamping and push button | 14 | BASIS® base rail
(optional: BASIS® VARIO base rail) |
| 7 | Trigger guard with closing/opening catch (7a) | 15 | Barrel locking screw |
| 8 | Manual cocking mechanism | 16 | Forend sling swivel |
| | | 17 | Interchangeable barrel |
| | | 18 | Muzzle thread with cap |
| | | 19 | Insert magazine |
| | | 20 | Forend |
| | | 50 | DENTLER T-handle Allen key |





DENTLER



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General Safety Rules

Preamble

You have opted for our DR21®, the easiest to handle and safest repeater on the market. We are delighted with your decision. However, please don't let this innovative tool's unique advantages, in particular its safety features, tempt you to neglect the necessary care or legal regulations that pertain to handling firearms. Therefore, the first step is to check whether you have the correct instruction manual by looking for the model number DR21 on one of the side plates of your firearm.

Caution:

Before using your DR21® for the first time, please make sure that you read through this instruction manual in full. When passing on the firearm, always include these instructions with it.

Note:

In addition to reading through this instruction manual, please ask your specialist dealer to explain your DR21® in detail and show you how to use it safely.

- Ensure that the firearm and ammunition cannot be accessed by any unauthorised persons
- Observe the applicable statutory provisions regarding carrying and storing weapons and ammunition
- Familiarise yourself thoroughly with the handling of your firearm and practise all functions and hand movements with an unloaded firearm
- Always assume that every firearm is loaded and ready for firing until you have made sure that it isn't by opening the bolt and looking into the chamber. An unloaded firearm must be handled in the same way as a loaded firearm.
- Always point the muzzle in a direction where you cannot cause injury to persons or damage to objects
- Before loading the firearm, always check to see if there is any residual oil or foreign matter (water, snow, earth, tree needles, leaf debris, etc.) in the chamber or barrel, as these can result in displacement of the point of impact (oil) or even cause the barrel to explode (foreign matter), seriously injuring the shooter or bystanders. While using the rifle, make sure that no foreign matter gets into the barrel.

- Only use ammunition that meets the requirements of the CIP with respect to the maximum permitted gas pressure (Pmax). Your DR21® is tested by the state proof house pursuant to the requirements of the Proof Law and Proof Ordinance with a proof gas pressure exceeding the permissible maximum gas pressure Pmax by at least 25%. If ammunition exceeding this gas pressure is used, the safety of the user or of third parties may not be guaranteed. The same applies to cartridge cases that do not fulfil or no longer fulfil their sealing function (obturation).
- Only load your firearm immediately before use
- When reaching into the pistol grip to cock the gun/release the safety, keep the barrel pointed in a safe direction
- Only place your finger on the trigger immediately before firing and after you have fully pressed the manual cocking mechanism
- Before firing, check the terrain both in front of you and behind you, and only fire your shot when you are certain that there is a secure backstop.
- Do not open the bolt for 20-30 seconds after a cartridge has malfunctioned in order to avoid the risk of a hangfire
- Wear ear protection when shooting
- **Unload your firearm before**
 - Crossing obstacles
 - Getting in and out of raised hides or other hunting ground facilities
 - Entering a building
 - Getting into a vehicle
 - Entering an inhabited area
 - Putting down or handing over your firearm temporarily
 - Disassembling or reassembling your firearm

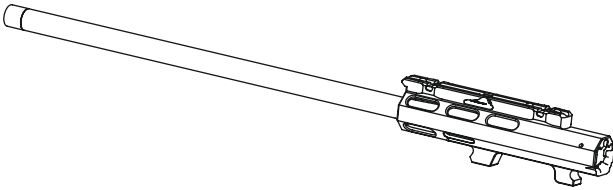


1. Assembly

Caution: Always make sure the gun is unloaded before inserting a component

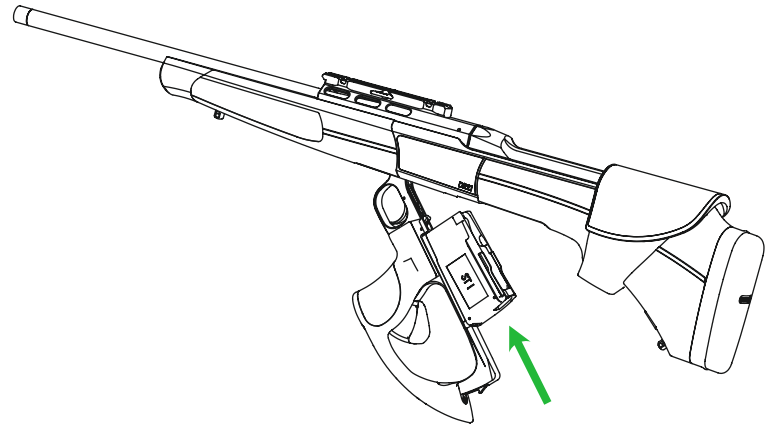
Installing the interchangeable barrel

- To install the interchangeable barrel, please see Section 6. Changing the Barrel/Bolt Head



Sliding in the insert magazine

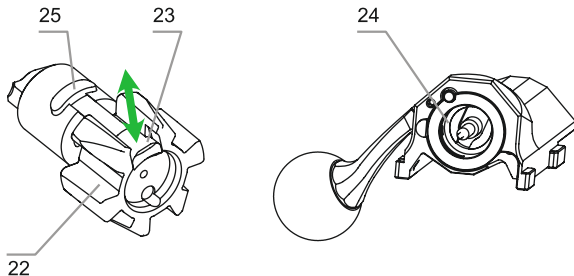
- Swing the trigger guard (7) down by operating the closing/opening catch (7a) and open it to the lowest position (45°) as far as it will go
- Place the underside of the insert magazine (19) at the rear end of the trigger guard on the side-mounted guide rails and push it all the way forwards to the stop until the transverse groove becomes visible
- Close the trigger guard again until it fully clicks into place



Caution: When assembling your DR21®, please always ensure that the interchangeable barrel (e.g. ST), the bolt head (e.g. ST) and the magazine (e.g. ST II) have the same calibre group (see point 8).

