



# USER MANUAL (multi-calibre)

Part No AI-15668 - Issue 3





## ACCURACY INTERNATIONAL

Accuracy International was formed in 1978 to design and build tactical rifles.

The original design ethos combined two factors into a unique package. Namely, the incorporation of performance-enhancing features learned in Olympic and international target shooting onto a platform exhibiting full military ruggedness.

The current designs faithfully follow this original concept but also benefit from over twenty years of continuous improvement. These improvements are not cosmetic but are driven solely by the needs of the users, highly trained military and police forces in over 60 countries worldwide. Such units are exposed to 'live' tactical situations daily and in the most demanding environments where first shot accuracy is critical.

All components are manufactured to Accuracy International's designs to ensure optimum performance, something not achievable with a re-purposed sporting weapon.

The AX ELR multi calibre sniper rifle is an evolution, which builds on Accuracy International's established family of highly successful AW50 and earlier model AX50 rifles. Being a bolt action rifle with a free-floating barrel and a magazine capacity of ten rounds fulfils the need for a very accurate long-range sniper rifle.

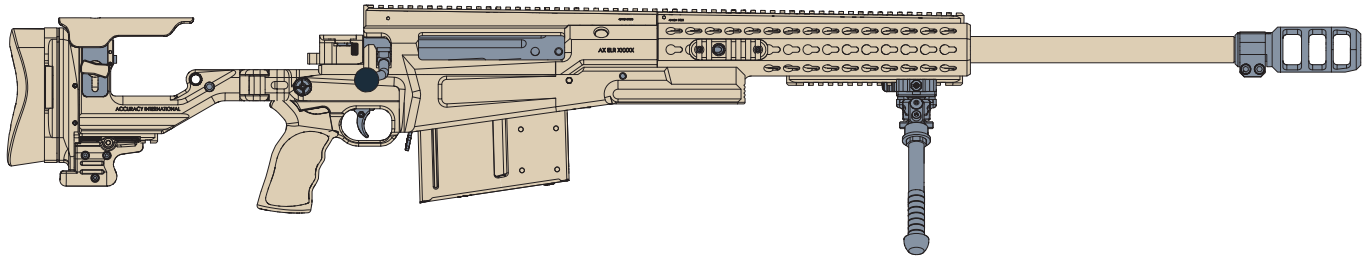
Like the AW series, all AX rifles utilise an aluminium chassis system, which ensures insensitivity to temperature and humidity, thus ensuring a constant zero.

The forend tube design provides multiple mounting points utilising Keyslot™ technology for accessory rails, sling attachments and bipod mounts.

The AX ELR multi calibre rifle also incorporates an integral RRS™ compatible 1.5" dovetail rail for use with a wide range of bipod, tripod and accessory mounts.

The AX ELR multi calibre rifle is easily upgradable with accessories and upgrades available from Accuracy International distributors.

# CUSTOMER COMMUNICATION



## UK & Rest of World

Accuracy International Ltd.  
P.O. Box 81 Portsmouth  
Hampshire  
PO3 5SJ  
United Kingdom  
T: +44 (0) 23 9267 1225  
F: +44 (0) 23 9269 1852  
E: [ai@accuracyinternational.org](mailto:ai@accuracyinternational.org)

## North America

Accuracy International North America.  
Fredericksburg  
Virginia  
USA  
T: +1 540 368 3108  
F: +1 540 368 3109  
E: [aina@accuracyinternational.us](mailto:aina@accuracyinternational.us)

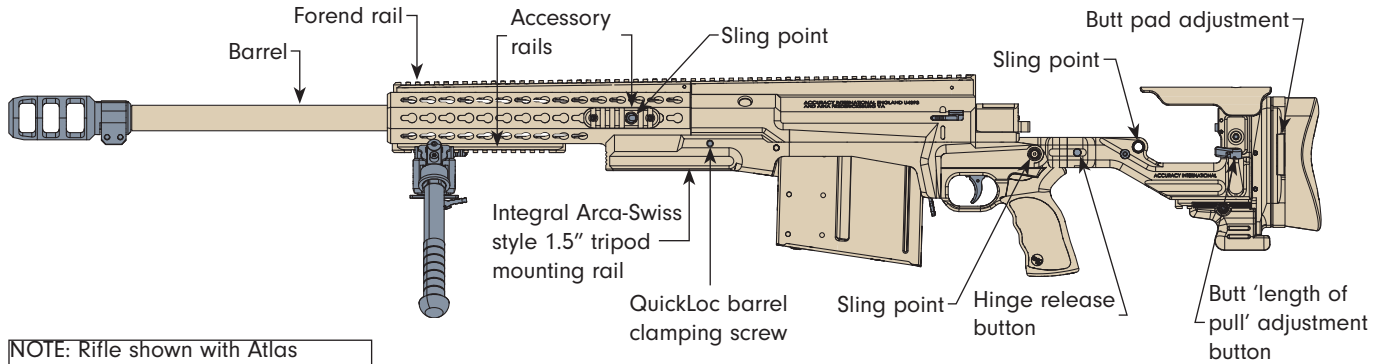
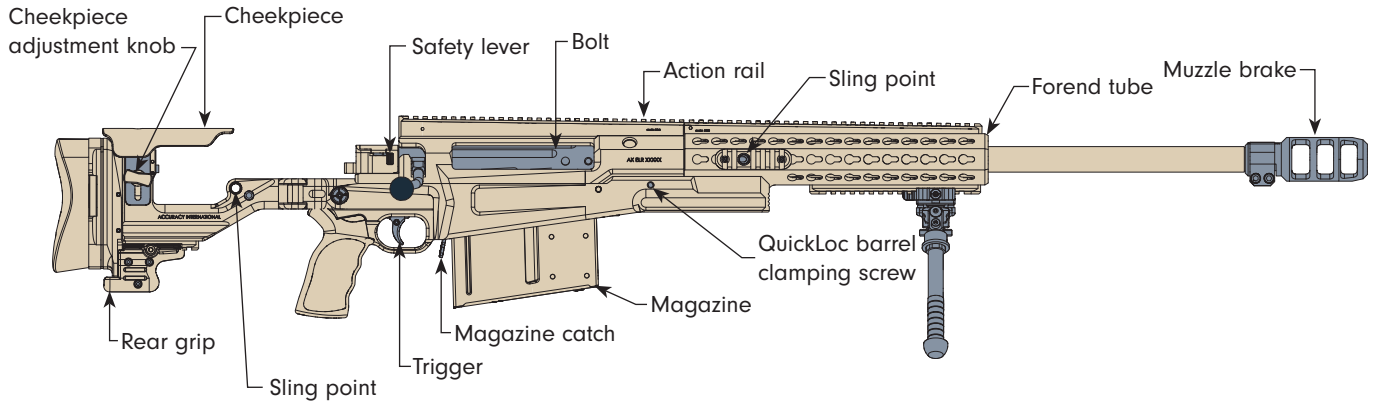


# TECHNICAL SPECIFICATION



Calibres	Multi-calibre: 0.50 BMG. 0.408.	Stock	Folding stock. Cheekpiece provides height, and lateral adjustment. Butt is adjustable for length of pull, height and rotation. Rear Grip. Optional Rear Spike.
Action	Front locking 6 lugs.	Optic rail	45MOA STANAG 4694 /Mil Std 1913.
Bolt	60 degrees opening, 8 mm striker fall.	Accessory rails	2 x 80 mm Keyslot™ rails. 1 x 140 mm Keyslot™ rail.
Trigger	2-Stage: Trigger weight set to 1.8Kg (4lbs). Adjustable between 1.5Kg (3.3lbs) and 2Kg (4.4lbs). Adjustable reach trigger blade.	Rail Interface	One integral RRS™ compatible 1.5" tripod mounting rail.
Barrel	Stainless Steel Match-Grade 0.50 BMG Length 692 mm (27") 1:15 twist with muzzle brake. .408 Length 737 mm (29") 1:12 twist with muzzle brake. Easily removable using the QuickLoc barrel clamp system.	Sling points	Flush cup sling points fitted.
		Length	Cal 0.50 BMG and 2 x 10 mm spacers 1383 mm x 220 mm x 120 mm (unfolded). 1145 mm x 220 mm x 120 mm (folded).
Safety	3-position. The safety lever draws back and blocks the firing pin allowing the user to cycle the bolt in a safe condition.		Cal 0.408 and 2 x 10 mm spacers 1428 mm x 220 mm x 120 mm (unfolded). 1190 mm x 220 mm x 120 mm (folded).
Magazine	10 shot, double-stack, detachable box type magazine.	Weight	12.1Kg (26.5lbs) with standard rails and unloaded magazine. (Excluding the bipod, and scope sight).
		Usage	Designed for all uses up to and including military use in extreme environmental conditions.

# PARTS IDENTIFICATION



NOTE: Rifle shown with Atlas bipod for illustrative purposes only.

# CONTENTS



INTRODUCTION	III
CUSTOMER COMMUNICATION	IV
TECHNICAL SPECIFICATION	V
PARTS IDENTIFICATION	VI
<b>1 SAFETY</b>	<b>7</b>
1.1 SAFETY FEATURES	2
1.2 FIRING PIN COCKING INDICATOR	2
1.3 SAFETY FUNCTION	3
1.4 SAFETY PRECAUTIONS	4
1.5 WARNINGS	5
1.6 FIELD SAFETY CHECK	6
1.7 CARTRIDGE HEAD-SPACE	7
<b>2 SETTING UP THE RIFLE</b>	<b>9</b>
2.1 HEX KEY STORAGE	10
2.2 CALIBRE CONVERSION	11
2.3 CHANGING THE BARREL	13
2.4 1.5" TRIPOD MOUNTING INTERFACE	15
2.5 SLING POINTS	16
2.6 CHEEKPIECE ADJUSTMENTS	17
2.7 REAR GRIP	18
2.8 LENGTH OF PULL ADJUSTMENT	19
2.9 BUTT PAD ADJUSTMENTS	20
2.10 BUTT SPACERS	21
2.11 TRIGGER BLADE ADJUSTMENT	22

# CONTENTS

<b>2</b>	<b>SETTING UP THE RIFLE (CONTINUED)</b>	<b>23</b>
2.12	BUTT SPIKE.....	23
2.13	ACCESSORY RAILS.....	24
2.14	EYE RELIEF.....	25
2.15	SCOPE MOUNT (AI MODEL).....	26
2.16	SUPPRESSOR.....	27
<b>3</b>	<b>FIELD STRIPPING THE RIFLE</b>	<b>29</b>
3.1	FOLDING THE STOCK.....	30
3.2	FIELD STRIPPING.....	31
3.3	STRIPPING THE BOLT ASSEMBLY.....	32
3.4	RE-ASSEMBLING THE BOLT.....	33
3.5	STRIPPING THE MAGAZINE.....	34
3.6	REMOVING THE FOREND.....	35
<b>4</b>	<b>PREPARING AND FIRING THE RIFLE</b>	<b>37</b>
4.1	MAGAZINE LOADING.....	38
4.2	LOADING THE RIFLE.....	39
4.3	FIRING AND OPERATING THE RIFLE.....	40
4.4	UNLOADING.....	41
4.5	STOPPAGES.....	42
<b>5</b>	<b>USER MAINTENANCE</b>	<b>45</b>
5.1	USER MAINTENANCE.....	46
5.2	CLEANING (GENERAL).....	47
5.3	CLEANING THE BARREL.....	48
5.4	CLEANING THE SUPPRESSOR.....	51
5.5	ACTION SCREW CHECK.....	52

# 1 SAFETY

Before attempting to use or handle the rifle, this manual must be read and understood fully. This manual assumes a basic level of user familiarity with firearms and is not a replacement for user training.



**DAMAGE TO PROPERTY, INJURY OR DEATH  
MAY RESULT IF SAFETY WARNINGS AND  
INSTRUCTIONS ARE NOT FOLLOWED.**

- Always keep the weapon pointed in a safe direction during handling.
- Never leave a weapon unattended.
- Always wear suitable eye and hearing protection when firing the weapon.
- Always check that the barrel, muzzle brake and suppressor, where fitted, are clear of debris and obstructions before firing.
- Never attempt to clear obstructions by firing.
- Always use quality factory ammunition of the correct calibre for the weapon.
- Clearly identify your target and what is beyond it.
- When the rifle is loaded, always keep your fingers outside of the trigger guard until ready to fire.
- Always show that the weapon is clear and safe before handing it to another user.



## 1.1 SAFETY FEATURES

- The AX ELR rifle bolt utilises six forward locking lugs.
- When the bolt is in the closed position, the bolt head is enclosed and supported within the lock ring and action body.
- The firing pin cannot protrude from the front of the bolt face until the bolt lugs fully engage with the lock ring.
- Dangerous gas leakage from the rear of the action body is minimised by a tight-fitting bolt and shroud assembly that assists the deflection of hot gasses away from the operator.
- In the event of an overpressure round, two gas pressure relief ports are located in the action body and one in the bolt.
- The AX ELR action incorporates a 3-position safety lever.

## 1.2 FIRING PIN COCKING INDICATOR

It is possible to determine if the rifle is 'cocked' and ready to fire by the position of the firing pin protruding through the rear of the shroud.

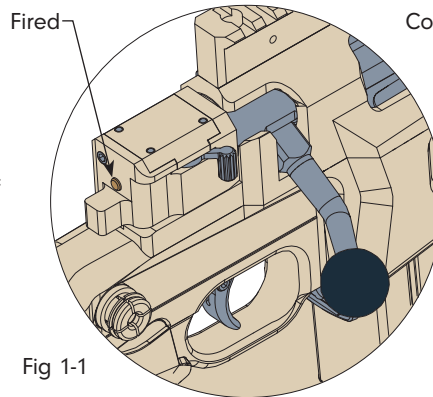


Fig 1-1

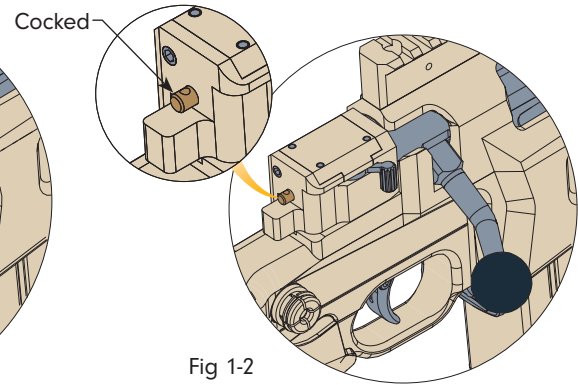


Fig 1-2

## 1.3 SAFETY FUNCTION

The Accuracy International AX ELR rifle is fitted with a 3-position safety lever.

