

MODEL
S510XS
ULTIMATE SPORTER
HIGH POWER MODELS



USERS HANDBOOK

THIS HANDBOOK REFERS TO S510XS ULTIMATE SPORTER HIGH POWER MODELS



***** SAFETY CODE *****

- 1 - TREAT THIS AIR RIFLE AS IF LOADED.
- 2 - NEVER POINT IT AT ANYONE, EVEN IF UNLOADED.
- 3 - NEVER LEAVE THIS RIFLE UNATTENDED WHEN COCKED OR LOADED.
- 4 - ALWAYS BE SURE OF WHAT LIES BEYOND YOUR TARGET.
- 5 - ALWAYS CONDUCT YOURSELF IN A SPORTSMAN-LIKE MANNER.

ALWAYS BE AWARE THAT YOUR ACTIONS WILL BE UNDER THE SCRUTINY OF OTHER MEMBERS OF THE PUBLIC WHO MAY NOT SHARE YOUR ENTHUSIASM FOR AIR WEAPONS. BAD PRACTICES PROMOTE BAD PUBLICITY. DO NOT JEOPARDISE YOUR FUTURE ENJOYMENT BY MISUSING THIS WEAPON.

! WARNING!

Not a toy. Adult supervision required. Misuse or careless use may cause serious injury or death. May be dangerous up to 1,000 yards.

! WARNING!

Do not inhale dust from lead pellets or put lead pellets in the mouth. Wash hands after handling lead. Lead pellets contain lead, a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm).

! WARNING!

Keep the air rifle in the ON SAFE position until you're ready to shoot, then push the safety to the OFF SAFE position.

! WARNING!

Keep your fingers off the trigger while cocking the air rifle or with the barrel in the downwards position. Failure to do so may permanently damage your air rifle. Do not shoot without a pellet in the chamber (dry fire). This may permanently damage your air rifle.

! WARNING!

Use the correct pellet size according to your Air Arms model. Never reuse pellets. The use of any other kind of ammunition can cause injury to you or damage the air rifle.

! WARNING!

Do Not assume that the gun is unloaded if it fails to fire properly.

! WARNING!

Never leave your gun loaded. Do not store it loaded.

! WARNING!

Never allow petroleum based lubricant products into the compressed air reservoir.



WARNING!

Compressed air cylinders must **NEVER** be opened or modified mechanically by unauthorized specialists.



WARNING!

Do not attempt to repair the airgun or to disassemble to correct an over-fill or valve lock. Parts can fly from the airgun at dangerous speeds when it is disassembled while pressurised.



WARNING!

Disconnecting the fill hose from the airgun without bleeding the air first may result in injury from hose whip as a result of pressure in the fill hose.



WARNING!

Use only compressed air in this airgun. Use no other gases-including oxygen, which can cause a fire or explosion that may result in serious injury or death.



WARNING!

When filling the compressed air cylinder, the compressed air must **NOT** contain oil, water or any contaminant.



WARNING!

The compressed air cylinder must be protected from forceful impacts.



WARNING!

Compressed air cylinders are **NOT** intended for transport of other gases.



WARNING!

Do **NOT** exceed maximum fill pressure of 200bar at room temperature.

PLEASE READ THIS MANUAL BEFORE USING YOUR NEW RIFLE, IT
CONTAINS IMPORTANT SAFETY INFORMATION AND INSTRUCTION ON
ADJUSTMENT AND MAINTENANCE.

WARNING ! - UNAUTHORISED DISASSEMBLY OF THIS RIFLE WILL INVALIDATE THE MANUFACTURERS WARRANTY

Important information

Warning. Only use clean, filtered and dry compressed air. Never use any other gas, particularly industrial or welding gases such as oxygen, carbon dioxide, acetylene, hydrogen, argon, etc.

Before leaving the factory this rifle was Q.A. inspected and test fired using Air Arms pellets to check operation and final adjustment.

It was dispatched in a sealed purpose designed box with a contents label on the lid. Air Arms may not be responsible for any damage to the contents or missing items if the box is not original, if it is damaged or the seals are not intact.

Air Arms cannot be held responsible for damage or missing items due to transit damage, mishandling or being tampered with after leaving the factory.

If this rifle is not received in the original box with the seals intact, please examine carefully for any damage, missing tools or documentation.

In the first instance any problems or complaints regarding this product should be referred to the supplier.

The air cylinder is a highly pressurised unit that must not be modified in any way. Serious personal injury may result if this, and the advice below is not followed.

Do not pressurize the cylinder if there are any surface abrasions or dents. Contact Air Arms for advice.

Do not store the rifle in places with, or near sources of high temperature such as fires or boilers.

Do not attempt to dismantle when pressurised.

Do not pressurize beyond the stated filling pressure (see filling instruction section). Damage caused by such action is not covered by the manufacturers warranty.

If compressed air is being used other than from a diving shop, the inside of the cylinder should be inspected for corrosion at least annually. If in doubt contact Air Arms for advice.

In any event the cylinder should be inspected every two to three years depending upon usage.

Air Arms can provide this service at a reasonable cost.

To maintain this rifle in good working order it should be serviced annually by a competent gunsmith, your supplier may be able to provide this service or contact air arms.

A reasonable amount of advice will be provided to enable the end user to service their own rifle, however this is at the discretion of Air Arms and may not be given in all cases.

The velocity of this rifle has been set using Air Arms field pellets. If any other make or type of pellet is to be used the rifle must be re-tested with the pellet that is to be used, to ensure the muzzle energy is within the limits determined by current legislation.

Due to the nature of hand pumps and their relative inefficiency in removing moisture from the compressed air, the chances of corrosion damage to the cylinder and other internal components are increased.

Therefore the rifle should be regularly serviced and/or checked for any signs of damage by a competent gunsmith.

Air Arms recommend using a dry pack filter kit on any hand pumps used to fill our air rifles.

If accessories not manufactured by Air Arms are used on this rifle, Air Arms can not be held responsible for any loss of performance. Contact your supplier or Air Arms for any advice on this matter.

Do not store this rifle in a damp place such as garden shed or garage.

Do not store this rifle in a plastic or PVC gun bag without first applying a surface corrosion inhibitor.

Always ensure the loading bolt is fully closed before firing.

Rules of safe shooting:

- Never point a gun at anyone or anything, even if you think the gun is unloaded.
- Wear shooting/safety glasses where appropriate and ensure those around you do too.
- Always keep your gun on SAFE until you are ready to shoot safely.
- Always use a safe backstop in a safe location in case the backstop should fail or any pellets pass through it.
- Never load your gun until you are ready to shoot and it is safe to do so.
- Never shoot at hard surfaces, water or anything else that may cause a ricochet.
- Always ensure a gun is on SAFE and unloaded when receiving a gun or giving a gun to someone else. Many accidents are caused by people handling guns that they thought were unloaded and safe!
- Never put a gun away loaded or cocked.
- Always be sure of your target and what lies beyond it in case you miss.
- Never re-use ammunition.
- Ensure you always use the correct caliber ammunition that is suitable for your gun.
- Never rely solely on the safety; the most important safety feature is you!
- Always treat a gun as if it is loaded and with the respect any loaded gun commands.
- Always read and follow the manufacturer's manual and instructions.
- Always make sure you understand how to use any gun before using it.
- Always keep your finger off the trigger and clear of the trigger guard until you are ready to shoot and it is safe to do so.
- Always store the gun in a safe place, unloaded and uncocked, and out of reach of children and unauthorized users.
- Always store ammunition separately from the gun.
- Always abide by laws and regulations that apply to airguns.
- Always use the correct and recommended lubricants, failure to do so may cause injury or damage.

Shooting is one of the safest sports in the world, but misuse and careless use of guns can cause serious injury or death.

ASK, LISTEN, THINK—IF IN DOUBT—DON'T!