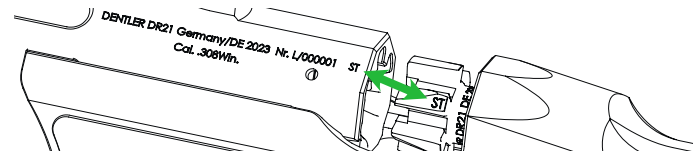
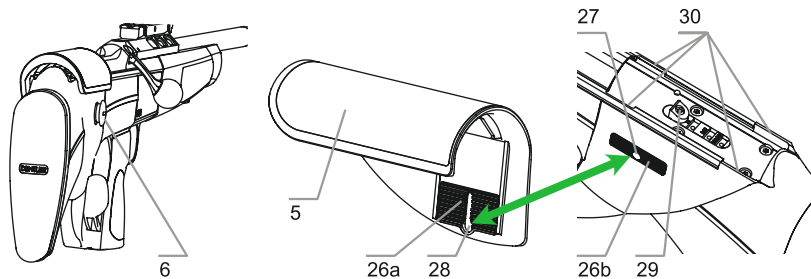
Installing the bolt head

- Lightly press the manual cocking mechanism (8) and, using the bolt handle (9), pull the bolt (11) all the way back as far as it will go
- Set the firearm on the butt plate (1) to keep the bolt (11) in the rear position
- Pull/push the extractor (23) on the bolt head (22) away from the centre in the opposite direction to the working position
- Insert the bolt head with extractor on the cartridge ejection side into the receiver sleeve (24) in the bolt (11)
- Release the extractor again - turn the bolt head until the bolt head catch (25) clicks into place and the extractor is back in the working position



Installing the bolt

- Loosen the cheek piece clamp (26a+26b) by unscrewing the clamping and push button (6) by 5 turns using a coin, then keep the clamping and push button pressed and move the cheek piece upwards until the spring-loaded retaining pin (27) can be removed from the cheek piece cut-out (28) by pulling sideways
- Completely remove the fixed repeating stop (29) with a 2.5 mm Allen key and mount the receiver in the guide pockets (30). Then push it forwards and reinstall the repeating stop
- Set the firearm on the butt plate to keep the bolt in the rear position
- With the clamping and push button (6) pressed, mount the cheek piece (5) back onto the spring-loaded retaining pin (27), push it down to the desired height and lock it into place. Then hand-tighten the clamping and push button (6) again

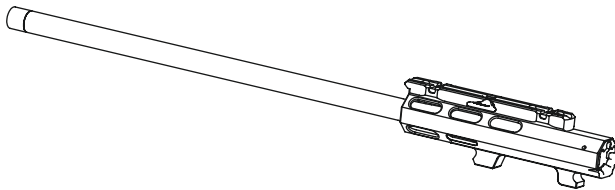


2. Disassembly

Caution: Always completely unload the gun before dismantling it

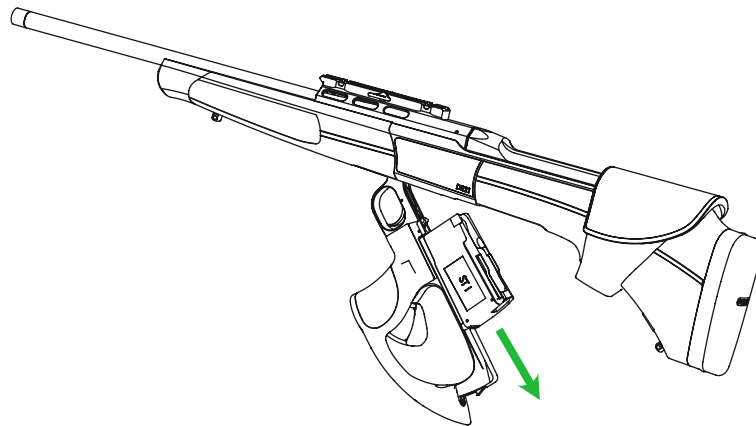
Removing the interchangeable barrel

- To remove the interchangeable barrel, please see Section 6. Changing the Barrel/Bolt Head



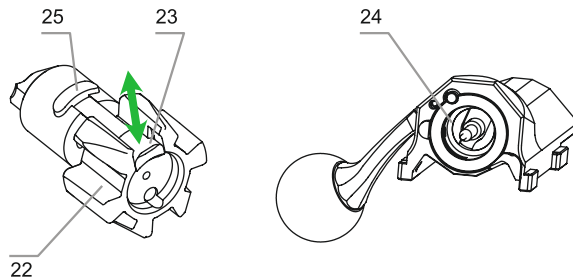
Removing the insert magazine

- Swing the trigger guard (7) down by operating the closing/opening catch (7a) and open it to the lowest position (45°) as far as it will go
- Pull the insert magazine (19) towards the buttstock and remove it
- Close the trigger guard again until it fully clicks into place