Note: The safety lever only operates when the rifle is 'cocked' and does not block the trigger in any of the three positions.

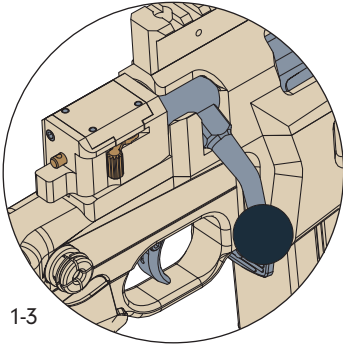


Fig 1-3

### 'SECOND SAFE' position

**The safety lever is in the rear position**

- The firing pin is drawn back from the trigger mechanism and is physically blocked from moving forward.
- The bolt is locked in the closed position.

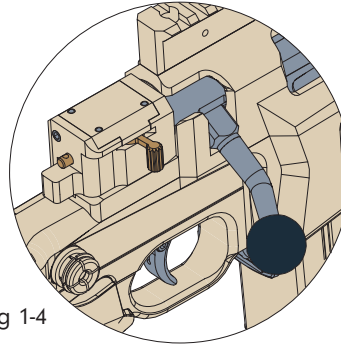


Fig 1-4

### 'FIRST SAFE' position

**The safety lever is in the centre position**

- To apply the 'First Safe' position the lever must be brought back to the 'Second Safe' position then moved forward into the 'First Safe' position.
- The firing pin is drawn back from the trigger mechanism and is physically blocked from moving forward.
- The bolt is unlocked and may be used to unload cartridges safely.

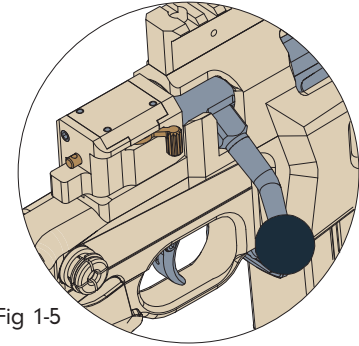


Fig 1-5

### 'FIRE' position

**The safety lever is in the forward position**

- The bolt is unlocked and can be manipulated.
- The firing pin engages with the trigger mechanism the rifle is ready to fire.

# 1.4 SAFETY PRECAUTIONS

WARNING - Users and personnel responsible for the weapon must comply with the following safety precautions. In the interests of health and safety, all warnings and cautions must be adhered to.

Safety precautions should be carried out:

- On initial receipt of the weapon.
- Before use.
- After use.
- Before maintenance or cleaning procedures.
- Before any inspection procedure.
- Before any non-tactical movements.
- Before the weapon is placed in a transit case or drag bag.
- When the documentation recommends it.

## SAFETY PRECAUTIONS

- Hold the weapon securely, do not place your finger inside the trigger guard.
- Point the weapon in a safe direction.
- Remove the magazine (if fitted).
- Check that the safety is in the 'First Safe' position.
- Orientate the ejection port downwards, open the bolt and slide to the rear.
- Watch for a live cartridge or empty case ejecting.
- Inspect the chamber and bolt face for a live cartridge or empty case.
  - Visual Check - Look through the ejection port.
  - Physical Check - Use a finger to check the chamber.
- Remove any cartridge or case from the weapon.
- With the bolt left 'open', the rifle is now safe to handle.

Where possible, the bolt should be left 'open' to identify to others that it is safe. However, should the bolt be required in the 'closed' position:

- Pull and hold the trigger while closing the bolt.
- Fit an empty magazine if required.
- The rifle is now safe to handle.

## SAFETY CONSIDERATIONS

- The extractor does not engage the cartridge rim unless the bolt is fully closed.
- Failure to fully close the bolt every time it is manipulated may result in a live round being left in the chamber.
- Attempting to load a second round will result in a stoppage. (double feeding).



**WARNING - DANGER TO LIFE AND LIMB:  
IF THE BOLT IS NOT FULLY CLOSED WHEN  
THE RIFLE IS FIRED, THE COCKING PIECE  
COULD STRIKE THE BOLT CAUSING POSSIBLE  
MISSFIRE.**

## 1.5 WARNINGS



THE CORRECT FUNCTIONING OF THE TRIGGER, SAFETY MECHANISM, AND THE RIFLE HEAD-SPACE ARE CRITICAL TO THE SAFE OPERATION OF THE RIFLE AND SHOULD BE REGULARLY CHECKED. SEE SECTIONS 1.6 AND 1.7 FOR DETAILS. DO NOT ATTEMPT TO FIRE THE RIFLE IF THE SERIAL NUMBERS OF THE ACTION BODY, BOLT AND SHROUD/FIRING PIN ASSEMBLY DO NOT MATCH.

### WEAPON STATUS.

When users are not aware of the weapon status, i.e. loaded, unloaded, cocked or fired, the user must assume the weapon is LOADED and carry out the SAFETY PRECAUTIONS set out in section 1.4 on page 4.

### HANDING OVER WEAPONS.

A weapon which is to be handed over to another individual must be unloaded and presented with the bolt in the 'open' rearward position.

### TACTICAL MOVEMENTS.

Tactical movements with a loaded weapon must be performed with the safety lever in a 'Safe' position.



WARNING - DANGER TO LIFE AND LIMB: THE TRIGGER UNITS FITTED INTO ACCURACY INTERNATIONAL RIFLES ARE DESIGNED AND FACTORY SET AS TWO-STAGE TRIGGERS. THEY MUST NOT BE MODIFIED UNDER ANY CIRCUMSTANCES INTO A SINGLE STAGE TRIGGER.

FAILURE TO COMPLY WITH THIS WARNING COULD RESULT IN SERIOUS INJURY OR DEATH.

## 1.6 FIELD SAFETY CHECK



The following procedure should be carried out before each time the rifle is used to ensure the safety lever is functioning correctly. This does not replace the need to have the safety mechanism routinely tested in accordance with the Accuracy International Maintenance Manual.

- Ensure the weapon is unloaded and safe to handle.
- With the bolt assembly fitted into the action body, open then close the bolt, leaving it in the cocked position.
- Move the safety lever into the '1st Safe' position (See section 1.3 on page 3).
- Pull and release the trigger six times, remove your finger from the trigger.
- Push the safety lever forward into the 'Fire' position.
- The firing pin should be retained by the trigger and not be released.
- Pull the trigger to release the firing pin.
- Repeat this process two or three times to confirm that the system is safe.
- If the firing pin is released when the safety lever is moved to the 'Fire' position, the rifle is deemed unsafe and must be returned to the base armourer for maintenance in accordance with the Accuracy International maintenance manual.

## 1.7 CARTRIDGE HEAD-SPACE

Cartridge head-space defines the distance between the bolt face and the rear face of the cartridge. It is measured using a gauge between the bolt face and the cartridge datum reference within the chamber when the bolt is closed, as shown in the image below. Head-space is a critical safety feature on all rifles, regardless of manufacturer.

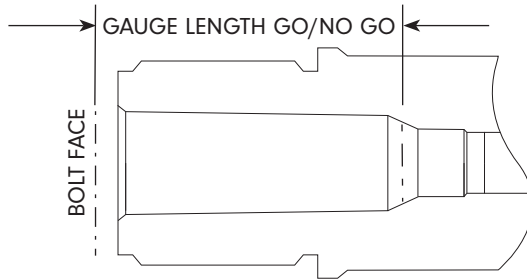


Fig 1-6

For the user's safety and to maximise cartridge compatibility, the head-space measurement on every AX ELR rifle is inspected before leaving the factory.

However, during the working life of the rifle, wear to crucial components and, new barrel fitting may increase the cartridge head-space. If this becomes excessive, it can lead to misfires, a loss of accuracy, and possible damage to the rifle due to a ruptured case.

It is therefore essential to check the cartridge head-space using Accuracy International approved gauges throughout the life of the rifle, particularly after a new barrel is fitted.



**EXCESSIVE HEAD-SPACE CAN BE HAZARDOUS AND MAY LEAD TO MISFIRES AND CARTRIDGE CASE RUPTURES**

Instructions for checking the head-space dimension:

Head-space gauges are used to specify a maximum head-space for safety purposes using 'GO' and 'NO GO' gauges.

Checking the head-space is easier with the shroud and firing pin assembly removed (see section 3.3 on page 32).

1. Ensure the chamber is clean before inserting the gauge into the chamber through the ejection port. Note: To prevent damaging the chamber, fully insert the gauge into the chamber before attempting to close the bolt.
2. Gently close the bolt handle down to a stop, without using excessive force.
3. If the bolt closes fully on the 'GO' gauge the head-space is acceptable.
4. If the bolt closes fully on the 'NO GO' gauge using a minimum amount of force, the head-space is out of tolerance and indicates that the rifle's accuracy and safety are compromised. The rifle must be inspected by a suitably qualified armorer before further use.

This page intentionally left blank

## 2 SETTING UP THE RIFLE



Before handling the rifle or attempting any procedure described in this manual, the user must ensure their safety and that of others by:

Standing behind the weapon.

Ensuring that it is pointing in a safe direction.

Checking it is unloaded and safe to handle.

The AX ELR rifle is designed to be user configurable and adjustable, for example:

- Cheekpiece.
- Length of pull.
- Butt pad height and rotation.
- Rear grip position.
- Accessory rails and sling loop position.
- Calibre conversion.



## 2.1 HEX KEY STORAGE

Many adjustments on the rifle are carried out using a hex key. For the convenience of the user, a 4 mm hex key is stored within the Cheekpiece of the rifle.

### To remove the hex key:

- Firmly push the hex key out of the Cheekpiece.

### To replace the hex key:

- Align the hex key to the slot and push into the recess until the detent engages.

### Using the hex key:

- Avoid over-tightening the screws as this may damage the rifle or accessories. It is often possible to achieve an acceptable level of torque using the long end of the wrench in the screw and the short end as the lever.

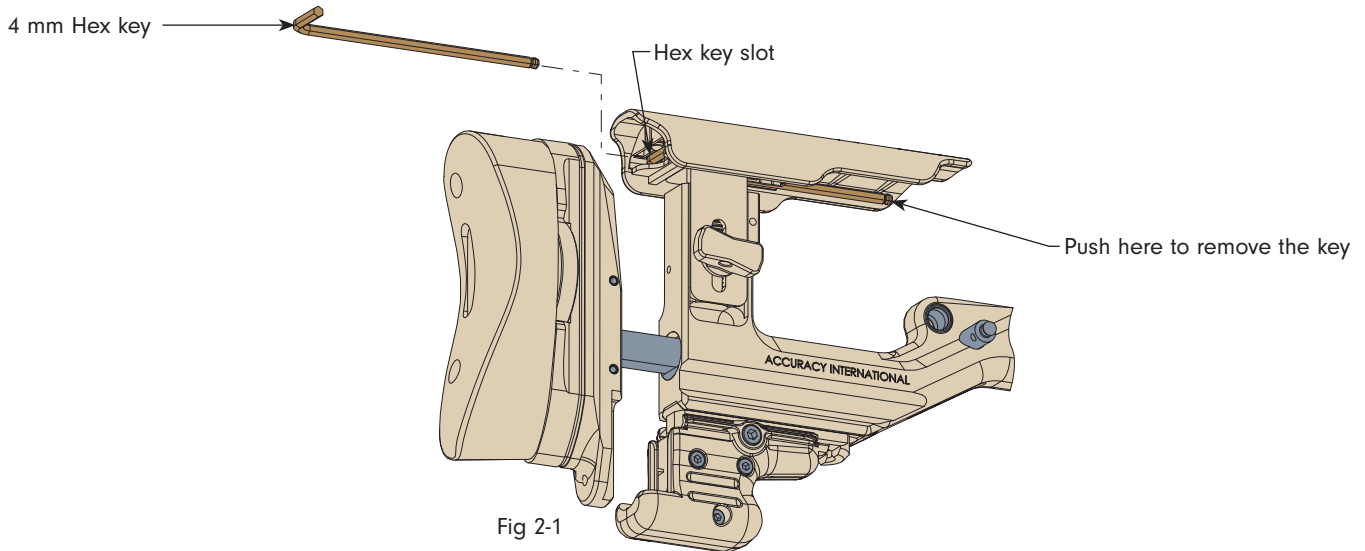


Fig 2-1

## 2.2 CALIBRE CONVERSION



The ELR multi calibre rifle has been designed to allow the user to easily change the calibre of the weapon.

Bolts and barrels are identified by tactile markers to aid identification. The bolt assembly is marked by round coloured indents on the bolt head (see Fig 2-2 and Fig 2-3), barrels are identified by round coloured indents to the rear of the muzzle brake (see Fig 2-4 and Fig 2-5).

50 BMG Bolt

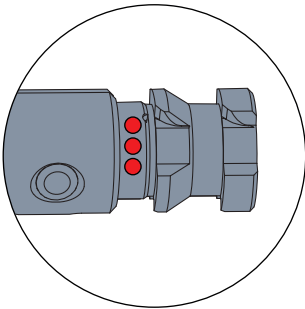


Fig 2-2

0.408 Bolt

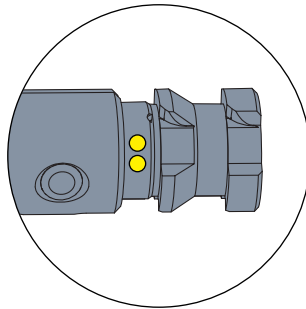


Fig 2-3

50 BMG Barrel

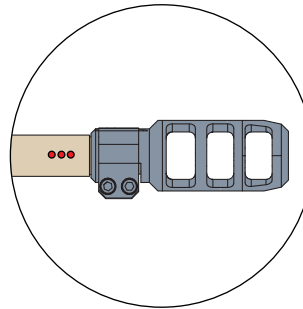


Fig 2-4

0.408 Barrel

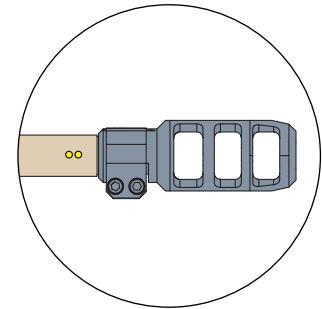


Fig 2-5

## 2.2 CALIBRE CONVERSION [CONTINUED]



The AX ELR rifle has been designed to allow the user to change the weapons calibre easily. The bolt assembly, magazine and barrel must be replaced.