CHECKING VELOCITY

- 1 Use a reliable chronograph to check velocity, (the formula below requires the reading to be in feet per second - FPS)
- 2 Use fine measurement scales to weigh the pellet, If scales are unavailable the pellet weight may be stated on the pellet container lid or contact the supplier. (The formula requires the weight to be in grains). To convert from grams to grains multiply by 15.432, i.e. 0.69 grams x 15.432 = 10.65 grains.
- 3 To find the muzzle energy in ft/lbs use the formula $(FPS \times FPS \times Grains) / 450240$, i.e. $(700 \times 700 \times 10.65) = 5218500$ divide by 450240 = 11.59.

WARRANTY

Air Venturi Limited Lifetime Warranty

During the lifetime of the original retail purchaser, Air Venturi will provide without cost all genuine factory parts (excluding main spring and seals). All factory-authorized labor necessary to repair any factory defect of material or workmanship of the covered airgun. Parts and labor necessary to repair any defect of material or workmanship of the seals and main spring will be provided for one year from the verified date of purchase.

Shipping costs to Air Venturi will be responsibility of the purchaser.

The warranty will be void if the manufacturers instructions/guidelines are not followed and the original purchase receipt cannot be presented.

Some items are not covered by this free lifetime repair policy, including:

- Customer abuse or failure to perform normal maintenance.
- Unauthorized repair, parts or modifications.
- Stocks/wood (including the finish).
- Incorrect lubrication or lubricants.
- Breech, piston and other seals.
- Mainsprings.
- Loss or theft.
- Consequential damages, incidental damages or incidental expenses including damage to property.
- Shipment damage of the rifle to or from Air Venturi.
- Shipping charges to or from Air Venturi.
- Normal wear and tear.
- Cylinders on PCP models
- If the cylinder replacement is mandated by local governing laws.
- If the cylinder has been over pressurized.
- If the inside of the tank is rusted due to moisture from using a non recommended filling device.

We strongly advise against disassembling or modifying your air rifle. Doing so could be dangerous. The powerful mainsprings are kept under considerable tension even when the air rifle is uncocked. Improper disassembly may lead to serious injuries or even death if the mainspring is suddenly ejected from the compression tube. Specialized training and proper tools are required to safely disassemble and reassemble the air rifle.

This warranty is in addition to your statutory rights. Retain your sales receipt as proof of purchase.

This policy supersedes all other repair policies. For repairs on any airgun, send the airgun prepaid and insured to: Air Venturi, 5135 Naiman Parkway, Solon, OH 44139.

Include a note describing the problem, your name, address, telephone number and a copy of your dated sales receipt.

NOTE: Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

To the extent any provision of this warranty is prohibited by federal, state or municipal law which cannot be preempted, it shall not be applicable. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state and country to country.

* Lifetime repair policy valid only as long as parts are readily available for the airguns

Air Venturi Limited One-Year Warranty

This product is warranted to the retail consumer for one year from date of retail purchase against defects in material and workmanship and is transferable.

What is covered:

Replacement parts and labor. Transportation charges to consumer for repaired product.

What is NOT covered:

Transportation charges to Air Venturi for defective products. Damages caused by abuse or failure to perform normal maintenance. Any other expense. CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES OR INCIDENTAL EXPENSES INCLUDING DAMAGE TO PROPERTY. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Warranty claims:

Warranty claims for U.S. and Canadian Customers:

Please return product to Air Venturi. Call Air Venturi at 216-292-2570 before returning any product.

Implied warranties:

ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO ONE YEAR FROM DATE OF RETAIL PURCHASE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

To the extent any provision of this warranty is prohibited by federal, state or municipal law which cannot be preempted, it shall not be applicable. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state and country to country.

Air Venturi
AirVenturi.com • 216-292-2570



WARNING!

DO NOT TRY TO DISASSEMBLE THE GUN. Your rifle needs special tools and Air Arms parts in order to be repaired. If you disassemble it, you may not be able to properly reassemble it. Air Arms does not assume any warranty liability under such circumstances.

AIR ARMS RESERVE THE RIGHT TO ALTER THE CONSTRUCTION, APPEARANCE OR PERFORMANCE OF ANY PRODUCT WITHOUT PRIOR NOTIFICATION. ALL ILLUSTRATIONS ARE FOR INFORMATION PURPOSES ONLY AND DO NOT NECESSARILY HOW THE EXACT MODEL THAT WAS PURCHASED.

OPERATING INSTRUCTIONS

COCKING

Hold securely in one hand and with the other pull the cocking lever out and to the rear. At the end of the stroke the magazine will index and present a new chamber, also the trigger mechanism will engage. This can be determined by the trigger blade 'kicking' forward at the end of the cocking stroke.

The effort required to cock the gun is quite low so minimal force should be used.



Note ! It is very important that the cocking lever is pulled back to the correct position. In one positive motion. The magazine indexes to the next pellet position as the bolt is retracted and it is possible for a partial index if the lever is not pulled back fully.

If you find the mechanism has not cocked completely but the magazine has indexed, Re-cock but before closing the bolt, remove the magazine and manually index it back to the empty chamber. Replace the magazine and fire as normal. If this procedure is not followed it is likely that you will load a second pellet into the barrel. Push the lever back to the forward position. The rifle is now cocked and loaded, treat with caution.

MOUNTING/DEMOUNTING THE MAGAZINE & PELLETS

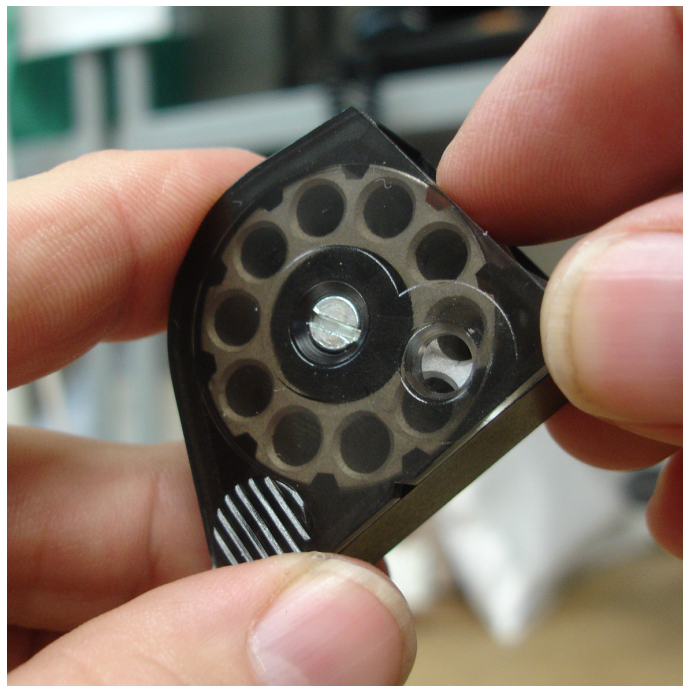
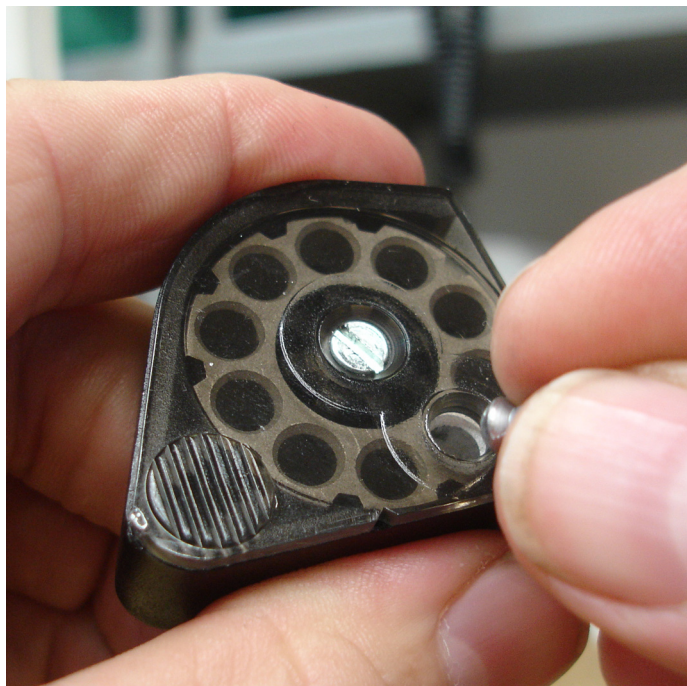
DEMOUNTING

Fully cock the rifle, grip the magazine and slide out of the bolt housing without lifting. **Do not** attempt to lift vertically as damage to the indexing spring will result.