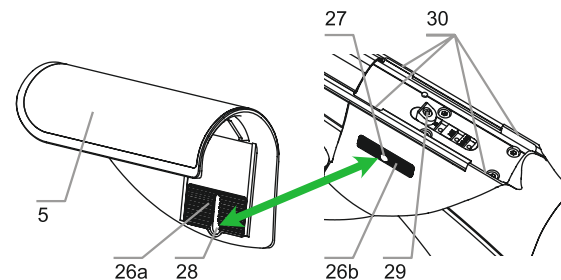
Removing the bolt head

- Lightly press the manual cocking mechanism (8) and pull the bolt (11), using the bolt handle (9), all the way back as far as it will go
- Set the firearm on the butt plate (1) to keep the bolt (11) in the rear position
- Pull/push the extractor (23) on the bolt head (22) away from the centre in the opposite direction to the working position to release the bolt head catch (25)
- Pull the bolt head out of the receiver sleeve (24)



Removing the bolt

- Loosen the cheek piece clamp (26a+26b) by unscrewing the clamping and push button (6) by 5 turns using a coin, then keep the clamping and push button pressed and move the cheek piece upwards until the spring-loaded retaining pin (27) can be removed from the cheek piece cut-out (28) by pulling sideways
- Completely remove the fixed repeating stop (29) with a 2.5 mm Allen key and remove the receiver from the guide pockets (30). Then reinstall the repeating stop
- Set the firearm on the butt plate to keep the bolt in the rear position
- With the clamping and push button (6) pressed, mount the cheek piece (5) back onto the spring-loaded retaining pin (27), push it down to the desired height and lock it into place. Then hand-tighten the clamping and push button (6) again.



3. Safety System / Bolt Handle Lock

The safety system of the DR21® bolt action rifle is based on intuitive manual cocking via the manual cocking mechanism (8) on the rear of the pistol grip (10). The firing pin spring is only under tension ready for firing when this heel-of-the-hand knob is fully grasped by the firing hand and pressed in. That's why the firing pin spring is relaxed even after operating the bolt, making the firearm 100% safe. If the bolt handle (9) is fully engaged / the bolt (11) is fully closed, it is locked to prevent it from being opened unintentionally when the firearm is being carried.

Cocking the firearm

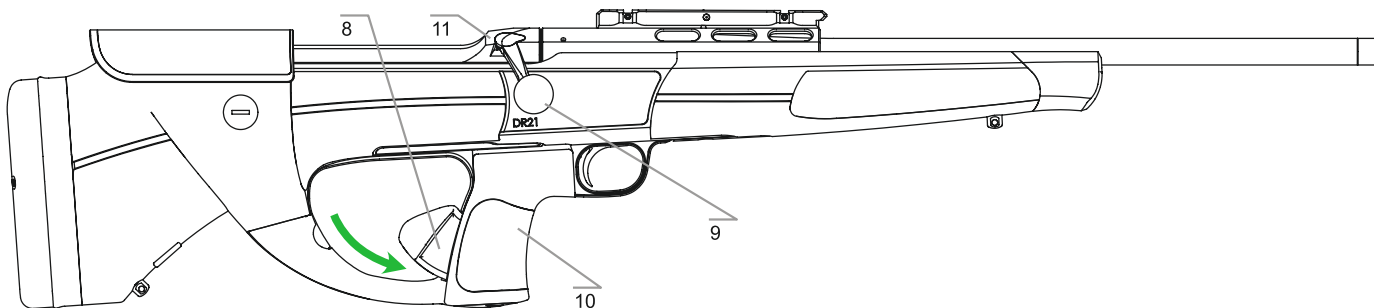
- Fully enclose the pistol grip (10) with your firing hand and press the manual cocking mechanism (8) in the direction of the arrow all the way as far as it will go

Uncocking the firearm

- Remove your firing hand from the manual cocking mechanism (8) in the opposite direction to the arrow

Opening the bolt

- Lightly press the manual cocking mechanism (8) in the direction of the arrow and pull back the bolt (11) using the bolt handle (9). Please ensure that you remove your finger from the trigger.



4. Loading / Unloading

- Remove your hand from the pistol grip and manual cocking mechanism
- Lightly press the manual cocking mechanism (8) and, using the bolt handle (9), pull the bolt (11) all the way back as far as it will go
- Set the firearm on the butt plate to keep the bolt in the rear position
- Swing the trigger guard (7) down by operating the closing/opening catch and open it to the lowest position (45°) as far as it will go
- Pull the insert magazine (19) backwards towards the buttstock and remove it
- **Loading:** Push the cartridges downwards through the magazine lips
- **Unloading:** Push the cartridges out of the magazine from back to front
- Place the insert magazine (19) with the underside at the rear end of the trigger guard on the side-mounted guide rail and push it all the way forwards to the stop until the transverse groove becomes visible
- Close the trigger guard again until it clicks into place

Note: The insert magazine can be loaded directly from above when the bolt is open, without removing it from the trigger guard

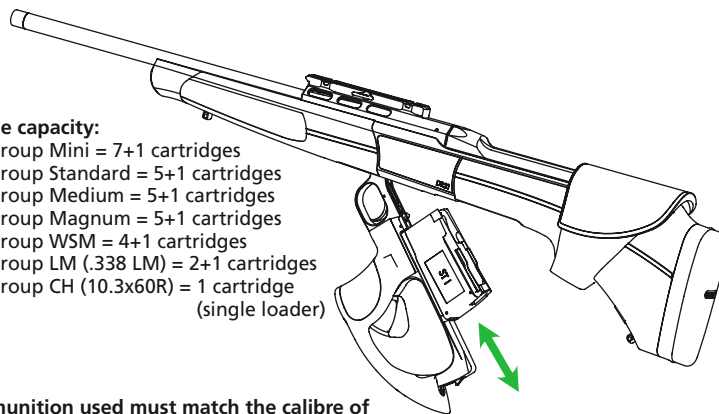
Magazine capacity:

Calibre group Mini = 7+1 cartridges
 Calibre group Standard = 5+1 cartridges
 Calibre group Medium = 5+1 cartridges
 Calibre group Magnum = 5+1 cartridges
 Calibre group WSM = 4+1 cartridges
 Calibre group LM (.338 LM) = 2+1 cartridges
 Calibre group CH (10.3x60R) = 1 cartridge
 (single loader)

Caution:

The ammunition used must match the calibre of the interchangeable barrel, the bolt head and the magazine.

With the cushioned longitudinal stops option, please make sure to fully retract the bolt once the trigger guard has clicked into place.

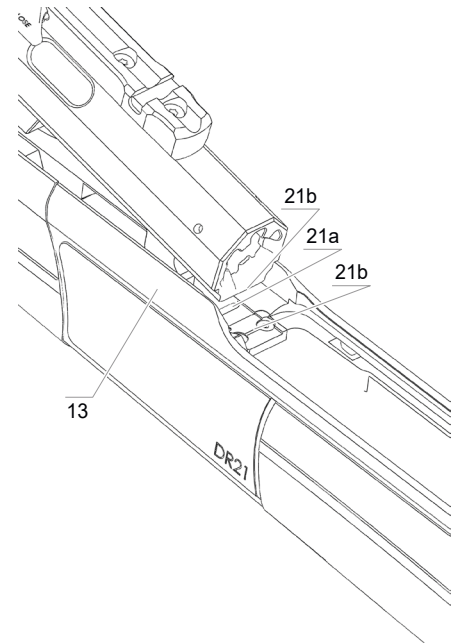


5. Firing / Operating the Bolt

- Before firing, check the terrain both in front and behind you, and only fire your shot when you are certain that there is a safe backstop
- Aim at the target
- Grasp the pistol grip with your firing hand and press the manual cocking mechanism fully as far as it will go - **the firearm is now cocked and the safety is released**
- Pull the trigger and fire
- To reload/repeat, pull the bolt handle (9) back as far as it will go and then push it forwards until the bolt is completely closed again and the bolt handle is in the foremost position

Caution:

First press the manual cocking mechanism (8) fully as far as it will go and then put your finger on the trigger (12) to activate it. The bolt handle (9) must always be in the foremost position to fire a shot.

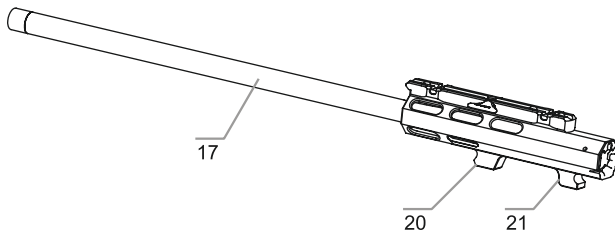


6. Changing the Barrel/Bolt Head

Caution: Always completely unload the firearm before changing the barrel and/or bolt head

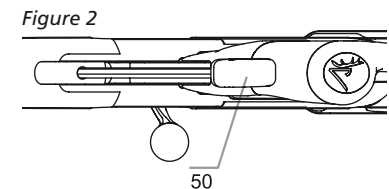
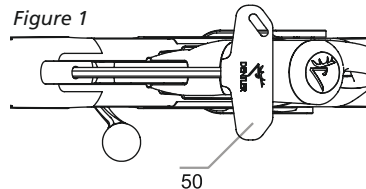
Removing the interchangeable barrel

- Lightly press the manual cocking mechanism (8) and, using the bolt handle (9), pull the bolt (11) all the way back as far as it will go
- Set the firearm on the butt plate (1) to keep the bolt (11) in the rear position
- Fully unscrew the barrel locking screw (15) with the DENTLER T-handle Allen key (50) as far as the intended stop, while lightly pressing the barrel with the front nose of the wedge (20) against the receiver as a counter-hold
- Lift the interchangeable barrel (17) from the muzzle and then pull out the rear fixed bearing (21) from under the pin in the rear recess of the receiver (13)



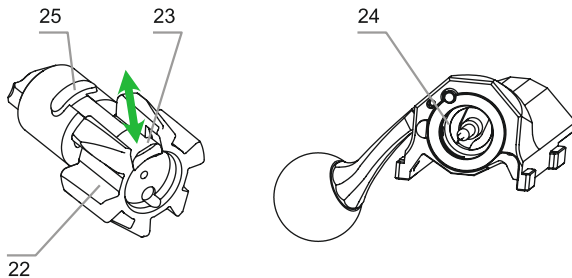
Installing the interchangeable barrel

- Using the bolt handle (9), pull the bolt (11) all the way back as far as it will go
- Set the firearm on the butt plate (1) to keep the bolt (11) in the rear position
- Use the DENTLER T-handle Allen key (50) to check whether the barrel locking screw (15) is fully open
- With the barrel locking screw open, place the interchangeable barrel (17) with the rear edge of the monoblock (21b) from above onto the marking (21c), tilt it forwards and press it lightly against the receiver with the front nose of the wedge (20)
- Adjust the barrel locking screw (15) using the DENTLER T-handle Allen key (50) without fully tightening it, then remove the T-handle (50) from the screw and align it 90° to the direction of fire (Fig. 1). Then insert the T-handle (50) back into the barrel locking screw (15) and turn it by 90° (Fig. 2) until the T-handle (50) is parallel to the direction of fire or max. **8 Nm** is reached