Note: If the calibre conversion kit does not include a complete bolt assembly, refit the original firing pin assembly into the alternate bolt (see Fig 2-6). The firing pin assembly is interchangeable between calibres (see section 3.3 on page 32 for detailed instructions).

For instructions on removing and refitting muzzle brakes to alternate barrels see page 27 and page 28.



WHEN CHANGING CALIBRE FOR THE FIRST TIME, CHECK THAT THE NEW BARREL, MUZZLE BRAKE AND BOLT HEAD CARRY A PROOF MARK.

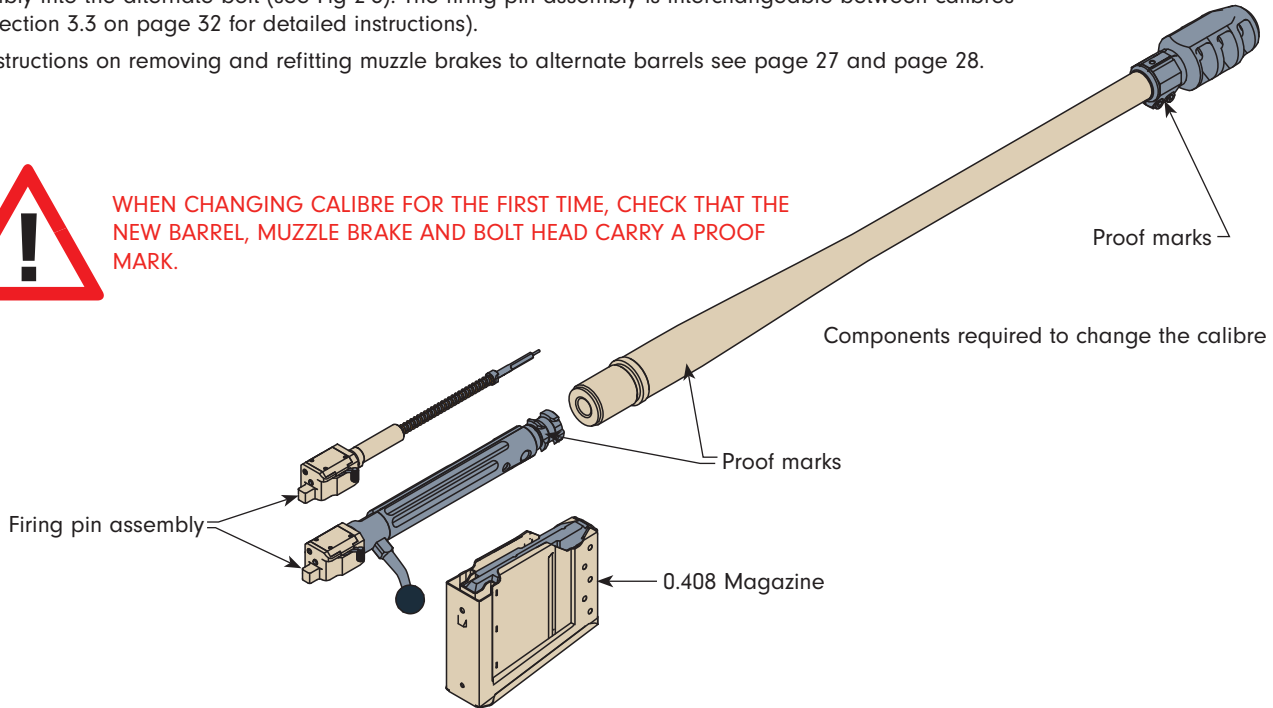


Fig 2-6

## 2.3 CHANGING THE BARREL



### Preparation:

The rifle must be unloaded and safe to handle, with the bolt and the magazine removed. The rifle should be unfolded. The procedure may be completed without removing the scope; however, it is strongly recommended that scope covers are used to protect the lenses.

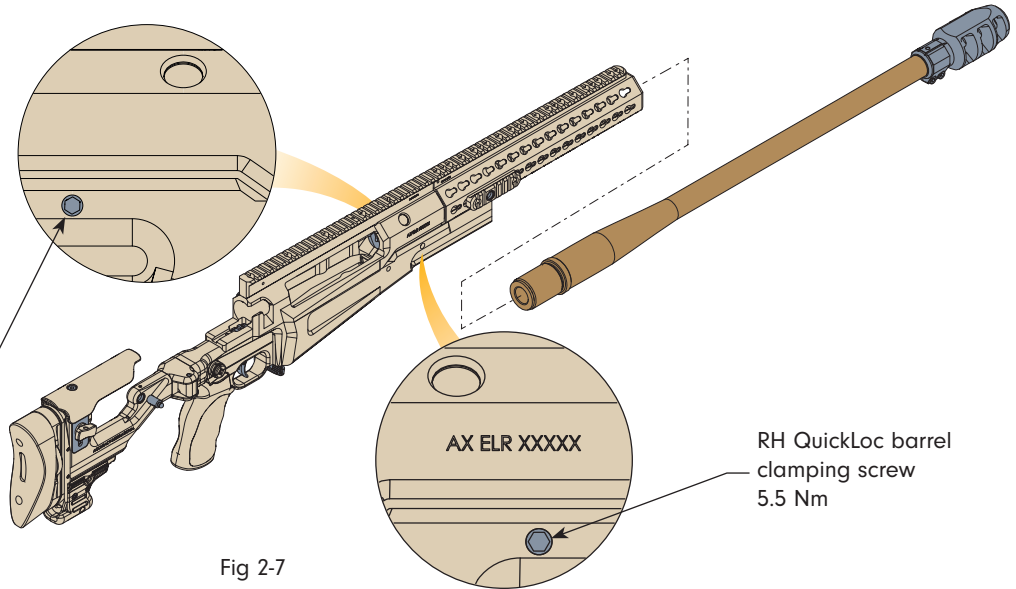
### Removal:

- Use a 5 mm hex key to loosen the QuickLoc barrel clamping screws on the action. NOTE: One screw on each side of the action body.
- Unscrew the barrel from the action body. If it is tight, a suitably sized spanner may be used across the flats of the muzzle brake boss to assist removal.
- Ensure the barrel thread is protected from damage while removed.



WARNING - DO NOT REMOVE THE CLAMPING SCREWS AND DO NOT TIGHTEN THE CLAMPING SCREWS WITH THE BARREL REMOVED.

LH QuickLoc barrel clamping screw  
5.5 Nm



RH QuickLoc barrel clamping screw  
5.5 Nm

Fig 2-7

## 2.3 CHANGING THE BARREL (CONTINUED)



### Refitting:

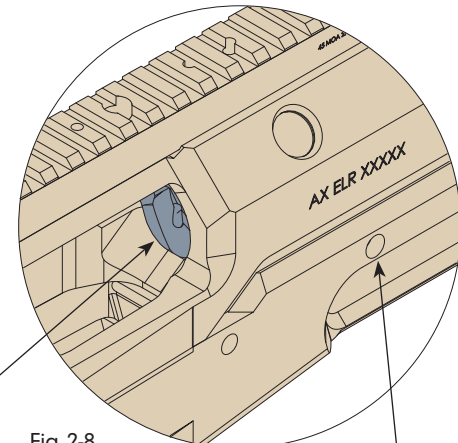
- Ensure the barrel, action body and their respective threads are not damaged, obstructed or fouled.
- Ensure the mating surfaces of the barrel and action are clean and free from damage.
- Carefully locate the barrel into the action. Screw the barrel into the action body, taking care not to damage the threads.
- Firmly tighten the barrel by hand only.
- Tighten the left-hand and right-hand QuickLoc barrel clamping screws to 5.5 Nm.
- Test the barrel clamp by attempting to loosen the barrel by hand, do not use a spanner. The barrel should not rotate.
- Where possible, it is strongly recommended to check the cartridge head-space, refer to section 1.7 on page 7 for details.
- Insert the correct bolt.
- Insert the correct magazine.



**WARNING - IF, AFTER TIGHTENING THE CLAMPING SCREW, THE BARREL ROTATES, RE-TIGHTEN THE BARREL AND BARREL CLAMPING SCREWS AS DESCRIBED ABOVE. IF THIS DOES NOT PROPERLY SECURE THE BARREL, THE RIFLE MUST BE INSPECTED BY A QUALIFIED ARMOURER.**



**ENSURE THE LOCK RING IS IN PLACE AND IS SECURE BY VIEWING THROUGH THE EJECTION PORT.**



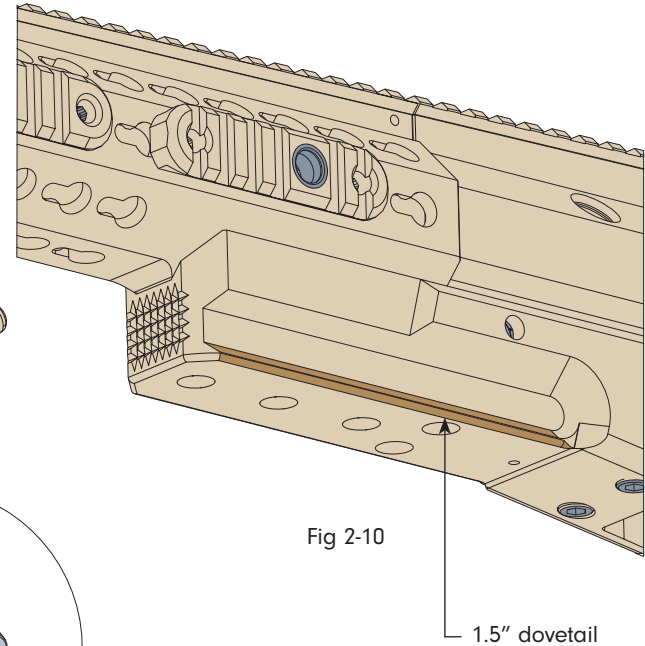
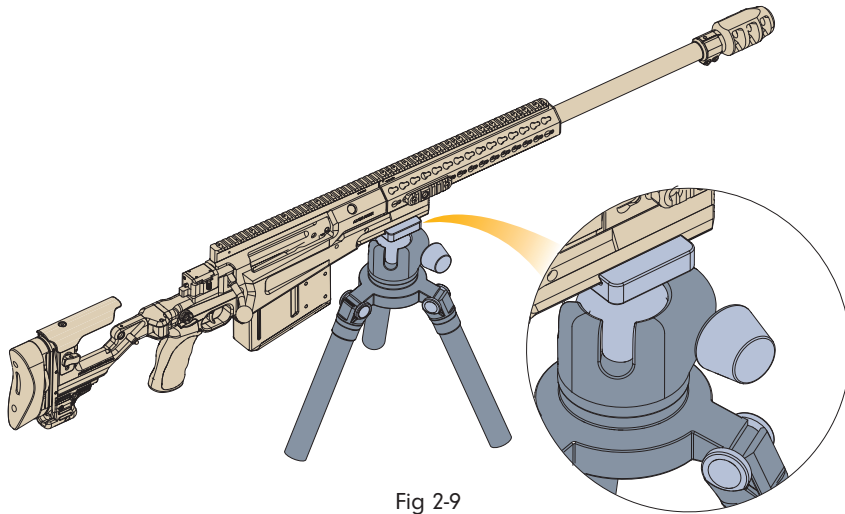
Lock ring

Fig 2-8

RH Quickloc barrel  
clamping screw.

## 2.4 1.5" TRIPOD MOUNTING INTERFACE

The AX ELR rifle incorporates an RRS™ compatible 1.5" wide tripod mounting rail; this is located just forward of the magazine opening. This interface provides an easy to use, and durable mounting system for a range of tripods and other shooting rests.

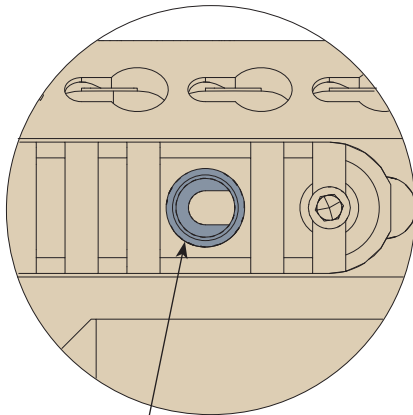


## 2.5 SLING POINTS



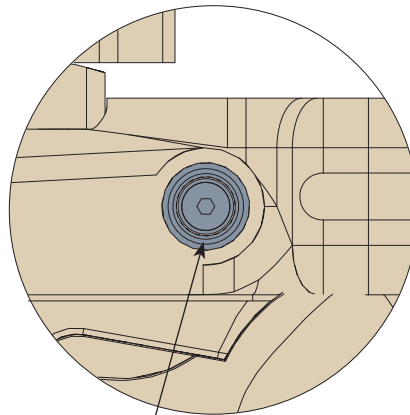
### Sling point type and location:

- Two flush cup sling points are located in the 80 mm accessory rails. The rails can be re-positioned on the forend tube as required (see Fig 2-11).
- One flush cup point is located above the pistol grip on the left side of the rifle (see Fig 2-12).
- One flush cup point is located in the rear frame, just in front of and below the Cheekpiece (see Fig 2-13).