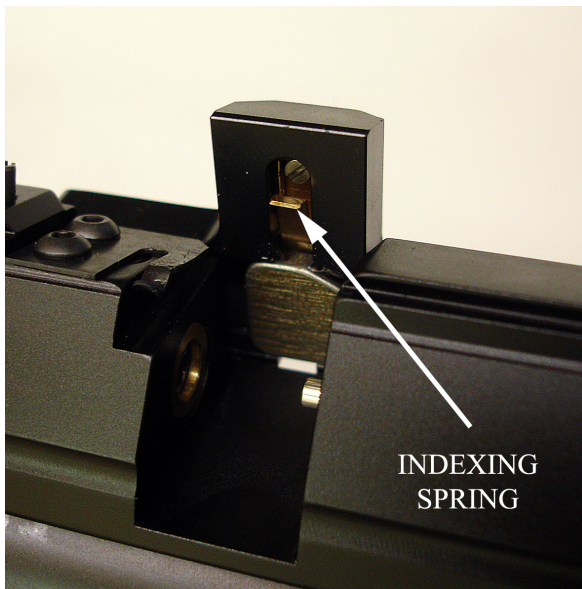
To refit the magazine, fully cock the rifle, grip the magazine and slide in the bolt housing applying downward pressure with the fore finger to keep the base of the magazine against the bottom of the slot in the bolt housing. Take care not to damage the indexing spring.



LOADING PELLETS



Hold the magazine and drop a pellet into the chamber. Manually index to the next empty chamber and repeat until the magazine is full.



Be very careful not to damage the indexing spring when de-mounting or mounting the magazine. Follow the instructions carefully.

A small drop of oil should be applied to the magazine 'O' ring to keep it moist, and increase its life span.

TRIGGER ADJUSTMENTS

The S510 models all have a two stage unit with adjustment to both stages plus a weight of pull adjustment. It is easy to upset the balance between the two stages and make the trigger inoperable if incorrectly adjusted.

If you have no experience of adjusting two stage triggers seek guidance or leave the trigger as set by the factory.

Note! Incorrectly adjusted trigger mechanisms are not covered by the manufacturers warranty. It is not possible to test this rifle with an incorrectly adjusted trigger, therefore all triggers leave the factory with correct adjustment. **WARNING!** Please note that it is possible to stop the safety button working with incorrect trigger adjustment. AN INCORRECTLY ADJUSTED TRIGGER CAN MAKE THE RIFLE UNSAFE TO HANDLE.

DESCRIPTION OF OPERATION

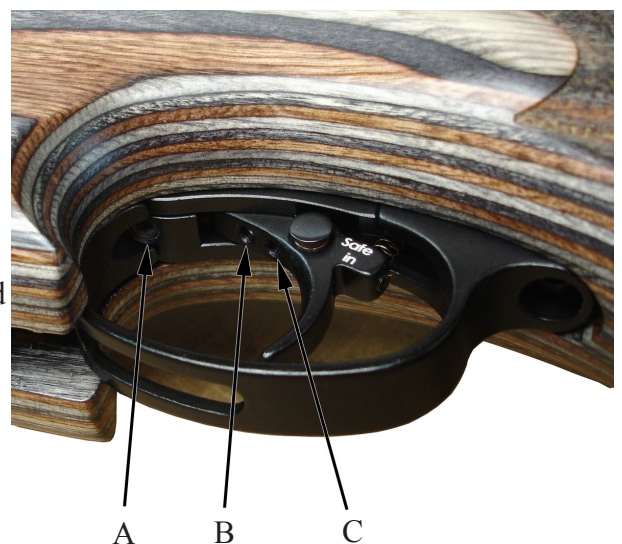
The S510 rifles have a true two stage trigger mechanism. This means that as the trigger is pulled the bottom sear gradually disengages with the top sear until the two disengage completely and the rifle goes off. If the pressure on the trigger is released at any point before full disengagement, the bottom sear will automatically return back to full engagement. This type of trigger allows very fine but safe operation because it is the release of the 2nd stage that actually makes the rifle fire. This arrangement is vastly superior to pseudo two stage triggers where the first stage is just a pivoting trigger blade that does not move sears. The down side is that they are more difficult to adjust correctly.

ADJUSTMENT

There are three adjuster screws, A-B-C. The weight of pull adjuster (A) is located in the front of the trigger guard. Clockwise rotation increases pull weight. If adjusted too far the spring will become coil-bound and prevent trigger operation.

The second stage adjuster (C) is the rear screw located in the trigger blade. This screw determines the exact point that the 2nd stage starts. If the 1st stage screw is incorrectly adjusted this screw may not have any effect.

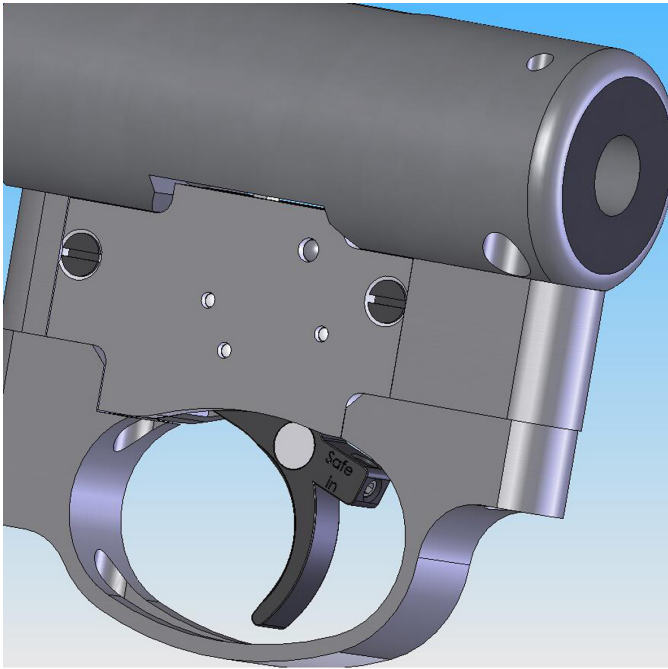
The first stage adjuster (B) is the front screw located in the trigger blade. This screw determines the length of travel before the 2nd stage starts. Clockwise adjustment reduces the first stage travel.



This rifle is fitted with a manual safety button located in the trigger blade.

To make the rifle safe the button must be pressed until it is flush with the side of the trigger blade.

Please note that it is possible to stop the safety button working with incorrect trigger adjustment.

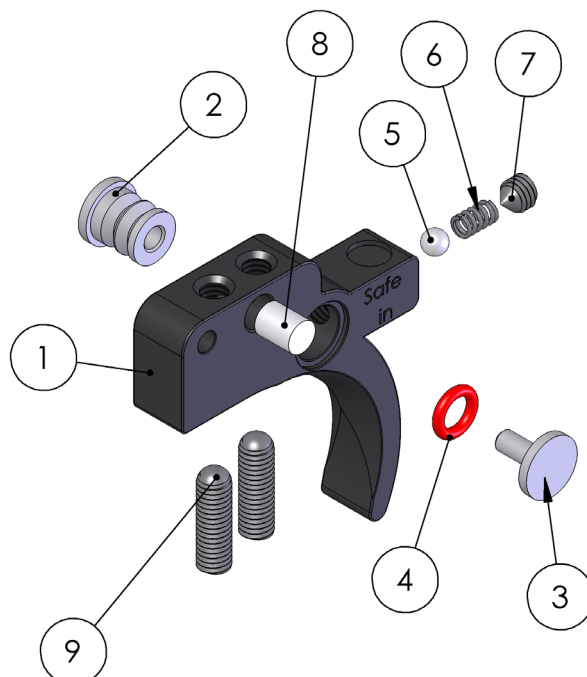


With the button pressed in the rifle is safe.