Removing the bolt head

- Lightly press the manual cocking mechanism (8) and, using the bolt handle (9), pull the bolt (11) all the way back as far as it will go
- Set the firearm on the butt plate (1) to keep the bolt (11) in the rear position
- Pull/push the extractor (23) on the bolt head (22) away from the centre in the opposite direction to the working position to release the bolt head catch (25)
- Pull the bolt head out of the receiver sleeve (24)



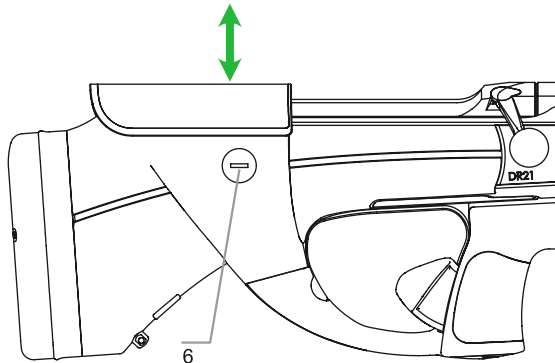
Installing the bolt head

- Lightly press the manual cocking mechanism (8) and, using the bolt handle (9), pull the bolt (11) all the way back as far as it will go
- Set the firearm on the butt plate (1) to keep the bolt (11) in the rear position
- Pull/push the extractor (23) on the bolt head (22) away from the centre in the opposite direction to the working position
- Insert the bolt head with extractor on the cartridge ejection side into the receiver sleeve (24) in the bolt (11)
- Release the extractor again - turn the bolt head until the bolt head catch (25) clicks into place and the extractor is back in the working position

7. Buttstock

Adjusting the height of the cheek piece

- Using a coin, unscrew the cheek piece clamp by 3 turns and then adjust the height of the cheek piece in 2 mm increments as required by keeping the clamping and push button (6) pressed. Release the clamping and push button (6) and tighten again using a coin



8. Calibre Groups

Interchangeable barrel/bolt head/magazine (MI, ST, ME, MA, WSM, LM, CH)

Mini (MI)	.222Rem.	.222Rem.Mag.	.223Rem.	5.6x50 Mag.
Standard (ST)				
- Magazine ST I				
6.5x55 SE	.270Win.	7x64	.30-06Spr.	8x57IS
- Magazine ST II				
.22-250Rem.	.243Win.	7XC	6.5mm Creedmoor	.308Win.
- Magazine ST III				
9.3x62				
Medium (ME)	6.5x68	7.5x55 Swiss	8x68S	
Magnum (MA)	7mm Rem.Mag.	.300Win.Mag.	.338Win.Mag.	.375 H&H Mag.
WSM (WSM)	.270WSM.	.300WSM.		
LM (LM)	.338 Lapua Mag.			
CH (CH)	10.3x60R			

Note:

Please note that this is a basic list of the calibres that can be technically implemented, but does not give any indication of current availability.



9. Scope Mount

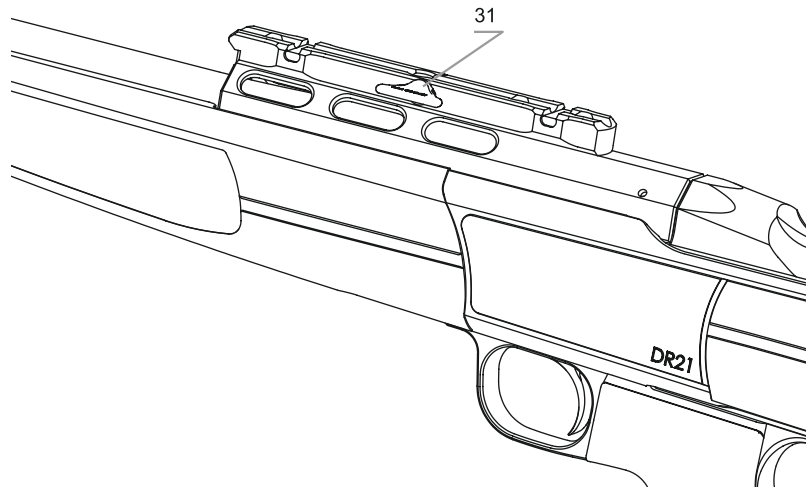
Your DR21® repeater comes with a BASIS® base rail in its standard factory configuration and is therefore compatible with all optics that are equipped with a BASIS® mounting rail. The optics are zeroed using the windage and elevation adjustment of the sighting device.