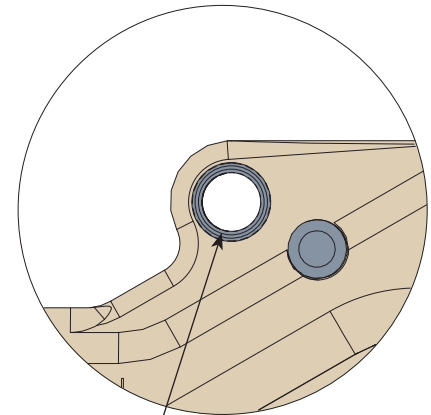
Flush cup

Fig 2-11



Flush cup

Fig 2-12



Flush cup

Fig 2-13

## 2.6 CHEEKPIECE ADJUSTMENTS

The AX ELR rifle is fitted with a Cheekpiece that can be adjusted for height and lateral position.

### To adjust the height of the cheekpiece:

- Loosen the cheekpiece adjustment knob.
- Adjust the height of the cheekpiece to the desired position.
- Tighten the adjustment knob.
- The hexagon key can be used to aid tightening or loosening by inserting it through the central hole in the adjustment knob. Take care not to over-tighten.

### To adjust the lateral position of the cheekpiece:

- Use the supplied 4 mm hex key to loosen the lateral adjustment screw.
- Adjust the cheekpiece to the left or right as appropriate.
- Tighten the lateral adjustment screw using the hex key.

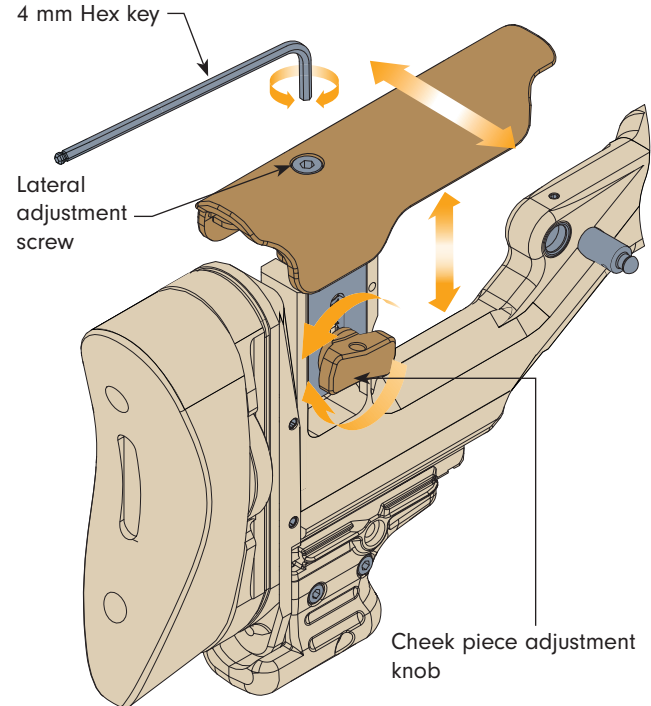


Fig 2-14

## 2.7 REAR GRIP

The AX ELR rifle is supplied with a rail-mounted rear grip. It can be fitted to the accessory rail located on the underside of the rear chassis, or directly to the butt assembly. The rear grip can be removed if it is not required or if a suitable spike/monopod is to be fitted.

Note: The same fixing screw is used to attach the rear grip to the rail or the butt.

### Rear grip-rail fitting

- Use the supplied 4 mm hex key to loosen and remove the rear grip screw.
- Slide the rear grip along the rail until the desired position is reached.
- Ensure that the screw hole is in line with a rail slot and refit the rear grip screw.
- Tighten the screw to secure the grip.

### Rear grip-butt fitting

- Use the supplied 4 mm hex key to loosen and remove the rear grip screw.
- Slide the rear grip rearwards until it contacts the butt assembly.
- Refit the screw through the front of the grip and engage with the threaded hole in the butt assembly.
- Tighten the screw to secure the grip.

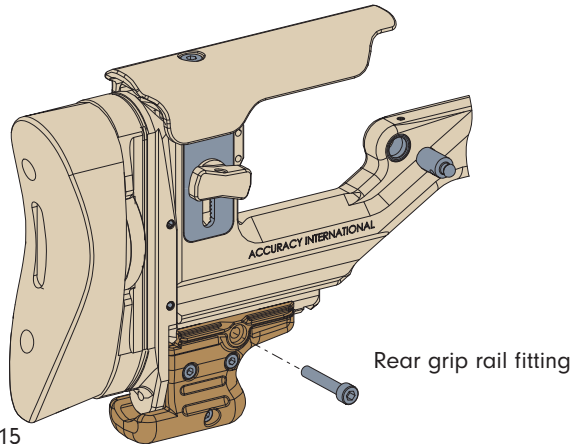


Fig 2-15

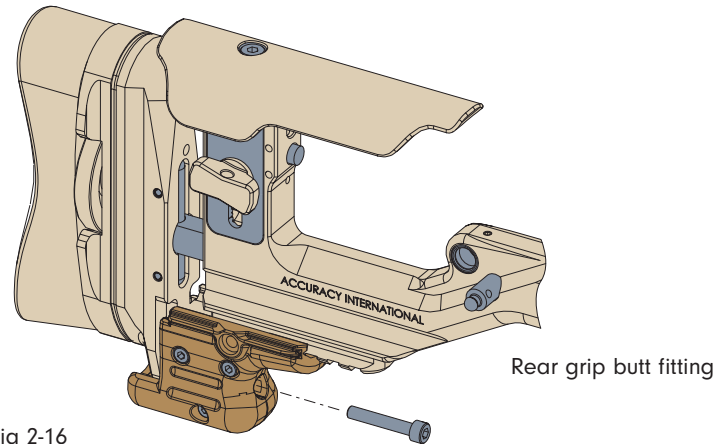


Fig 2-16

## 2.8 LENGTH OF PULL ADJUSTMENT

### To adjust the length of pull:

- Press down the release button then, rotate anti-clockwise (see Fig 2-17).
- Once in the unlocked position, press down again and hold to adjust the length of pull.
- Release the button once adjusted, to lock. It may be necessary to slightly re-adjust the butt position until the button clicks positively into the nearest detent.
- Rotate the release button into the locked position.
- The button may raise slightly to fully engage.

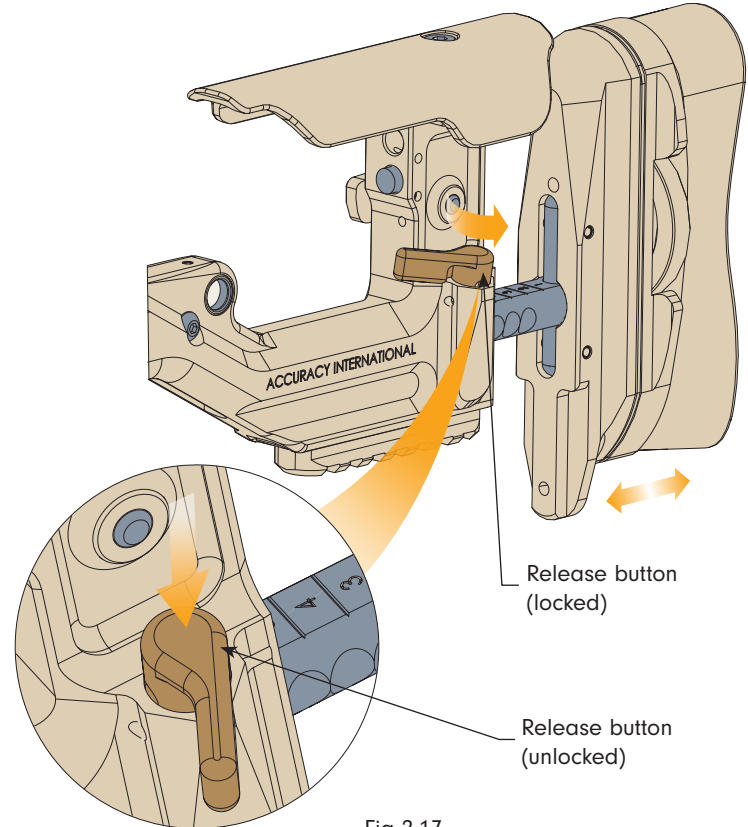
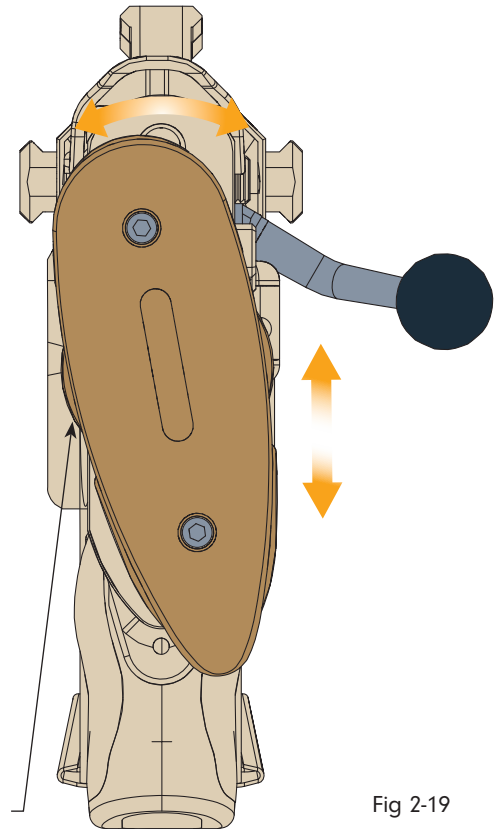
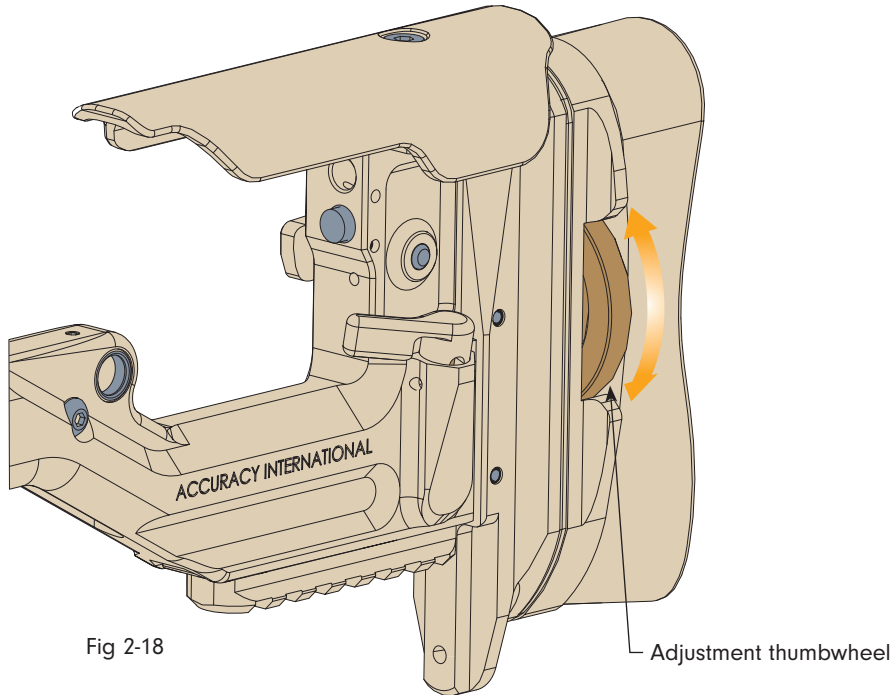


Fig 2-17

## 2.9 BUTT PAD ADJUSTMENTS

### To adjust the butt pad height and angle:

- Loosen the butt pad adjustment thumbwheel.
- The butt pad can be raised, lowered or rotated.
- Once the desired position has been achieved, re-tighten the adjustment thumbwheel.



## 2.10 BUTT SPACERS

The AX ELR length of pull can be extended further by fitting butt spacers from the supplied kit. Two 10 mm spacers are supplied with the rifle along with appropriate length screws to suit the desired combination.

### Fitting the spacers:

- Insert the supplied 4 mm hex key through the rubber of the butt pad and remove the two butt pad screws.
- Select the correct length screws to suit the number of spacers being used (see the guide below).
- Fit the butt and spacers, as shown in Fig 2-21.
- Use the hex key to tighten the two butt screws. These should be tightened to 3.5 Nm if a torque driver is available.

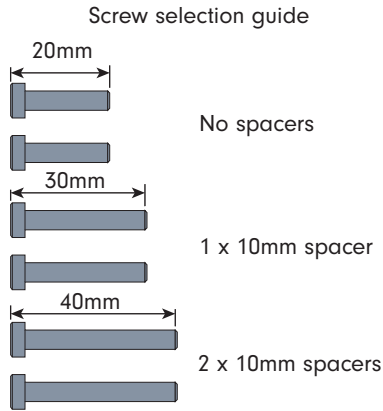


Fig 2-20

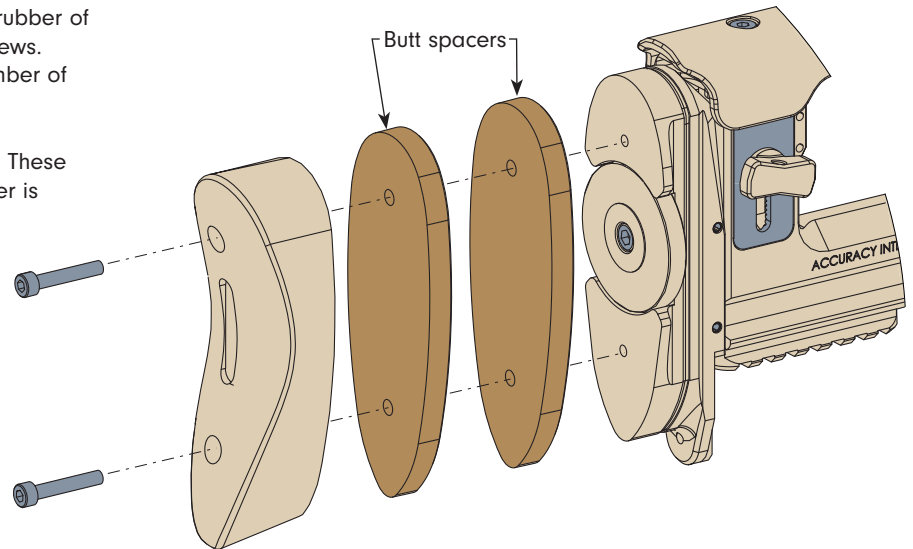


Fig 2-21

## 2.11 TRIGGER BLADE ADJUSTMENT

### To adjust the trigger blade position:

- Loosen the trigger blade clamping screw using a 2.5 mm hex key.
- Slide the trigger blade to the desired position.
- Tighten the screw, ideally to 0.8 Nm.