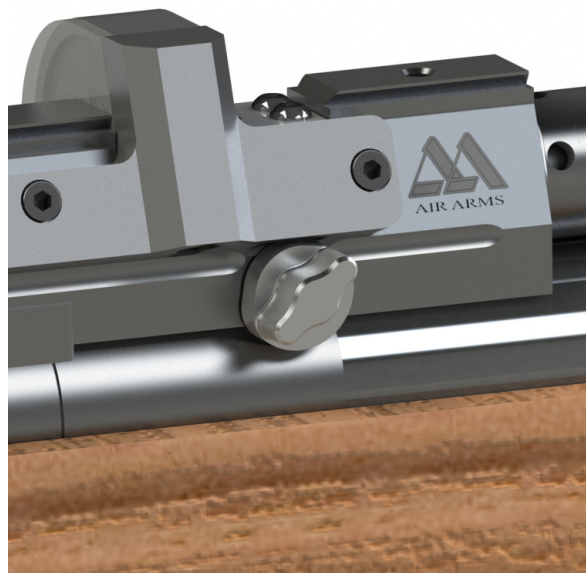
With the button out the rifle is now ready to fire.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	S420S-2	TRIGGER BLADE - BLACK ANODIZED	1
	S420GS-2	TRIGGER BLADE - GOLD PLATED	
2	S521-2A	SAFETY BUTTON - PART ONE	1
3	S521-2B	SAFETY BUTTON - PART TWO	1
4	S526	SAFETY BUTTON O RING	1
5	S523	BALL BEARING	1
6	S522	SAFETY BUTTON SPRING	1
7	S524	SCREW	1
8	TX432	ADJUSTER SCREW LOCKING PAD	1
9	S421	SCREW	2

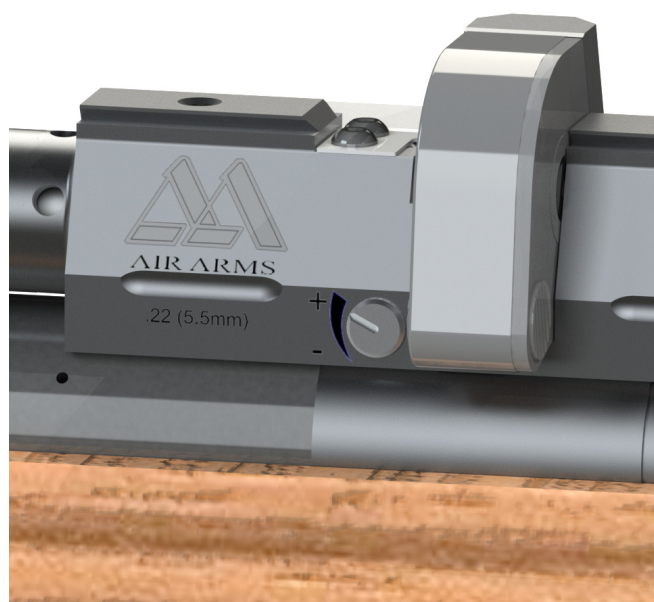


POWER ADJUSTER

The S510 XS is fitted with a power adjuster on the side of the rifle. This can be used to adjust the power at any time by just turning anti-clockwise to increase and clockwise to decrease the power. Adjusting the power between shots will not harm the rifle.



On the left hand side of the rifle is a indicator to help select your most common power settings + = High. - = Low. The marks do not indicate a particular power as this would change depending on the pellets used.



FILLING INSTRUCTIONS

NOTE! ONLY USE CLEAN, DRY AND FILTERED COMPRESSED AIR, PREFERABLY FROM A DIVING SHOP. OVER PRESSURIZATION MAY DAMAGE THE CYLINDER BEYOND REPAIR.

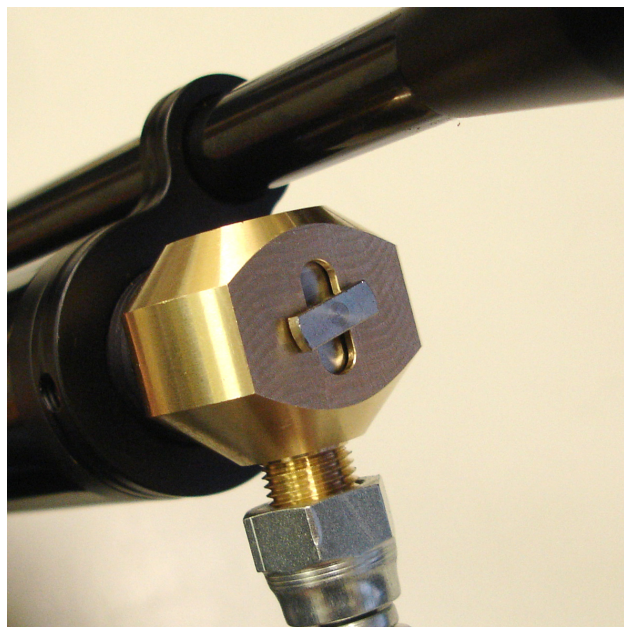
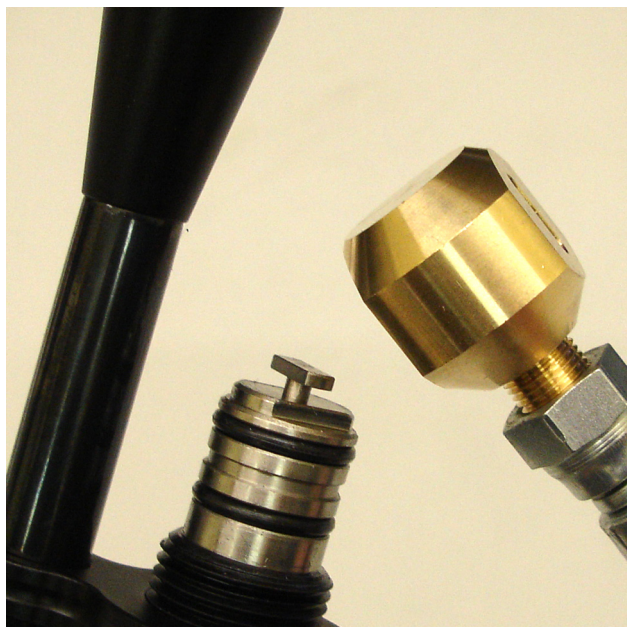
First the female part of the filling kit (this was supplied with the rifle) must be fitted to your filling equipment. The female part (S475) has a 1/8th BSP male thread that screws directly into the hose of your pump or bottle.

Next remove the dust cover from the end of your rifle. This is achieved by unscrewing the cover in an anti-clockwise direction.



Once the connector is exposed the female part of the filling kit can be placed on the male and press all the way on making sure that the 'O' rings on the male part are covered.

It is a wise precaution to hold the female part of the connector, during the filling procedure, as shown in the pictures below. This will ensure the female adaptor is located completely over the male part and prevent any accidental dislodging of the connector before you start to refill the cylinder.



Using hand pumps

The procedure for using hand pumps is the same as for bottle. It is more important to turn the female on the gun to lock it in place.

When using the pump it must be remembered that the first few pumps are filling the hose and NOT the gun. When the pressure in the hose equalizes to that in the gun, the gun will start to fill.