Mounting the optics

- If necessary, open the clamping lever (31) by turning it 180° towards the buttstock
- Place the optics with the BASIS® mounting rail and the clamping lever recess on the left onto the BASIS® base rail (optional: BASIS® VARIO)
- Turn the clamping lever 180° towards the muzzle to close it completely

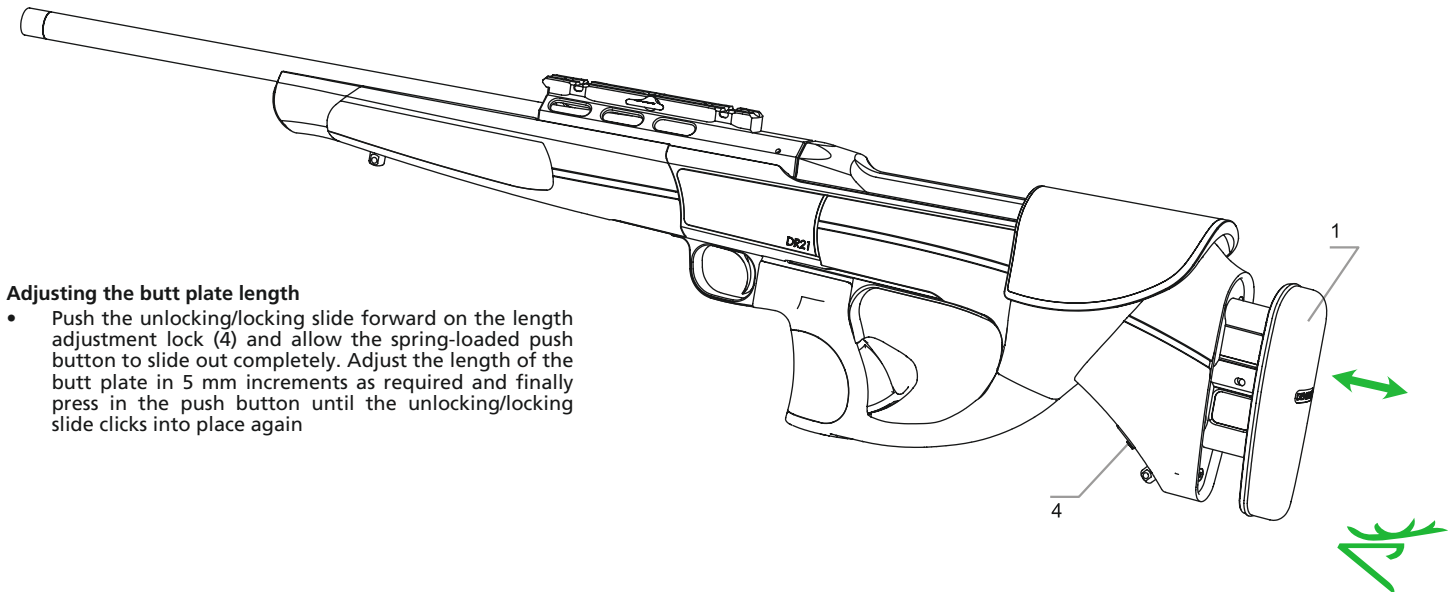
Removing the optics

- Turn the clamping lever (31) 180° towards the buttstock to open it
- Secure/hold the optics with your hand and then remove them



10. Options

Caution: Always completely unload the firearm before changing the barrel and/or bolt head



Adjusting the butt plate length

- Push the unlocking/locking slide forward on the length adjustment lock (4) and allow the spring-loaded push button to slide out completely. Adjust the length of the butt plate in 5 mm increments as required and finally press in the push button until the unlocking/locking slide clicks into place again

10. Options

BASIS® VARIO base rail zeroing

Windage adjustment when shooting to the left

- Loosen the left adjustment screw (33a) by a maximum of four turns
- Turn the right adjustment screw (33b) clockwise to adjust laterally
- Screw the left adjustment screw hand-tight again as far as it will go with max. 3 Nm

Windage adjustment when shooting to the right

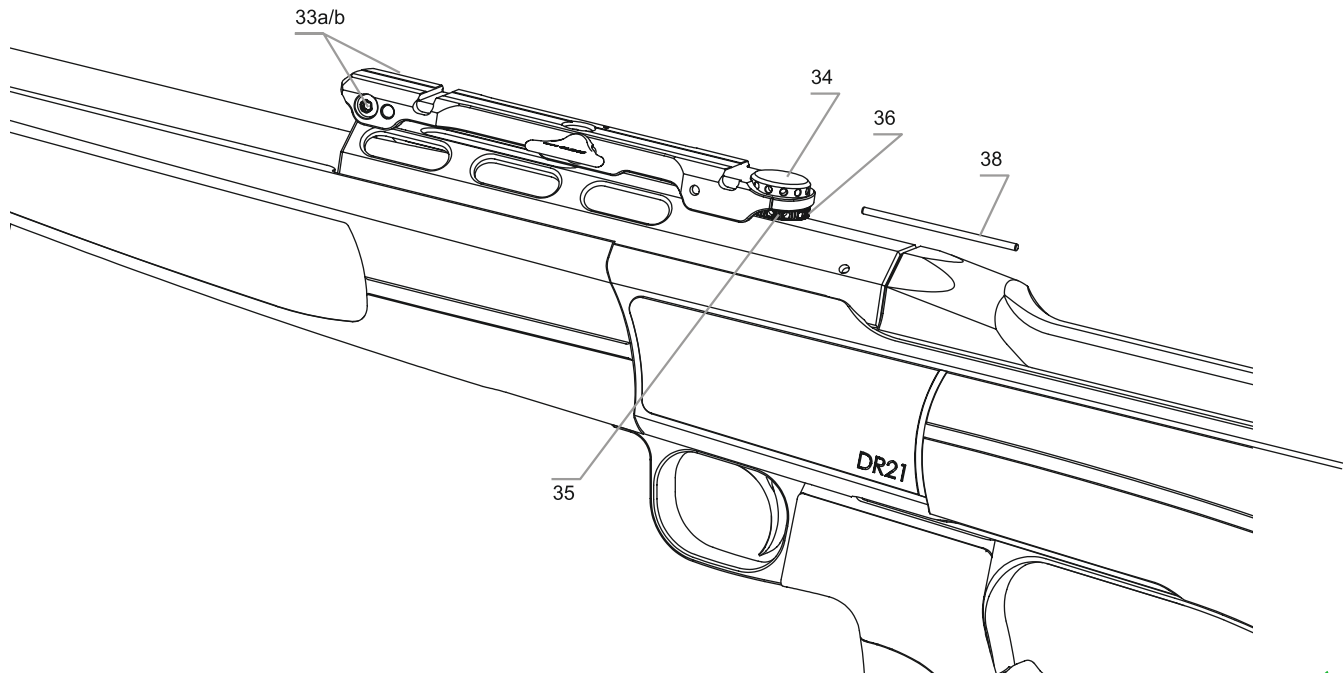
- Loosen the right adjustment screw (33b) by a maximum of four turns
- Turn the left adjustment screw (33a) clockwise to adjust laterally
- Screw the right adjustment screw hand-tight again as far as it will go with max. 3 Nm