Note: the trigger blade design provides approximately 8 mm of adjustment. The trigger blade clamp must remain in full contact with the trigger shoe.

Maximum trigger blade rearward position

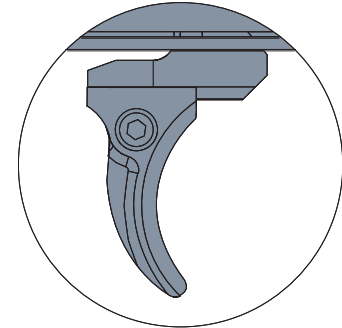


Fig 2-23

Maximum trigger blade forward position

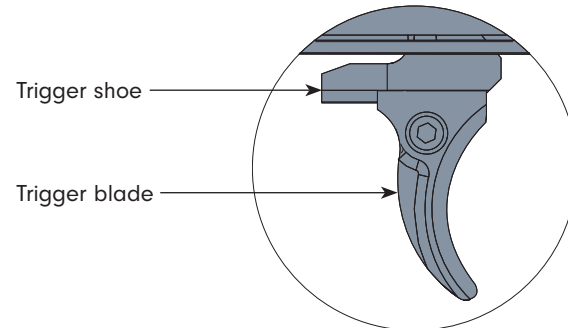


Fig 2-24

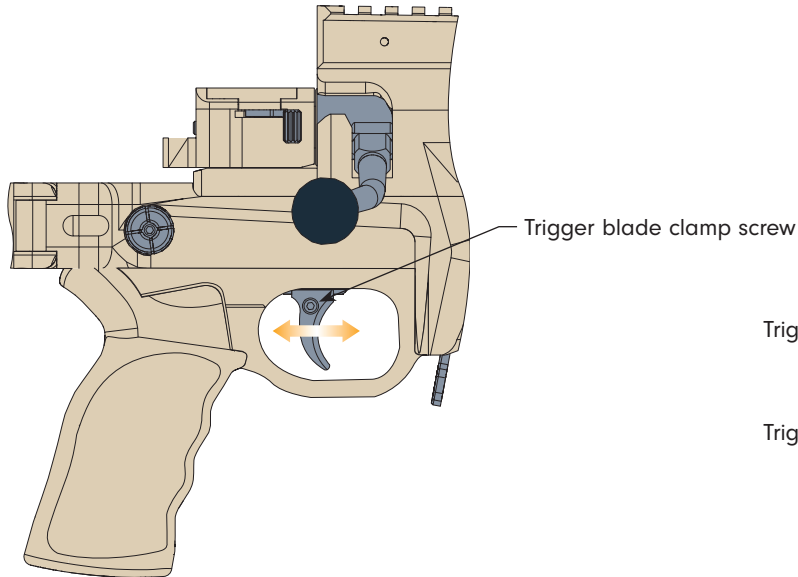


Fig 2-22

## 2.12 BUTT SPIKE

The AX ELR rifle can be fitted with the optional butt spike in place of the rear grip.

### To fit the butt spike:

- Remove the rear grip (if fitted) (See section 2.7 on page 18).
- Using the 4 mm hex key, loosen the two spike clamp screws.
- Locate the edge of the spike clamp on one side of the rear accessory rail (see Fig 2-25).
- Ensure the clamping screws are aligned with the recoil slot in the rail and rotate the spike assembly onto the rail.
- Hold the spike assembly in place and tighten the two clamping screws, ideally to 3 Nm.
- The spike is to be used for observation only and should not contact the ground when firing.

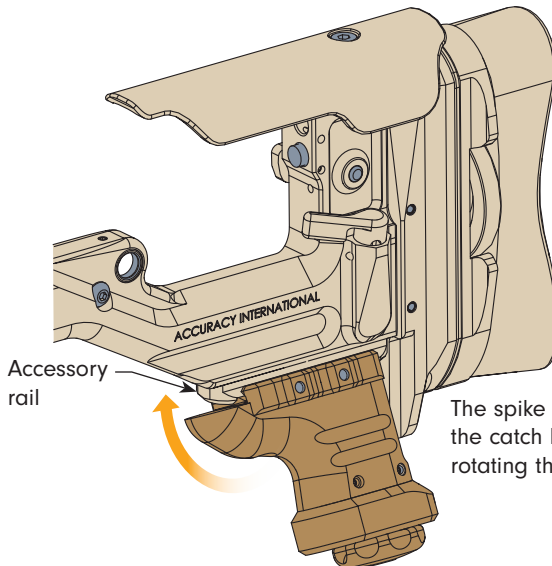


Fig 2-25

The spike can be adjusted for height by using the catch button for coarse adjustments or rotating the foot for fine adjustments.

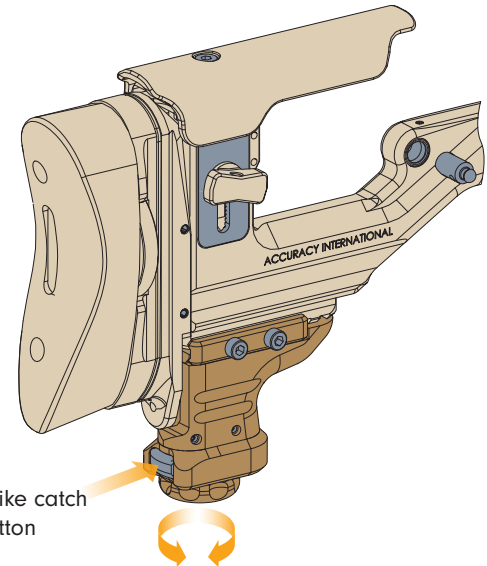


Fig 2-26

## 2.13 ACCESSORY RAILS

Accessory rails can be fitted into any available Keyslot™ on the forend tube.

### Removing an accessory rail:

- Apply light thumb pressure as shown on the right.
- Using the 4 mm hex key, loosen the retaining screws and continue to undo until light resistance is felt, then stop, do not continue to undo.
- Slide the rail to the rear of the Keyslot™ aperture (open end).
- Lift the rail clear of the forend tube.

### Refitting the accessory rails:

- Adjust the screw positions in the rail to extend 5 mm as shown on the right.
- Position the screw heads over the open end of the desired Keyslot™ apertures.
- Insert the screw heads through the open ends of the Keyslot™ apertures and slide the rail forwards until it comes to a stop.
- Pull the rail upwards and tighten the retaining screws, drawing the rail to the surface of the forend tube.
- If a torque wrench is available, tighten to 4.0 Nm.

Fig 2-27

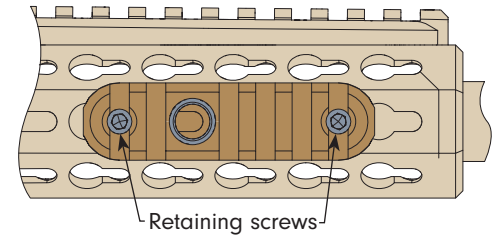


Fig 2-28

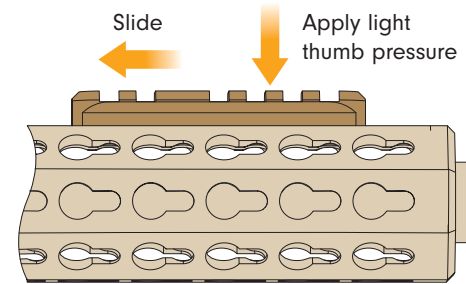
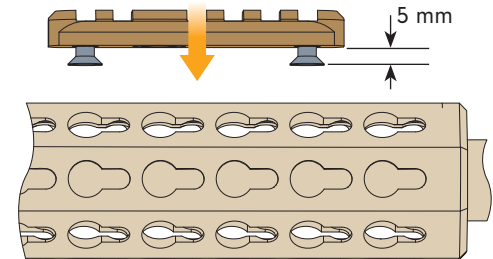


Fig 2-29



## 2.14 EYE RELIEF

### Scope mount eye relief:

It is possible to adjust the position of the scope mount on the action rail for eye relief

If the distance between the eye and the eyepiece is too short, then a shadow will appear at the extreme edges of the reticule, as shown in the diagram on the right, the field of view will be narrower.

If the distance between the eye and the eyepiece is too long, then the extreme edges of the reticule are not visible, the field of view will be narrower.

If the distance between the eye and the eyepiece is correct, then the whole of the reticule and the full field of view will be visible.

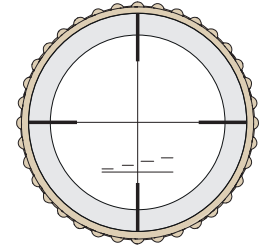


Fig 2-30

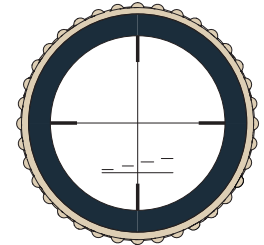


Fig 2-31

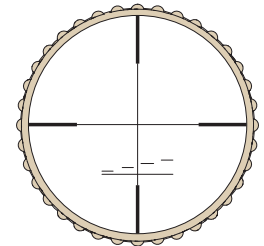


Fig 2-32

## 2.15 SCOPE MOUNT (AI MODEL)

Note: For mounts not of Accuracy Internationals manufacture, please refer to the relevant manufacturers instructions.

### To re-position an Accuracy International scope mount:

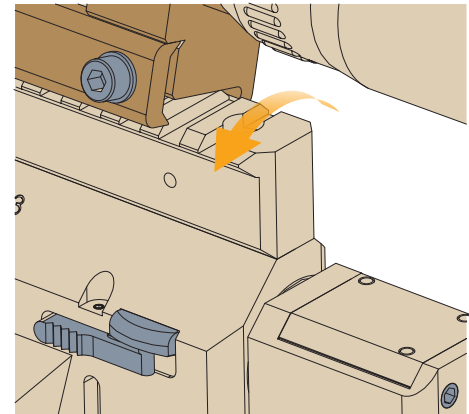
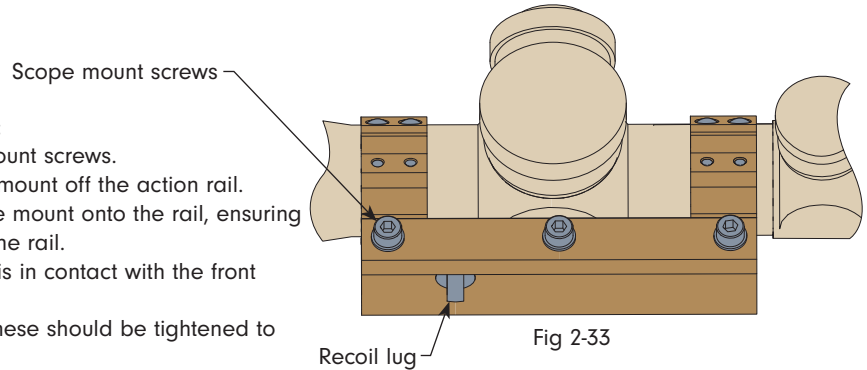
- Use the 4 mm hex key to loosen the three scope mount screws.
- Once loose, it should be possible to roll the scope mount off the action rail.
- Choose the new desired location and roll the scope mount onto the rail, ensuring that the recoil lug is located in one of the slots on the rail.
- Push forward on the scope to ensure the recoil lug is in contact with the front face of the rail slot.
- Tighten the three screws using the 4 mm hex key. These should be tightened to 3.5 Nm if a torque driver is available.

### Notes:

It is recommended that the scope is re-zeroed following any changes to its position. Unnecessary removal and refitting of the scope mount should, therefore, be avoided where possible.

Correct eye relief may also be obtained by adjusting the length of pull.

The cheekpiece should be adjusted to achieve the correct alignment between the eye and eyepiece.



## 2.16 SUPPRESSOR



### To remove the muzzle brake and fit the suppressor to the rifle:

- Unload the rifle and carry out safety precautions.
- Inspect the inside of the suppressor to ensure it is clear before firing. If it has been immersed in water or other fluid, always fully drain the suppressor before firing.
- Use a 5 mm hex key to slacken the two muzzle brake clamping screws and unscrew the muzzle brake from the barrel.
- If the muzzle brake cannot be turned by hand, place a coin or similar into the open slot between the sides of the clamp, refit a clamping screw to the opposite side from which it was removed. **Carefully** tighten the screw onto the coin to slightly open the clamp, allowing the muzzle brake to be more easily removed. A suitable size spanner may also be used across the two flats of the muzzle brake boss.
- Ensure that the exterior of the barrel is clean and the suppressor adapter is securely fitted to the suppressor (see Fig 5-4 on page 51). Slide the suppressor over the thread and onto the barrel.
- Move the suppressor rearward carefully until the barrel thread starts to engage the thread inside the suppressor. Turn clockwise to tighten onto the barrel.
- The suppressor adapter should be a close fit to the barrel diameter to prevent excessive movement during firing. If the gap between the adapter and barrel appears greater than the thickness of a piece of printer paper (0.1 mm), ensure the rifle and suppressor are checked before firing.

### Recommendations:

- Tighten the suppressor to the barrel using moderate force. Do not use tools or strap wrenches as over-tightening may result in group shifts or loss of accuracy.
- When refitting the suppressor, try to use the same felt tightness, this helps to ensure optimum accuracy and consistency.
- Remove the suppressor after each shooting session to allow condensation to evaporate and reduce corrosion.



**CAUTION: THE SUPPRESSOR OUTER CASING WILL BECOME HOT DURING USE. IF REMOVING THE SUPPRESSOR IMMEDIATELY AFTER USE. TAKE PRECAUTIONS TO PREVENT INJURY.**



## 3 FIELD STRIPPING THE RIFLE

- Folding the stock.
- Field stripping.
- Stripping the bolt assembly.
- Stripping the magazines.
- Removing the forend.