It can take some effort to fill the gun using a pump and we recommend using the pump to top up instead of filling from empty.

With the female in place the gun can now be filled.

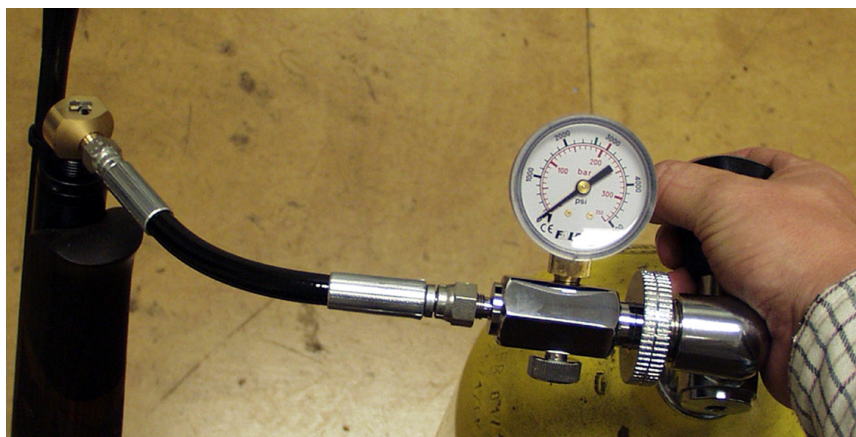
If the rifle is empty the mechanism will need to be cocked to allow the firing valve to close. If the rifle is not cocked when the bottle is opened or the pump used, the air will past the valve and exhaust through the barrel.

Check that the bleed valve on the filling equipment is closed (turn clockwise to close) then slowly open the main valve on bottle or start using the pump. The pressure in the hose will equalise and then the rifle will start to fill.

If you are filling your rifle from empty there may be some air exhausted through the barrel until the air pressure is sufficient to over come the firing valve spring this will happen at approximately 725psi (5MPa).

The filling pressure of the S510 XS is 3625psi (25MPa, 250bar). Filling to a higher pressure will not increase either power or number of shots. Over filling will lower the power and may cause irreparable damage to the cylinder.

Once the filling pressure has been reached, close the valve on the bottle or stop pumping, open the bleed valve on the filling kit (to vent the hose, if you do not vent the hose you will not be able to remove the female from the rifle). Now the female connector can be removed from the rifle and end cap (E483BK) can be replaced over the male connector ensuring not to overtighten.



The S510 Ultimate Sporter range of rifles are fitted with a pressure indicator mounted on the underside of the rifle just in front of the stock screw. This provides the user with a visual check on the amount of air remaining in the cylinder this indicator should not be used during the filling process as the gauge reaction speed has been slowed to prevent damage whilst filling. After filling the gauge can take several seconds to synchronize with the air in the cylinder. The gauge below shows a guns with just over 1450psi (10MPa,100 bar) of pressure. Although every gun is slightly different the recommended refill pressure for the S510 XS is between 1450 & 1595psi (10 & 11MPa, 100 & 110bar). **Always use the gauge on the filling kit.**

Please note: There is not needle on the ultimates sporter gauge, instead there are two zones, green and red. The line between to two replaces the needle on a traditional pressure gauge. More green means more air.



NOTE: On the front of the cylinder is an engraved warning reading....

READ MANUAL. MFP 3625psi (25MPa). MSP 3625psi (25MPa). DOM **/**/** ** . INSPECT BI-ANNUALLY.

MFP = Maximum Filling Pressure. The pressure is stated.
MSP = Maximum Safe Pressure. The pressure is stated.
DOM = Date of Manufacture. The date is stated.

WARNING NOTE CONCERNING 300 (4351psi)BAR BOTTLES.

WITH THE ADVENT OF THE 300 BAR (4351psi) BOTTLE IT SHOULD BE NOTED THAT CARE HAS TO BE TAKEN WHEN FILLING YOUR RIFLE.

THE FILLING PROCEDURE DESCRIBED IN THIS MANUAL MUST BE FOLLOWED TO AVOIDED DAMAGE TO THE RIFLE, PARTICULARLY THE SLOW OPENING OF THE VALVE ON THE BOTTLE. OPENING THE VALVE QUICKLY WILL ALLOW UP TO 300 BAR OF PRESSURE INTO THE CYLINDER AT ONCE, THIS COULD CAUSE SERIOUS PERSONAL INJURY OR IRREPARABLE DAMAGE TO THE CYLINDER.

MAINTENANCE

FIXINGS

Regularly check the tightness of all fixings. However do not be tempted to over tighten as some parts are made from aluminium and stripped threads may result. Stripped threads are not covered by the manufacturers warranty.

BARREL

For ultimate accuracy, clean and re-lube the barrel frequently. It is difficult to advise how often is best for every circumstance, but every 250 shots is not too often if the desire is to keep the barrel in the best possible condition.

The correct materials are very important. Air arms only uses products made by Napier. Listed below is the Napier product and a more generally available alternative. If possible use napier for the best results.

CLEANER:	‘NAPIER GUN CLEANER’, ALTERNATIVELY WHITE SPIRIT.
OIL:	‘NAPIER GUN OIL’, ALTERNATIVELY ‘3 IN 1’ OIL.
PULL-THROUGH PAD:	‘NAPIER RIFLE CLEAN’, ALTERNATIVELY SOFT COTTON CLOTH.
PULL-THROUGH LINE:	‘NAPIER PULL THROUGH KIT’, ALTERNATIVELY 20lb FISHING LINE

As a rule cleaners and oils intended for shotguns and small/full-bore weapons are not suitable.

1. Cut a piece of line three times the length of your barrel, fold in half and tie ends together. Remove silencer if fitted. Open loading bolt.
2. Feed un-knotted end down barrel from the muzzle end until folded end protrudes out 50mm.
3. Cut a 100mm length of ‘rifle clean’ or 100 x 50mm piece of cloth and pass it between the protruding loop. Spray the pad with ‘gun cleaner’ or white spirit, turn the rifle upside down and pull the line back through the barrel slowly.
4. Repeat steps 2&3 until the pad is clean.
5. Repeat steps 2&3 once more without any cleaner on the pad to dry the barrel.
6. Repeat steps 2&3 once more with the pad sprayed with ‘gun oil’ or 3 in 1 oil.

IMPORTANT : THE REASON FOR TURNING THE RIFLE UPSIDE DOWN IS TO PREVENT EXCESS CLEANER/OIL FROM PASSING DOWN THE TRANSFER PORT INTO THE FIRING VALVE CHAMBER.

LUBRICATION

Lubrication of the internal mechanism is not covered in this handbook. This is best performed by a competent gunsmith or the factory and in any case should not be required until the annual service.

Apply a small dab of grease or oil, on the two pivot points shown in the diagram, and work -in by moving the bolt forwards and backwards. Wipe off excessive grease. Preferred grease is ‘napier g95 gun grease’ On return from every shooting session, wipe all over the exterior with an oily rag to preserve the surface finish during storage.

A small drop of oil should be applied to the magazine O ring to keep it moist, and increase its life span.



STOCK ADJUSTMENTS

CHEEK PIECE

There are two adjustments available to the cheek piece. The whole assembly can be raised or lower by loosening the screw in the side on the butt stock using a 4mm allen. This allow the cheek piece to be positions at the perfect height for the shooter and scope they are using.

The cheek piece is also mounted on a ball joint at the top of the shaft. Loosening the two screws (access through the slots in the side of the cheek piece) allows the piece to be adjusted by minuet amounts to make the cheek piece as comfortable and exact as possible. Do not over tighten the screws.