Elevation adjustment when shooting too high

- Loosen the locking washer (34) anti-clockwise using the included pin (38)
- Turn the adjusting disc (35) clockwise from right to left until the intended point of impact position is reached (use the pin (38) in the holes provided as a turning aid - 1 graduation mark on the marking (36) corresponds to 1 cm, with the middle of the hole also corresponding to a graduation mark)
- Turn the locking washer back again with the pin (38) and lock it hand-tight

Elevation adjustment when shooting too low

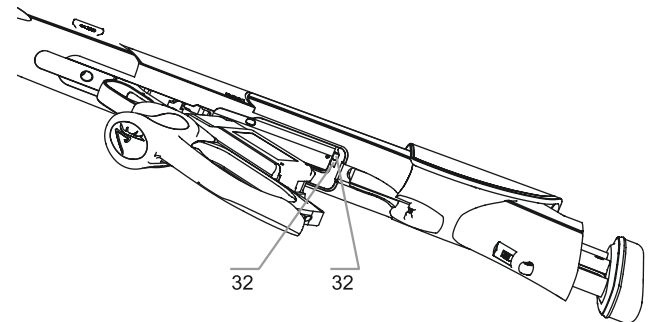
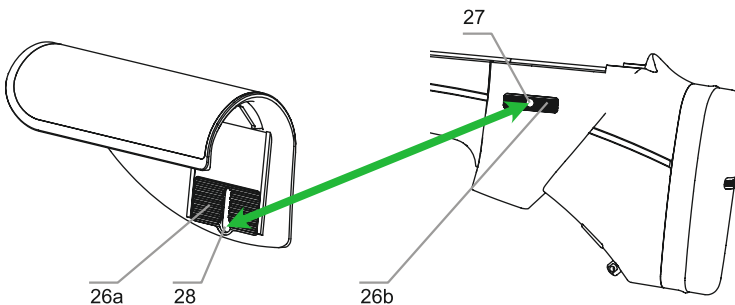
- Loosen the locking washer (34) anti-clockwise using the included pin (38)
- Turn the adjusting disc (35) anti-clockwise from left to right until the intended point of impact position is reached (use the pin (38) in the holes provided as a turning aid - 1 graduation mark on the marking (36) corresponds to 1 cm, with the middle of the hole also corresponding to a graduation mark)
- Turn the locking washer back again with the pin (38) and lock it hand-tight



10. Options

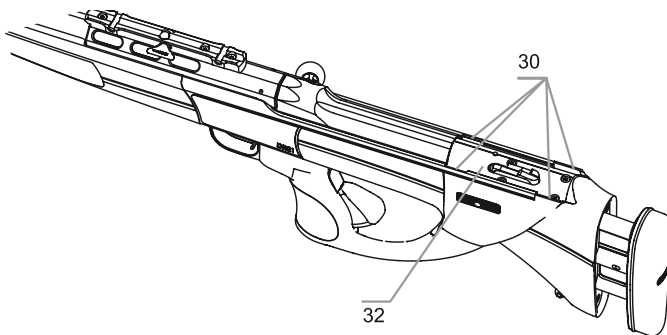
Removing the bolt in the case of cushioned longitudinal stops

- Loosen the cheek piece clamp (26a+26b) by unscrewing the clamping and push button (6) by 5 turns using a coin, then keep the clamping and push button pressed and move the cheek piece upwards until the spring-loaded retaining pin (27) can be removed from the cheek piece cut-out (28) by pulling sideways
- Lightly press the manual cocking mechanism (8) and, using the bolt handle (9), pull the bolt (11) all the way back as far as it will go
- Set the firearm on the butt plate to keep the bolt in the rear position
- Swing the trigger guard (8) down by operating the closing/opening catch and open it to the lowest position (45°) as far as it will go
- Pull the insert magazine (19) towards the buttstock and remove it
- Push up the control lever (32) for cushioned repeating stops on the rear side of the magazine well and pull the receiver back as far as it will go
- Remove the receiver from the guide pockets (30)
- With the clamping and push button (6) pressed, mount the cheek piece (5) back onto the spring-loaded retaining pin (27), push it down to the desired height and lock it into place. Then hand-tighten the clamping and push button (6) again



Installing the bolt in the case of cushioned longitudinal stops

- Loosen the cheek piece clamp (26a+26b) by unscrewing the clamping and push button (6) by 5 turns using a coin, then keep the clamping and push button pressed and move the cheek piece upwards until the spring-loaded retaining pin (27) can be removed from the cheek piece cut-out (28) by pulling sideways
- Mount the receiver in the guide pockets (30), press downwards against the spring-loaded resistance of the cushioned repeating stops (32) and push forwards
- Set the firearm on the butt plate to keep the bolt in the rear position
- With the clamping and push button (6) pressed, mount the cheek piece (5) back onto the spring-loaded retaining pin (27), push it down to the desired height and lock it into place. Then hand-tighten the clamping and push button (6) again



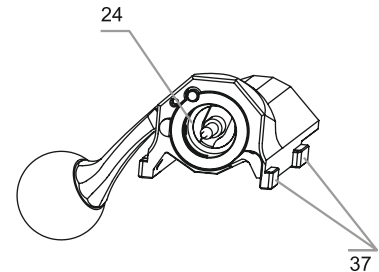
11. Care & Maintenance

Note:

Only use gun care products and tools that are expressly intended for this purpose. Always read the manufacturer's instructions and warnings.