## 3.1 FOLDING THE STOCK

The AX ELR rifle is fitted with a folding stock. The stock folds to the same side as the bolt. Once the stock is folded, it is not possible to open the bolt, as it is protected by the rear frame.

### To fold the stock:

- Ensure that the rifle is safe to handle.
- Ensure that the bolt is fully closed.
- Press the rear frame release button and fold the rear frame.
- When fully folded, push the rear frame firmly against the pistol grip, ensuring that the male catch has engaged with the female catch.

### To unfold the stock:

- Pull the rear frame away from the chassis and rotate it to a definite stop, ensure that the rear frame locking mechanism has fully engaged.

Stock fully folded

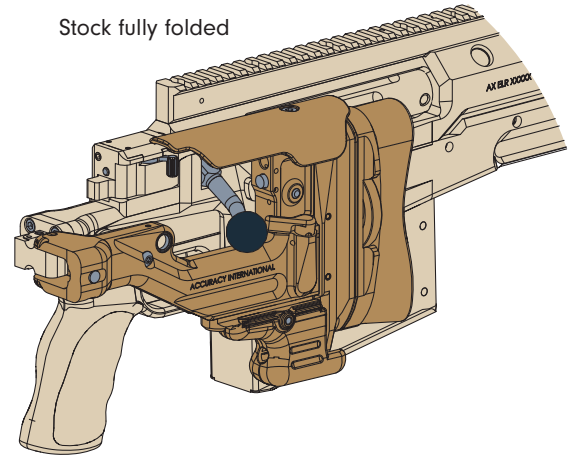


Fig 3-3

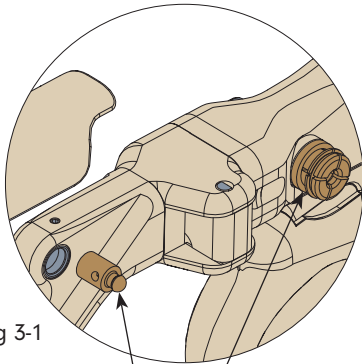


Fig 3-1

Male catch

Female catch

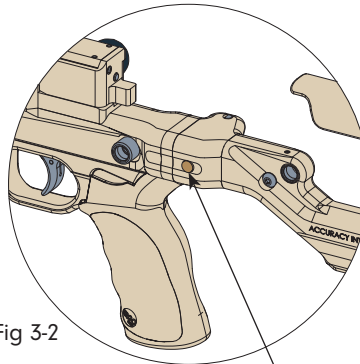


Fig 3-2

Rear frame release button

## 3.2 FIELD STRIPPING

Before stripping the rifle, carry out the safety precautions as described in section 1.4 on page 4.

### To field strip the rifle:

- Depress the magazine catch and remove the magazine (if fitted).
- Cover the lenses of the telescopic sight.
- Remove the sling (if fitted).
- Partly fold the rear frame as shown on the right.
- Open the bolt.
- Press and hold the bolt release catch, rotate the bolt handle to the position shown and slide the bolt rearward to remove.
- Remove the bipod if required.

### To reassemble after stripping:

- Ensure the serial numbers and calibre on the action body, bolt and shroud match, if not, report the issue to the appropriate authority.
- Partly fold the rear frame as shown on the right.
- Position the bolt body up to the action body and press and hold the bolt release catch.
- Rotate the bolt handle to the position shown, then insert the bolt into the action body and push forward. Rotate the bolt body to its normal orientation and release the bolt release catch.
- Cycle the bolt fully several times to ensure correct fitting and operation.
- Unfold the rear frame fully until it locks.
- Refit the sling.
- Refit an empty magazine.

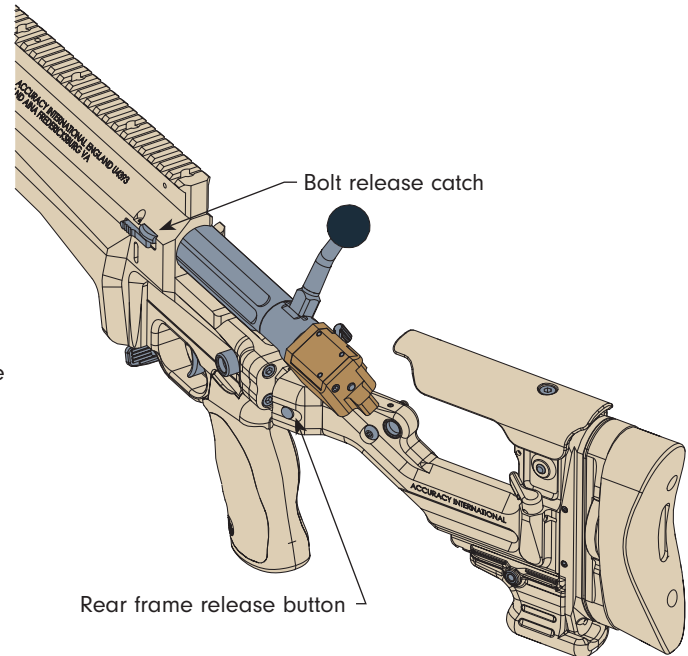


Fig 3-4

## 3.3 STRIPPING THE BOLT ASSEMBLY



The AX ELR Shroud assembly can be removed from the bolt for cleaning and lubrication, or when changing calibres.



**CAUTION: THE FIRING PIN COMPONENTS ARE UNDER HIGH SPRING TENSION, DO NOT DISMANTLE THE FIRING PIN ASSEMBLY.**

### To remove the shroud assembly:

- Grasp the bolt firmly in the right hand and the shroud in the left.
- Press the bolt location pin with the right thumb and rotate the shroud, as shown in Fig 3-5, until the assembly can be withdrawn.
- Remove the shroud assembly from the bolt (Fig 3-6).

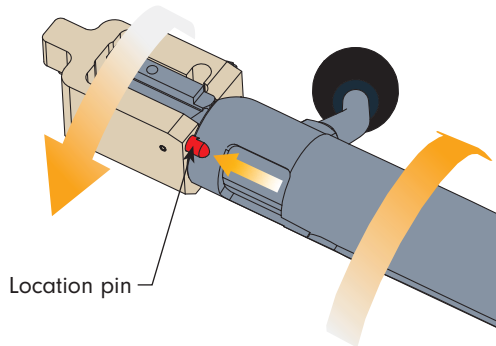


Fig 3-5

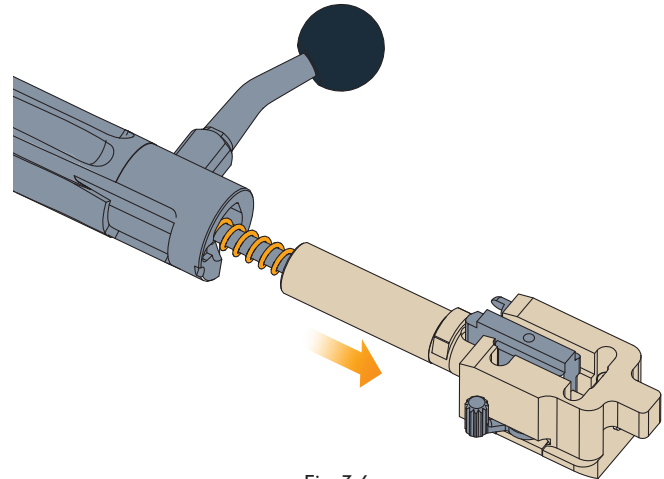


Fig 3-6



## 3.4 RE-ASSEMBLING THE BOLT

### To reassemble the bolt:

- To reassemble the bolt, insert the firing pin and shroud assembly into the bolt body, aligning the shroud retaining lug with the corresponding opening in the bolt body (see Fig 3-7).
- Holding the shroud assembly in the left hand and the bolt body in the right, push the shroud assembly against the bolt body to compress the firing pin spring. Pushing the rear of the shroud against a hard, non-marking surface will assist in compression.
- When the firing pin spring is compressed, rotate the shroud as shown in Fig 3-8, until the location pin engages with the bolt body, just before the fire position.

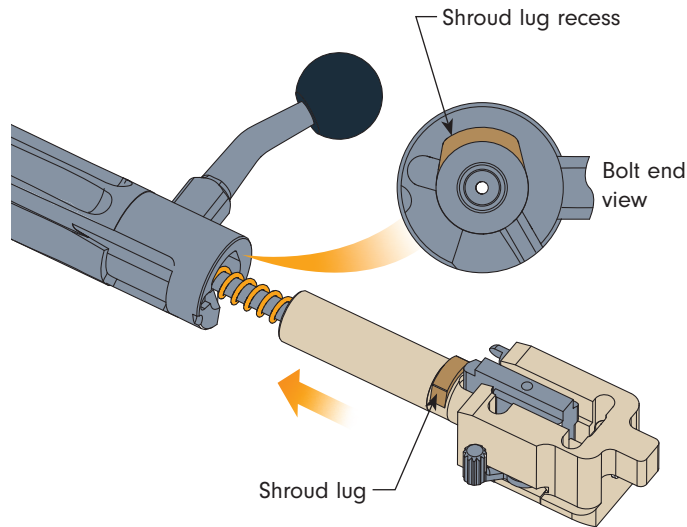


Fig 3-7

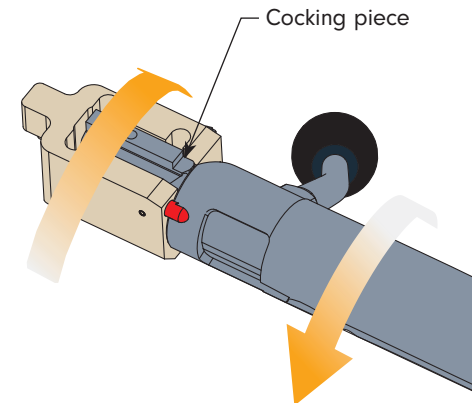


Fig 3-8

## 3.5 STRIPPING THE MAGAZINE



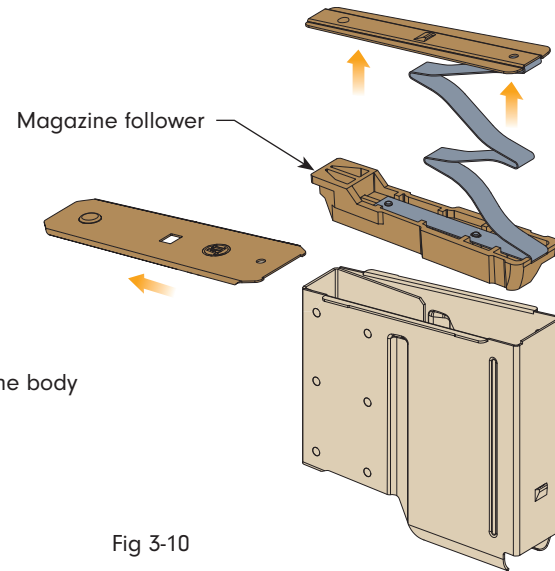
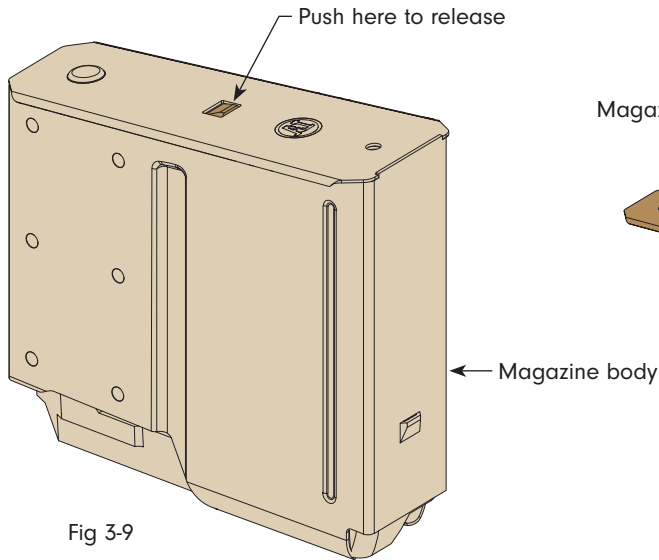
### Stripping the magazine:

- Press and hold down the retaining button and slide off the base, at the same time retain the magazine spring assembly (see Fig 3-9).
- Remove the spring assembly from the body (see Fig 3-10).
- The magazine spring is riveted to the follower, and must not be separated for any maintenance activities.

### Re-assembly:

- Refit the magazine spring assembly into the magazine body.
- Hold down the spring assembly and slide on the base.
- Ensure the base is securely retained, and the retaining button is correctly located in the base.

Note: The dismantling and assembly operation is the same for all calibres.



## 3.6 REMOVING THE FOREND

The length of the rifle can be reduced significantly by removing the barrel and the forend. Useful for cleaning, storage and transportation.

### To remove the forend:

- Unload the rifle and carry out safety precautions.
- Remove any heavy or bulky items mounted on the forend.
- Remove the magazine.
- Remove the barrel and muzzle brake assembly (see section 2.3 on page 13) or just the muzzle brake (see section 2.16 on page 27).
- While supporting the forend, use the 4 mm hex key to loosen the captive forend retaining screws (see Fig 3-11).
- Lift and remove the forend from the chassis.

### Re-assembly:

- Ensure that the mating surfaces on the forend and chassis are clean.
- Locate the forend into position and start the three retaining screws into the threaded inserts in the forend.
- Tighten the three lower retaining screws evenly (ideally to a torque of 5 - 5.5Nm).
- Refit the barrel (see section 2.3 on page 13) or refit the muzzle brake (see section 2.16 on page 28).