SLING STUDS

The Ultimate sporter come fitted with a set of slings studs mounted to the butt stock and fore-end rail. The rail mount can be positioned anywhere along the rail length. To adjust the stud simply loosen the M6 screw inside the stud using a 3mm allen key and slide the stud into the required location then re-tigthen the screw. **Test the mount to ensure the screw is tighten enough to hold the weight of the rifle before mounting a sling. If the stud is too loose it may slide out of the rail during use.**

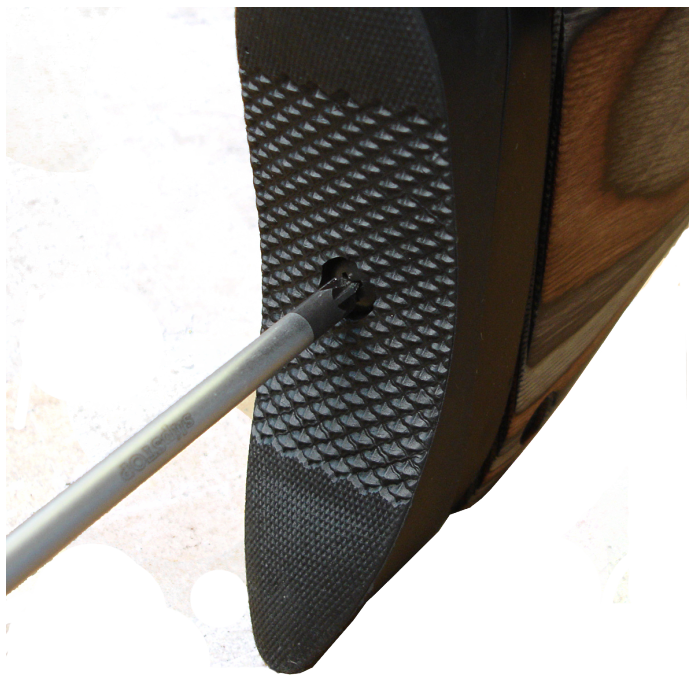


BUTT PAD

The butt pad has two adjustments available.

It can be adjusted to allow up and down movement for a higher or lower head position. This is done by loosening the screw in the middle of the pad and sliding into place then retightening the screw.

The second adjustment allow the length of the butt to be extended, this is achieved by adding spacers between the butt pad and the stock. With the pad slid up and down the screws that fix it to the wood can be accessed to allow extra spacers to be fitted. Please note that depending on the number or size of spacers required you may have to obtain longer screws.



REMOVING THE STOCK

To remove the stock from the action first ensure the gun is not cocked or loaded. Using a 5mm allen unscrew the bolt holding the stock to the action. This bolt is situated between the trigger guard and the gauge on the underside of the rifle. Remove the bolt and washer to allow the action to lift out of the stock.

When refitting take care not to over tighten the bolt and crush into the wood. Make sure the washer is present to avoid damage.

SAFETY

You and others with you should always wear shooting glasses to protect your eyes.

Always aim your air rifle in a SAFE DIRECTION. When you are sure of your target and backstop and the area around the target is clear, take the air rifle OFF SAFE and squeeze the trigger to fire.

Do not shoot at hard surfaces or at the surface of water. The pellet may bounce off or ricochet and hit someone or something you had not intended to hit.

Always choose your target carefully. It is best to shoot at paper bullseye targets attached to a safe backstop. Your backstop should be checked for wear before and after each use. Replace your backstop if the surface is worn or damaged or if a ricochet occurs.

Your rifle is suited for indoor and outdoor use. Always remember to place your target carefully. THINK about what you will hit if you miss the target.

Do not attempt to disassemble or tamper with your air rifle. Contact Air Venturi at 216-292-2570 for repair.

Do not put the air rifle away while it is loaded or cocked.