Caution:

Every firearm is a technical system that requires regular checks by a specialist. Make sure that no oil or grease gets into the trigger and/or lock system, as these can gum up or harden in certain environmental conditions, causing serious malfunctions. Therefore, have your rifle checked prior to each hunting season or hunting trip. Do not store the firearm with the muzzle taped or with a muzzle protector attached.

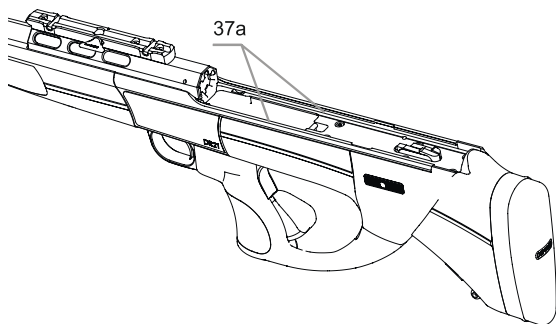


Synthetic stock

Due to the material properties of the perforated synthetic stock, no additional care is required. It can be cleaned with a damp microfibre cloth. Then dry it off.

Metal parts

Keep the metal parts of the rifle clean using a damp microfibre cloth, then dry them off and lightly oil them with a thin protective film.

**Bolt**

Caution: Keep the receiver operating smoothly by applying ceramic dry lubricant, e.g. Flunatec GunCoating, to the three outer surfaces of the guide shoes (37) and the guide rails (37a) on the bottom, top and sides of the receiver in order to prevent any dangerous malfunctions. Reapplication depends on usage of the firearm. Please refer to the sections describing how to remove/install the bolt.

Insert magazine

Remove any foreign matter (inside/outside) and keep the insert magazine clean with a damp microfibre cloth. This also applies to the trigger guard's guide rails.

Interchangeable barrel

The interchangeable barrel is made of highly tempered steel, which can withstand the highest mechanical loads. The outside of the barrel is specially surface-treated to ensure excellent scratch resistance with very high corrosion protection. Nevertheless, we recommend keeping the surface clean and dry and regularly applying a thin protective film of suitable rifle oil. After use, clean and apply preservative to the inside of the barrel as the powder residue attracts moisture. Particularly in the chamber, aggressive hand perspiration from the cartridge can cause corrosion. Before use, we recommend removing oil from the barrel and chamber and wiping them dry to prevent point-of-impact deviations.

Optics

Please refer to the care and maintenance instructions from the optics manufacturer.



12. Warranty Conditions

Manufacturer's warranty

The warranty from Dentler Waffentechnik GmbH is provided in addition to the statutory warranty claims of the specialist dealer. The assured warranty applies exclusively to original metal and plastic parts of the DR21® including the integrated BASIS® or BASIS VARIO® base rail. The warranty period is the period provided for by law and begins on the date of purchase. It covers all defects and damage resulting from verifiable faults in the material and/or manufacturing. Within this framework, the manufacturer shall bear the material and labour costs at the authorised specialist dealer or at its own location, to which the firearm is to be returned in order to resolve the complaint.

The risk and costs of transporting the firearm there and back are assumed by the customer. Work carried out under the warranty, involving repair or replacement of faulty components, is provided at the manufacturer's discretion. Replaced components become the property of the manufacturer. The warranty services rendered do not extend or renew the warranty period, neither for the firearm itself nor for the installed replacement parts. For installed replacement parts, this ends with the warranty period for the entire weapon.

Shooting performance guarantee

The shooting precision of a firearm depends on lots of external factors such as the type of ammunition, the batch of ammunition, perfectly functioning optics and their professional assembly. These elements are the most common causes of widely varying differences in performance and associated unsatisfactory shooting performance. With the right choice of ammunition and properly functioning optics, we can guarantee that our rifle will perform exceptionally well for hunting. We will accept complaints in writing within 30 days of the date of purchase. We reserve the right to send the firearm to an independent institute for inspection and to claim the costs incurred from the customer if proof of excellent shooting results should be provided.

Exclusion of warranty

The warranty is excluded in the event of the following

- Defects due to normal wear and tear, failure to follow the operating instructions or improper use/handling or if the firearm exhibits mechanical damage of any kind
- Damage due to force majeure or environmental influences
- Repairs, machining, modifications or surface treatment of the firearm by external third parties
- Use of reloaded or non-CIP-approved ammunition

The warranty also excludes any further or other claims, in particular claims for compensation for (consequential) damage occurring outside the firearm, unless liability for such damage is mandated by law.

13. Storage / Transport

Never store your firearm when it is loaded. Comply with the applicable laws regarding the storage and transport of firearms and ammunition. Ensure that your firearm is suitably packaged and unloaded prior to despatch.

INNOVATION **JAGD**





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