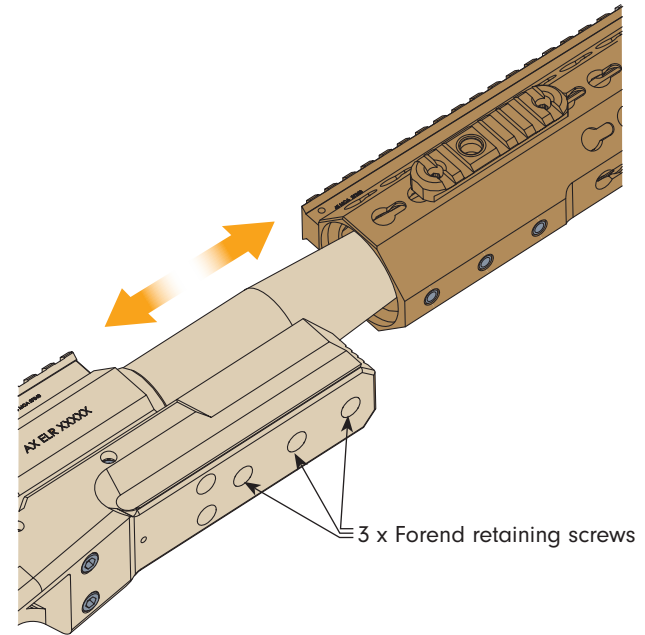


Fig 3-11

This page intentionally left blank

# 4 PREPARING AND FIRING THE RIFLE

- Magazine loading.
- Loading the rifle.
- Firing and operating.
- Unloading.
- Stoppages and troubleshooting.



## 4.1 MAGAZINE LOADING

The AX ELR rifle is supplied with a 10 round, double-stack magazine.

### To load a magazine:

- Put the first round onto the top of the empty magazine (see Fig 4-1).
- Push the round down until it is caught by the magazine feed lips and follower (see Fig 4-2).
- Push the round fully rearwards (see Fig 4-3).
- Repeat for the next round, again pushing it fully rearwards.
- Load a total of 10 rounds.

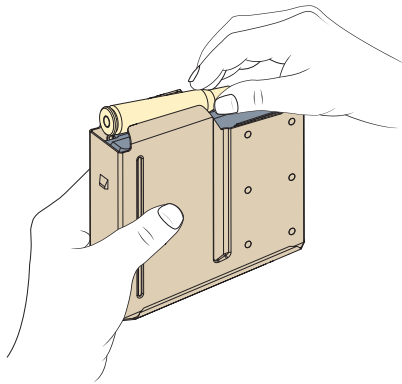


Fig 4-1

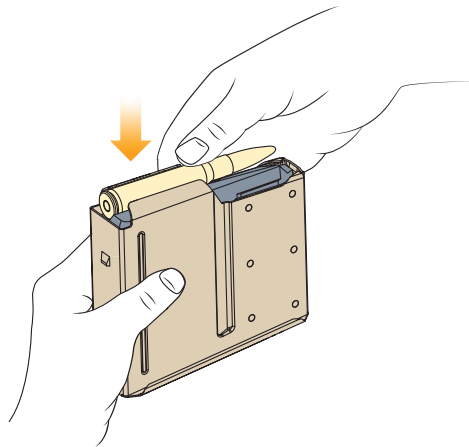


Fig 4-2

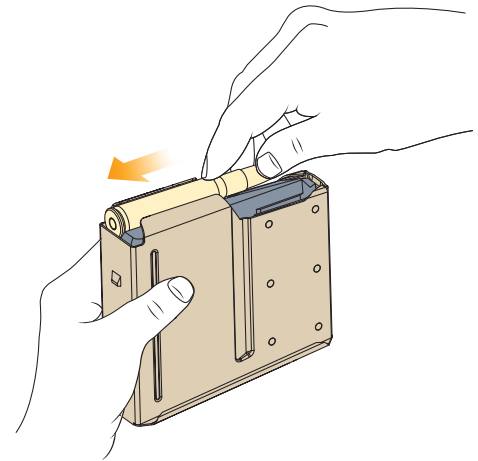


Fig 4-3

## 4.2 LOADING THE RIFLE

### To load the rifle:

- Point the rifle in a safe direction.
- Open the bolt by raising the bolt lever and pulling the bolt fully rearward.
- Fit the magazine into the rifle's magazine opening at a slight angle, as shown in Fig 4-4, ensuring that the retaining tab on the front of the magazine has engaged.
- Lift the magazine upwards at the rear until the magazine catch engages on the back of the magazine.
- Pull firmly downwards on the magazine to ensure it is securely retained.
- Pull the bolt fully rearwards.
- Feed a cartridge from the magazine into the chamber, by sliding the bolt fully forward and closing the bolt lever fully.
- The cocking indicator will protrude prominently from the rear of the shroud (see section 1.2 on page 2).

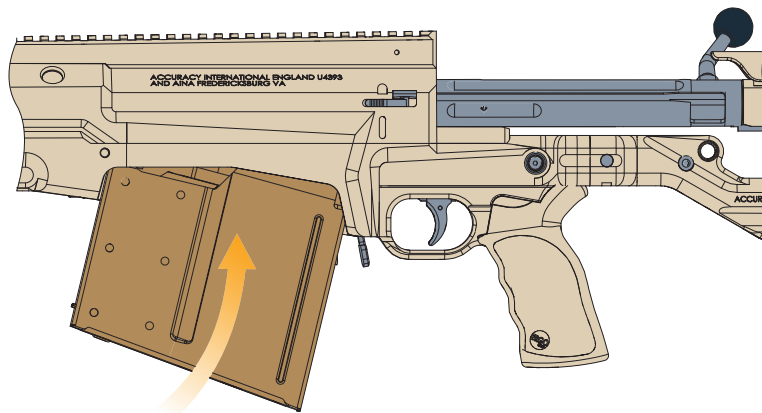


Fig 5-1



**WARNING: ALWAYS CLOSE THE BOLT FULLY. FAILURE TO FULLY CLOSE THE BOLT EACH TIME IT IS MANIPULATED COULD RESULT IN A LIVE ROUND LEFT IN THE CHAMBER.**

### Notes:

The extractor does not engage on the cartridge rim unless the bolt is fully closed.

When the magazine is full, it is more difficult to fit with the bolt closed. The first round is also more difficult to feed into the chamber than subsequent rounds.

## 4.3 FIRING AND OPERATING THE RIFLE

Use the following sequence when firing and operating the rifle.

- With the rifle unloaded and safe to handle, adjust the telescopic sight eyepiece to bring the reticle into sharp focus and adjust the parallax drum (where fitted) to suit the distance.
- Set the elevation and windage on the telescopic sight.
- Load the rifle.
- Move the safety lever rearward into the 'Safe' position.
- Get into a comfortable and stable fire position.
- Move the safety lever to the 'Fire' position.
- Ensure correct aim, take up the first stage and pull the trigger.
- Follow through and observe the target.

Note: Try to remain "on aim" during recycling of bolt.

- Open the bolt.
- Pull the bolt FULLY rearwards to allow ejection of the fired case and to pick up the next round.
- Push the bolt firmly forward to feed next round into the chamber. Close the bolt handle fully.
- Repeat sequence for each round as required.

### To reload the rifle:

- Move the safety lever rearward to the 'Safe' position.
- Press the magazine catch and remove the magazine.
- Install a loaded magazine (See section 4.2 on page 39).
- Pull the bolt FULLY rearwards before re-closing the bolt fully to chamber a new cartridge.
- Apply the safety lever when necessary.
- The rifle is now reloaded and ready to continue firing.

## 4.4 UNLOADING

Note the position of the Firing Pin Cocking Indicator (see section 1.2). If fired, use drill 1, If cocked, use drill 2.

### Drill 1: Unloading the rifle after firing (Firing Pin Cocking Indicator shows 'Fired').

- Point the weapon in a safe direction.
- Hold the weapon securely; do not place a finger inside the trigger guard.
- Remove the magazine (if fitted).
- Open the bolt and fully slide to the rear, ejecting the fired case.
- Inspect the chamber to ensure it is empty:
  - Visual Check - Look through the ejection port.
  - Physical Check - Use a finger to check the chamber and bolt face.
- Remove any cartridge or case from the weapon.
- With the bolt left 'open', the rifle is now safe to handle.
- Where possible, the bolt should be left 'open' to identify to others that it is safe. However, should the bolt be required in the 'closed' position:
  - Pull and hold the trigger while closing the bolt.
- Fit an EMPTY magazine, if required - the rifle is now safe to handle.

### Drill 2: Unloading a live cartridge (firing pin cocking indicator shows 'cocked').

- Point the weapon in a safe direction.
- Hold the weapon securely; do not place a finger inside the trigger guard.
- Set the safety lever to the 'First Safe' position (see section 1.3 on page 3).
- Hold the weapon securely; do not place a finger inside the trigger guard.
- Remove the magazine.
- Slowly cycle the bolt to unload the live cartridge from the chamber.
- Carefully remove the live round by hand.
- Inspect the chamber to ensure it is empty:
  - Visual Check - Look through the ejection port.
  - Physical Check - Use a finger to check the chamber and bolt face.
- Remove any remaining cartridges from the weapon.
- With the bolt left 'open', the rifle is now safe to handle.
- Where possible, the bolt should be left 'open' to identify to others that it is safe. However, should the bolt be required in the 'closed' position:
  - Push the safety lever into the 'Fire' position.
  - Pull and hold the trigger while closing the bolt.
- Fit an EMPTY magazine, if required.
- The rifle is now safe to handle.

## 4.5 STOPPAGES

If the rifle, magazines and ammunition are kept clean and maintained correctly, few stoppages should occur. However, if the rifle does fail to fire or operate as expected, the following drills must be carried out.



**FAILURE TO FIRE:** IF THE RIFLE FAILS TO FIRE, MAINTAIN AIM IN A SAFE DIRECTION FOR AT LEAST 30 SECONDS BEFORE ATTEMPTING TO OPEN THE BOLT. THE CARTRIDGE'S PRIMER MAY BE BURNING SLOWLY AND MAY CAUSE THE WEAPON TO FIRE UNEXPECTEDLY. FAILURE TO FIRE CAN BE CAUSED BY A SLOW BURNING PRIMER, A LIGHT STRIKE FROM THE FIRING PIN OR A ROUND NOT BEING LOADED INTO THE CHAMBER. IN ANY CIRCUMSTANCES, CARE MUST BE TAKEN WHEN THE BOLT IS OPENED - A FAULTY ROUND MAY STILL FIRE.

A Master Stoppage drill should be carried out to determine the nature of the stoppage.

- Follow the 30-second rule above.
- Open the bolt and slowly pull it to the rear; a live round may be ejected.
- Inspect inside the action body and chamber as the next step will depend on what is seen inside the action body.

### Rounds in the Magazine:

If there are rounds in the magazine but no round in the chamber, the magazine may be incorrectly fitted, or the bolt may not have been cycled correctly.

- Check that the magazine is correctly fitted, if necessary, remove and refit.
- Pull the bolt fully rearward, then push forwards and close.
- Continue firing.

### No rounds in the magazine:

- Remove the empty magazine.
- Fit a loaded magazine into the rifle.
- Pull the bolt fully rearward then push forwards and close.
- Continue firing.

### Obstruction in the action body—failure to eject:

If there is a live round or empty case present, this must be removed.

- Remove the magazine.
- Carefully remove the obstruction.
- Check the chamber is clear.
- Refit the magazine.
- Pull the bolt fully rearward then push forward and close.
- Continue firing.

The operator should check for component damage or obstructions that may impede the ejection of the weapon. Persistent failures to eject should be investigated by an Accuracy International qualified armourer.

## 4.5 STOPPAGES (CONTINUED)

### **Obstruction in the chamber—failure to extract:**

If a live round or empty case is present in the chamber, this must be removed.

- Remove the magazine.
- Close the bolt fully.
- Set the safety to the 'First Safe' position.
- Open the bolt to clear the obstruction.
- Check the chamber is clear.
- Refit the magazine.
- Pull the bolt fully rearward, then push forward and close.
- Set the safety to the 'Fire' position.
- Continue firing.

Should the above drill not clear the obstruction, check the bolt and extractor for damage. Persistent failures to extract should be investigated by an Accuracy International qualified armourer. A cleaning rod may be used to remove an EMPTY case only by carefully inserting it into the bore from the muzzle end of the barrel.



**ENSURE THE CLEANING ROD IS REMOVED FROM THE BARREL BEFORE CONTINUING TO FIRE.**

### **Slow-burning primer/hang fire:**

If the round does not fire after 30 seconds, eject the round and inspect it. If the primer strike looks positive, the round must not be used and be disposed of safely. Persistent problems must be investigated, and the ammunition batch should not be used until examined further.

### **Light Strike:**

A light strike can indicate that the bolt was not fully closed. Ensure that the bolt is closed fully each time a cartridge is chambered. The bolt may also require cleaning and light lubrication. If the problem continues, stop using the rifle and have it examined by an Accuracy International qualified armourer.

### **'Pierced' or 'Blanked' Primer:**

Should the ejected empty case have a 'pierced' or 'blanked' primer, the user should inspect the firing pin tip for damage. If the firing pin is damaged or if the problem persists, have the rifle examined by an Accuracy International qualified armourer.

### **Hard Extraction:**

Several factors can cause hard extractions. A heavily 'fouled' barrel or chamber is a common cause. The rifle should, therefore, be cleaned regularly, as set out in the Maintenance section of this manual. The user should also inspect the bolt head and extractor for cleanliness and or damage. Prolonged 'rapid' firing may also cause hard extractions. If this is the case, allowing the rifle to cool more frequently, if practical, may ease the problem. Recurring problems must be investigated by an Accuracy International qualified armourer.

This page intentionally left blank

# 5 USER MAINTENANCE

- Cleaning and lubrication before firing.
- Cleaning and lubrication after firing.
- General rifle cleaning.
- Recommendations.
- Barrel cleaning procedure.
- Removing carbon and copper fouling.
- Cleaning the suppressor.
- Barrel break-in procedure.
- Action screw check.



## 5.1 USER MAINTENANCE

The weapon system has been designed for military use and to withstand active service conditions, the AX ELR Rifle is robust and is tested in all conditions to meet all necessary requirements.

**ATTENTION:** Cleaning and maintenance is an essential part of the safe and reliable use of the weapon system, failure to correctly maintain both barrel and component parts could result in the following problems:

1. Reduced barrel life, poor accuracy and excessive wear and tear.
2. Overpressure, causing hard bolt lift, failures to extract and inconsistent muzzle velocities.
3. Cocking and trigger reset failure.
4. Damage to components outside of general wear and tear.

These maintenance procedures must be followed as a minimum standard to ensure that the rifle progresses through its life expectancy as intended. Care must be given to all aspects of the weapon system that has received prolonged use or used in harsh conditions that could affect the normal functioning of the system. Users and maintenance teams must identify poor maintenance and should implement the procedures outlined in this manual.

### Safety precautions:

- Before handling or attempting any cleaning or maintenance operations with the rifle, ensure that the rifle is unloaded and safe by carrying out the safety precautions detailed earlier in this manual (see section 1.4 on page 4).
- To ensure the rifle is not damaged while being cleaned and lubricated, only the recommended tools, cleaning materials and lubricants should be used in accordance with these instructions.
- No abrasive material should be used on any part of the rifle.

### Recommended lubricants

Lubricant	Description	Uses
Break free CLP 16 OX24	Lubricant and preservative	General lubrication of the action and rifle exterior
WD40 GT85	Light penetrating oil	Suppressor maintenance
Grease XG 279	General purpose lubricating grease	Hinge, adjustable butt mechanism

### Recommended bore cleaners

Cleaner	Uses
Shooters choice bore cleaner	Copper solvent
Forest bore cleaning foam	Copper solvent
KG1	Bore carbon remover
KG12	Big bore copper remover
KG SF112	Combined carbon and copper remover
Robla Solo MIL	Combined carbon and copper remover

## 5.2 CLEANING (GENERAL)



### Cleaning and lubricating before firing:

Before firing the rifle, it must be cleaned and lubricated as detailed in the table on the right.

### Cleaning and lubricating after firing:

The barrel should be cleaned upon completion of shooting, using the "Cleaning the Barrel" procedure described in the next section.

We recommend, as a minimum, that the barrel should be cleaned at the intervals listed in the table on the right.

The bolt body should be cleaned and lubricated regularly, i.e. daily when operational or when 100 rounds have been fired.

### General rifle cleaning:

- The action body should be brushed clean to remove any brass particles or dirt.
- The exterior of the rifle should be wiped or brushed down until clean.
- Ancillary items such as magazines and bipods should be brushed clean and lightly oiled if required (do not use oil inside the magazine).
- If working in a wet environment or the weapon is to be put into storage, parts should be lightly oiled using CLP or similar.
- It is recommended that the barrel torque is checked after cleaning or maintenance.

Part	Lubrication Requirements
Barrel - exterior	Leave dry
Barrel - interior (bore and chamber)	Clean and leave dry
Bolt - front face	Clean and leave dry
Bolt - remaining surfaces	Clean and lightly lubricate with CLP oil or similar
Stock/Chassis	Leave dry
Action body	Clean and lightly lubricate the inside surfaces with CLP oil or similar, do not oil the barrel threads (if barrel is removed).

### Cleaning Intervals

Military ball ammunition	Clean after every 50 rounds
Armour piercing ammunition	Clean after every 25 rounds

Note:

In very dusty or harsh environments, more frequent cleaning is recommended.

## 5.3 CLEANING THE BARREL



### Recommendations:

- The bore and chamber are easier to clean after firing, while the barrel is still warm.
- Use a cleaning rod and rod guide when cleaning the barrel. Using a rod guide ensures that the cleaning rod is held in the centre of the bore, reducing the possibility of damage to the chamber and bore during cleaning, and preventing solvent and debris from entering the action.
- Use Bore Snakes or pull-through`s for emergency cleaning only. Pull from the chamber to the muzzle, ensuring the cord is pulled centrally from the front of the barrel to avoid damaging the crown. Clean the Bore Snake regularly to remove grit and debris that could damage the bore of the barrel.
- Use a vice or cradle to secure the rifle and prevent damage.
- Use the correct size brush or jag.
- Follow the manufacturers instructions when using bore solvents and cleaning fluids.
- Work from chamber to muzzle, do not pull patches or brushes back through the muzzle.



CAUTION: THE SUPPRESSOR MUST BE REMOVED BEFORE CLEANING THE BARREL.



REFER TO THE BORE SOLVENT MANUFACTURER'S INSTRUCTIONS FOR RELEVANT HEALTH AND SAFETY PRECAUTIONS. SOLVENTS MUST BE USED SPARINGLY; ANY EXCESS SPILLAGE OUTSIDE OF THE BARREL MUST BE REMOVED IMMEDIATELY.



AFTER CLEANING AND BEFORE FIRING THE RIFLE AGAIN, ALWAYS CHECK THE BARREL AND SUPPRESSOR FOR OBSTRUCTIONS.



## 5.3 CLEANING THE BARREL (CONTINUED)

### Barrel cleaning procedure:

- Unload the rifle and carry out safety precautions (see section 1.4 on page 4).
- Remove the magazine if fitted.
- Securely hold the rifle horizontally by a suitable means, ideally between the protected jaws of a bench vice, where available.
- Partially fold the rifle, depress the bolt release catch and remove the bolt.
- Remove the Suppressor (if fitted).
- Insert a rod guide into the action body, ensuring it has engaged with the bolt catch.
- Ensure the rod is clean before fitting a clean patch to the correct size spear point jag (see Fig 5-2 and Fig 5-3).
- Soak the patch with Bore Solvent and push it once through the barrel to wet the bore.
- Remove the patch and jag from the barrel, leave the solvent inside the barrel to loosen the fouling.
- Attach another clean patch to the jag and wet with solvent, push the patch slowly to the end of the bore and then begin to scrub the bore back and forth, paying particular attention to the first six to eight inches of the barrel, do not allow the patch to exit the muzzle. Approximately 100 passes is sufficient. Push the patch out of the muzzle and remove the patch and jag. Clean the rod with a cloth.
- Note: This procedure can only be done with spear tip jags and the correct patches, never use a jag that is not designed for multi directional use or patches that are not the correct size for the bore. Take care when scrubbing with the jag, always seek the correct maintenance training before use. Allowing the solvent time to dissolve the fouling will have improved effects.
- Dry patch out the bore with clean patches and jag until no carbon or copper fouling is visible. Note: When using brass jags copper solvent could react and give false readings.
- Repeat the previous two operations until the patch comes out clean. If separate carbon and copper solvents are being used, then these two steps must be carried out independently.
- Remove the jag and fit a nylon brush, lightly wet with solvent and scrub the bore paying particular attention to the first six to eight inches. After approximately 100 passes remove the nylon brush and refit the jag, attach a new patch and patch out until clean.
- Once the above procedures have been completed the user must inspect the internal surface of the barrel with a bore scope. If carbon or copper can be seen repeat all necessary steps, concentrating on the area of the fouling. The bore can only be determined to be clean by using a bore scope.
- Moisten a patch with CLP oil and pass it once through the bore. **This oil must be removed before shooting.**

The chamber is to be cleaned using a chamber cleaning brush or a screw-on chamber brush and one of the cleaning rod sections. Always pass a dry patch through the bore after cleaning the chamber to remove any debris or cleaning product residue.

Wipe away all surplus solvents from inside the action body and from the muzzle brake.

Note: When the rifle is to be stored for a lengthy period or when in a corrosive atmosphere, a thin smear of oil should be left in the bore.

## 5.3 CLEANING THE BARREL (CONTINUED)

### Removing heavy carbon and copper fouling:

- Heavy copper fouling can occur as a copper coloured residue, carbon fouling can occur as a black residue between the lands. Usually within 12" (300mm) of the chamber.
- The presence of carbon and copper fouling in the barrel often shows as a coloured residue on cleaning patches. This colour varies from one cleaning product to the next, e.g. heavy copper fouling may show as blue on the patch, heavy carbon fouling may show as grey on the patch. Check your specific cleaning product for guidance and repeat the cleaning procedure as necessary, until the patches come out clean.
- For difficult fouling that has been identified with a bore scope, soak a patch with bore solvent and pass it once through the barrel to wet the bore. When the bore is wet attach a copper brush and pass through the bore in a controlled manner from chamber to muzzle only, never scrub with a copper brush. (Note: Copper solvent is not recommended for use with a copper brush as the solvent could potentially the brush). Clean the bore with clean patches and re-inspect. Carry out all cleaning steps until the bore is completely free of all carbon and copper fouling.
- For optimal results, we recommend that a copper solvent and a carbon remover be used alternately to clean a heavily fouled barrel.
- Refer to the copper/carbon solvent manufacturer's instructions to determine how the solvent should be applied to the bore and how long it should remain.
- If alternating between carbon and copper solvents, repeat the cleaning procedure with the alternative product, again, leaving it to penetrate the fouling for the recommended time.

Using the jag brush and triangle patch

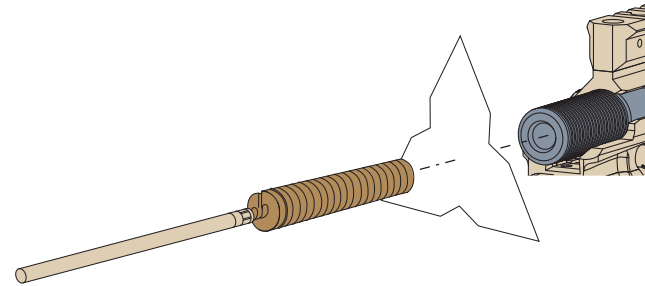


Fig 5-2

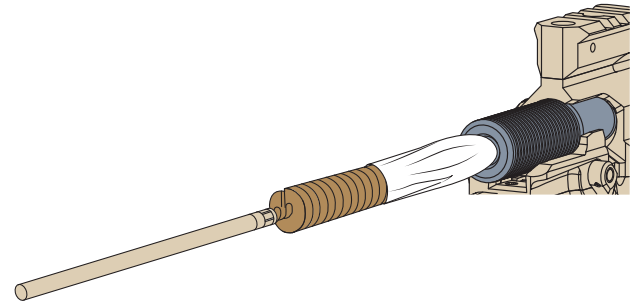


Fig 5-3

## 5.4 CLEANING THE SUPPRESSOR



### Cleaning the T12 Reflex suppressor:

- Removal of the suppressor from the rifle after firing is recommended; this helps to allow the condensation caused by hot gasses to evaporate.
- After firing, spray some WD40 or light gun oil onto the external surfaces and also inside, keep the barrel thread lightly greased to prevent corrosion.
- Loose particles may be removed by shaking the suppressor vertically, do not wash with liquids or solvents.

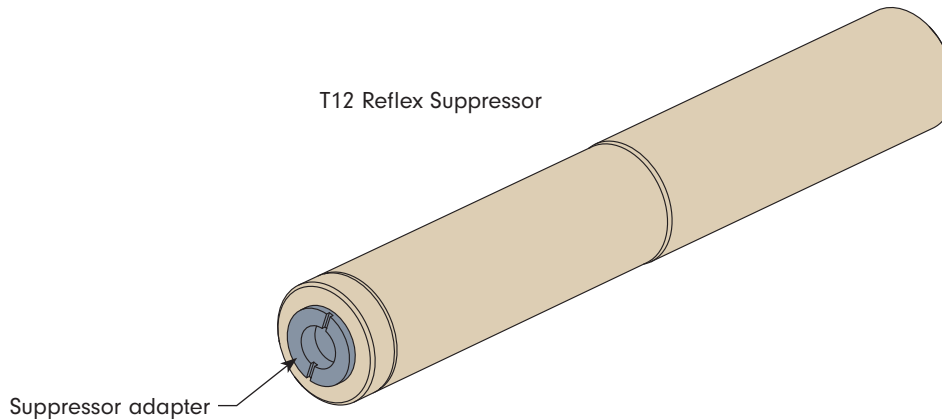


Fig 5-4



# 5.5 ACTION SCREW CHECK

The AX ELR Rifle Action is fastened to the chassis using five cap head screws. These screws are factory fitted with Loctite retainer and should not require user maintenance or adjustment.

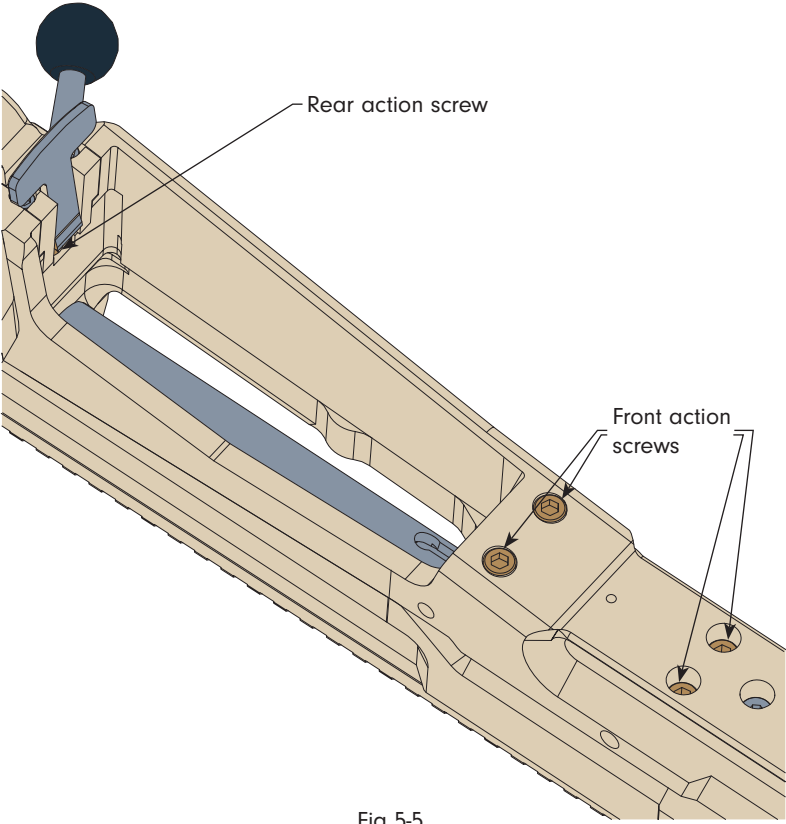


Fig 5-5







ACCURACY INTERNATIONAL