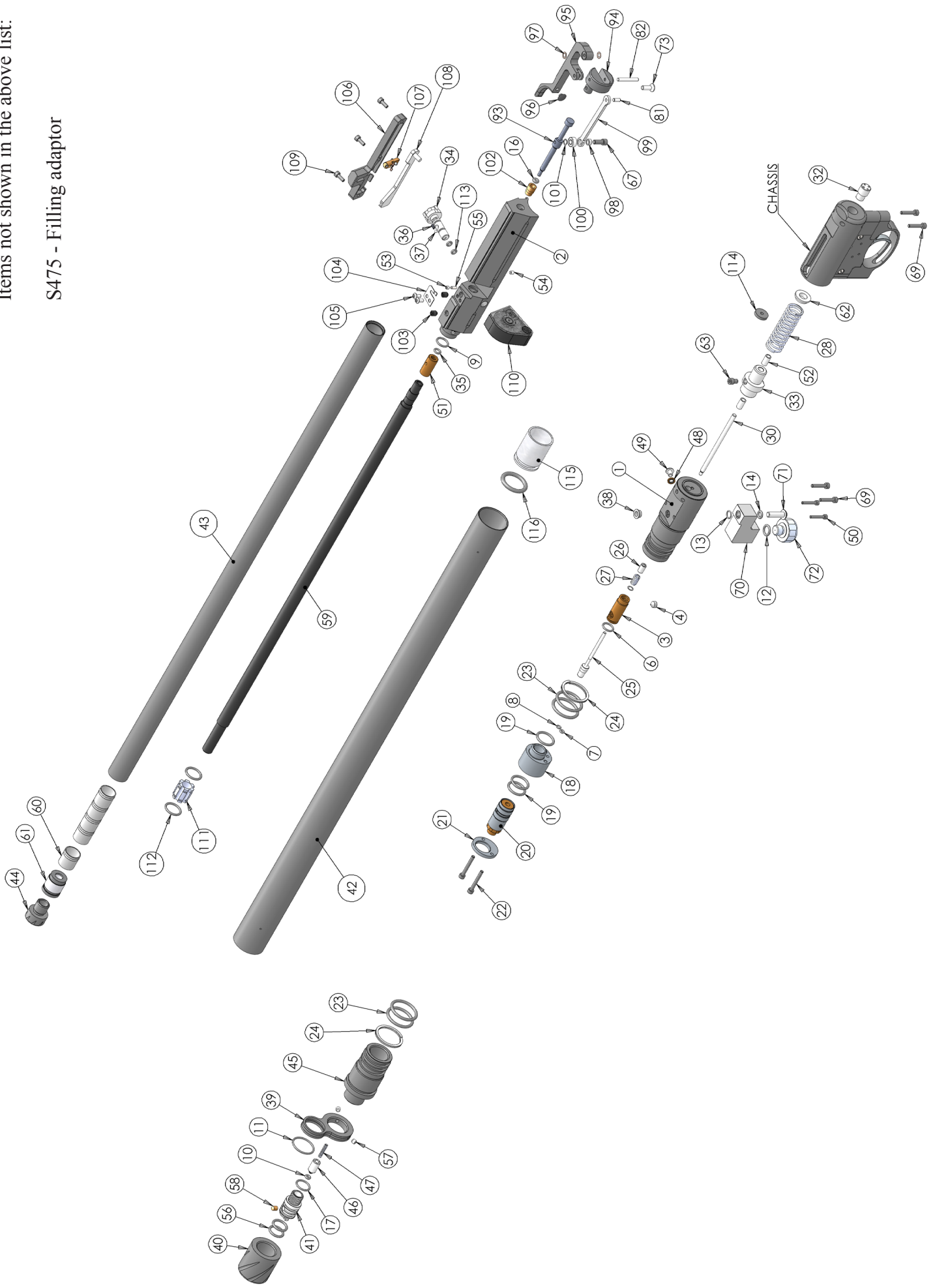
REPAIR SERVICE

**If your rifle needs to be repaired,
contact Air Venturi at 216-292-2570.**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	ITEM NO.	PART NUMBER	DESCRIPTION	QTY	ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	S507-R	FIRING VALVE BODY	1	36	S522	COMPRESSION SPRING	1	73	S322	M4 X 12 CSK SKT	1
2	S500H-R	BOLT HOUSING	1	37	S528	7/64" BALL BEARING	1	81	E127	3 X 7.8 ROLLER	1
3	S932-HP	VALVE SEAT - HP	1	38	S610-HP-R	TRANSFER PORT BUSH HP	1	82	E144	3 X 23.8 ROLLER	1
4	S934	M6 X 6 SKT SET CONE PT	1	39	S382H-SL	FRONT CLAMP	1	94	S130	COCKING ARM PIVOT BLOCK	1
6	FC101	9 X 1.5 NBR70	1	40	E483BK	END CAP	1	95	S125	COCKING ARM	1
7	FC303	2 X 1.5 NBR70	1	41	S472	MALE CONNECTOR	1	96	TX227	BUFFER	1
8	CZ014	3 X 1 NBR70	1	42	S950L-R	CYLINDER LONG	1	97	E160	M3 CRINKLE WASHER	2
9	S337	10 X 1.5 NBR 70	1	43	S600H-SL	BARREL TUBE - EXTRA SL	1	98	S542	SIDE LEVER BUSH	1
10	S327	BS005 NBR90	1	44	FP134	THREAD PROTECTOR	1	99	S264	COCKING LINK	1
11	S484H	20 X 1.5 NBR70	1	45	S491-R	FIRING VALVE BODY	1	100	S541	LOADING BOLT BEARING	1
12	RN219-9	BS011 NBR70	1	46	S473	FILLING VALVE	1	101	S541-1	BEARING SHIM	1
13	S427	6 X 1 NBR70	1	47	S319	COMPRESSION SPRING	1		S501-SL	BOLT HSE BUSH - .22	
14	S536	BS008 NBR70	1	48	S912	BONDED SEAL	1	102	S502 - SL	BOLT HSE BUSH - .177	1
16	S140	4 X 2 NBR70 9.22 & .25)	1	49	S928	M4 X 6 SKT BTN	1		S504-SL	BOLT HSE BUSH - .25	
	S142	BS102 NBR70 (.177)		50	S946	M2.5 X 16 SKT CAP	2	103	RN113	M5 X 6 SKT SET CUP PT	2
17	S484	12 X 1.5 NBR70	1	51	S402AH-R	BARREL SEAL HOLDER HP - .22	1	104	S505	MAGAZINE RETAINING CLIP	1
18	S936-25	REGULATOR HOUSING - LARGE	1	52	S402BH-R	BARREL SEAL HOLDER HP -.177	1	105	RN193	M3 X 6 SKT BTN	2
	S936	REGULATOR HOUSING - SMALL		52	E222	BUSH	2	106	S550-R	SIDE PLATE ADJ HP	1
19	S342	15 X 2 NBR90	3	53	TX239	M3 X 3 SKT SET FT PT	1	107	S515A	INDEXING POST ASSY	1
20	S930A-150	REGULATOR	1	54	S303	M3 X 3 SKT SET FT PT	1	108	S560	CAM PLATE	1
21	S938	REGULATOR RETAINER	1	55	S517	3/32 x 1/4 DIN6325	1	109	S565	M3 X 8 SKT CAP	3
22	S346	M3 X 50 SKT CAP (.25)	2	56	S474	12 X 2 NBR70	2		S555A-US	MAGAZINE - .22 (10 SHOT)	
	S920-7	M3 X 25 SKT CAP (.177 & .22)		57	TX228	M4 X 4 SKT SET FT PT	2		S555B-US	MAGAZINE - .177 (10 SHOT)	
23	S836	23 X 2.5 NBR90	4	58	S471	SINTERED FILTER	1	110	S555C-US	MAGAZINE - .25 (10 SHOT)	2
24	S837	23 X 2.5 BACKUP RING	2		S401A-BO	BARREL .22			S554-US	MAGAZINE - .25 (5 SHOT)	
25	S370H-R	FIRING VALVE HP	1	59	S401B-BO	BARREL .177	1		S557-US	MAGAZINE - .22 (5 SHOT)	
26	S940	VALVE STEM NUT	1		S401J-BO	BARREL .25			S558-US	MAGAZINE - .177 (5 SHOT)	
27	S942	COMPRESSION SPRING	1	60	PS224	BAFFLE	5	111	S600-3	BARREL TUBE SUPPORT	1
28	S331	COMPRESSION SPRING	1	61	S133	SHROUD INSERT	1	112	RN219-7	BS012 NBR70	2
30	S340-R	GUIDE ROD	1	62	S530	MAIN SPRING GUIDE	1	113	E880-6	BS0031-16 NBR70	2
32	S944	GUIDE ROD NUT	1	63	S356H	M4 X 5 MODIFIED	1	114	S952	SPRING BAFFLE	1
33	S520H-R	STRIKER HP	1	67	S355H-SL	M4 X 12 MODIFIED	1	115	S143	DAMPER	1
34	S508-R	POWER ADJUSTER	1	69	RN102A	M3 X 16 SKT CAP	4	116	FP205	BS211 NBR70	1
	FP121	BARREL SEAL - .177		70	S640AT	GAUGE MOUNT	1				
35	S538	BARREL SEAL - .22	1	71	JT416	M5 X 18 SKT BTN	1				
	FP122	BARREL SEAL - .25		72	S645-2	INDICATOR GAUGE	1				

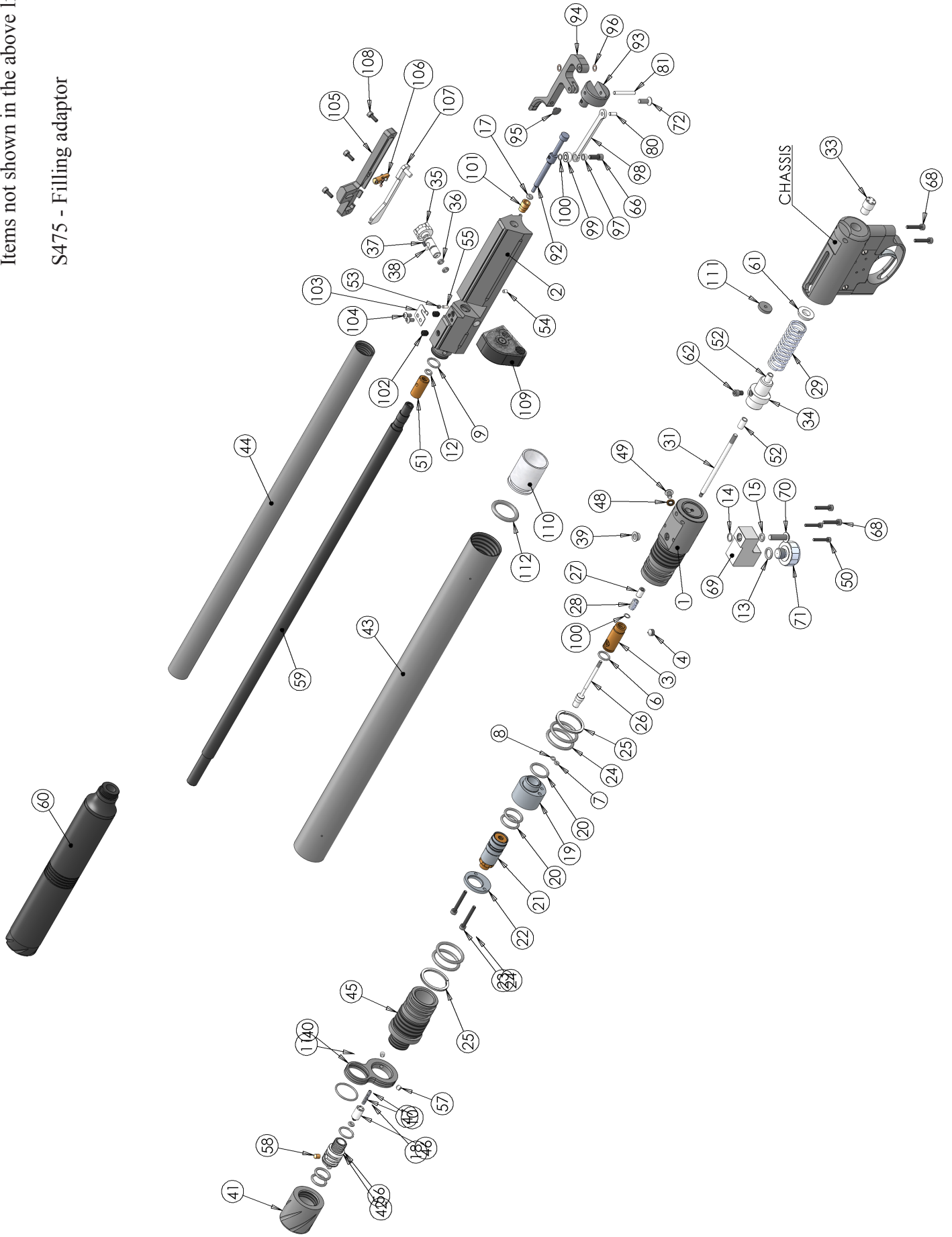
Items not shown in the above list:

S475 - Filling adaptor

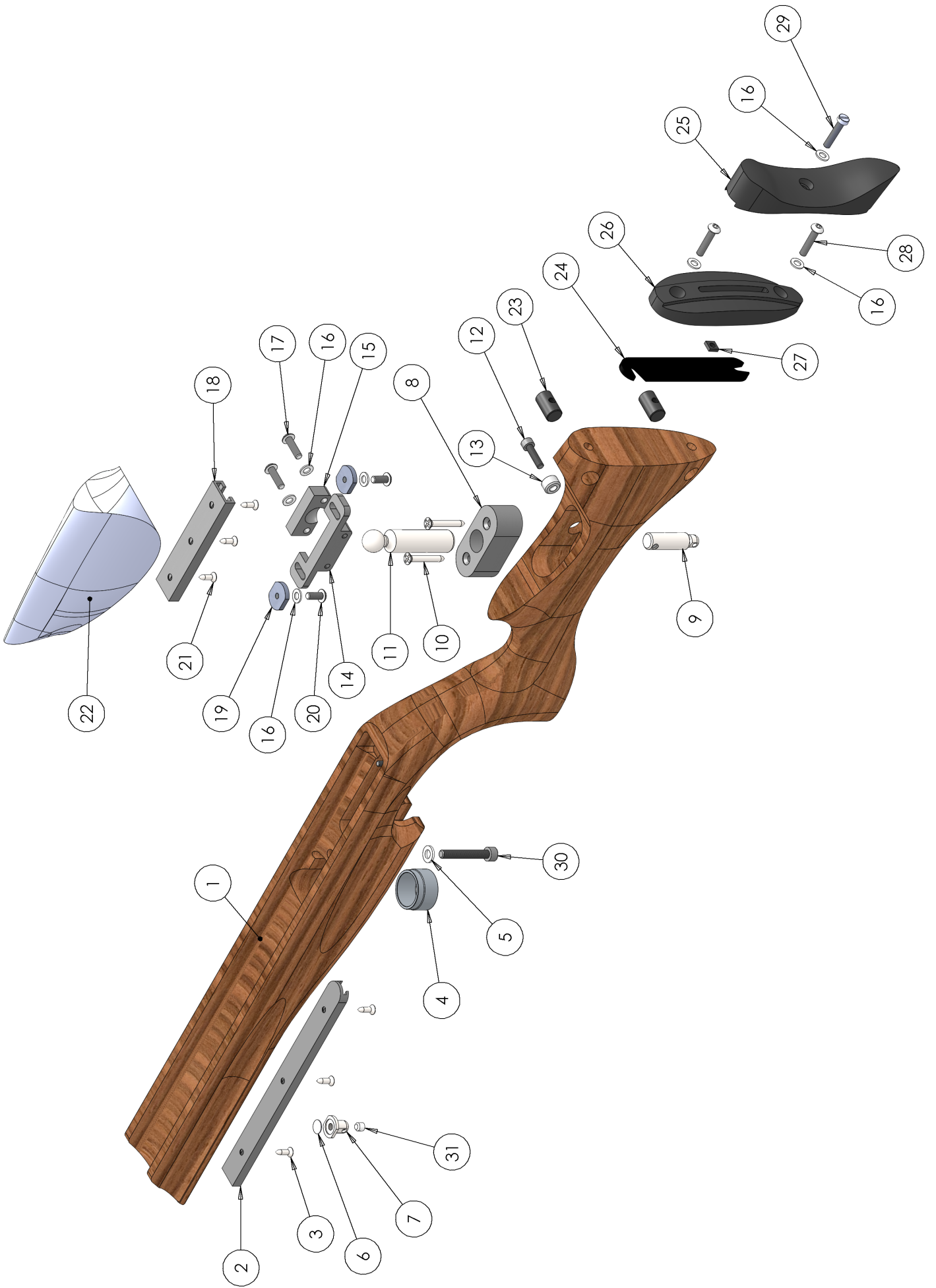


Items not shown in the above list:

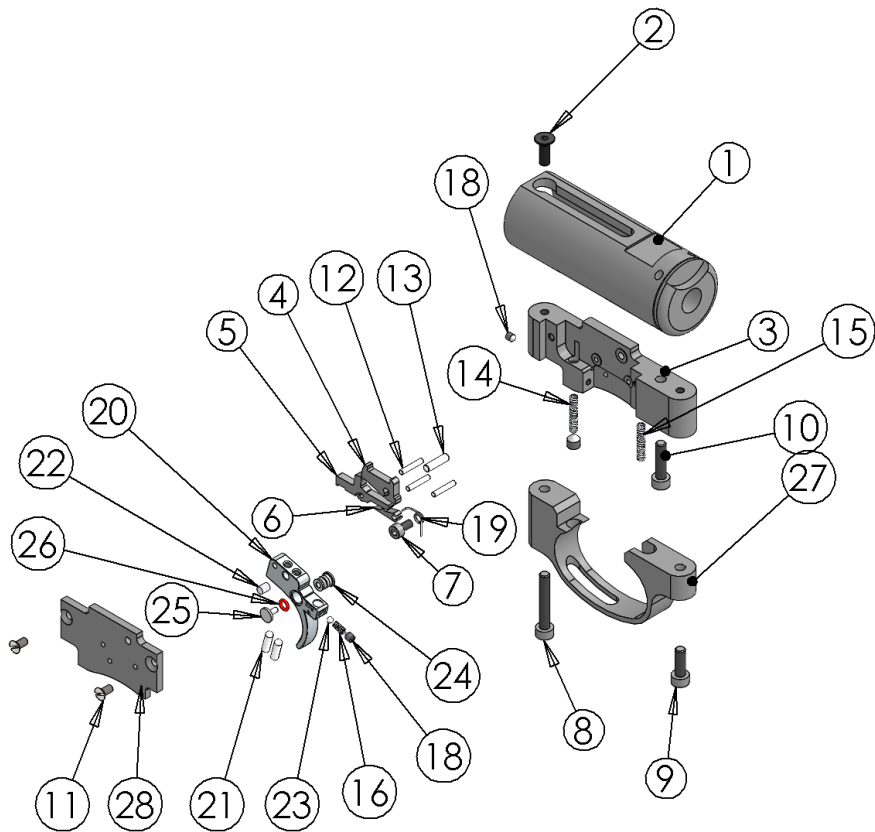
S475 - Filling adaptor



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	S676-PT1	MAIN STOCK - LAMINATE	1	16	S770-PT2	CHEEK PIECE TOP CLAMP - PT 2	1
	S676-BK	MAIN STOCK - BLACK		17	JT416	M5 X 18 SKT BTN	3
	S676-W	MAIN STOCK - WALNUT		18	E335	CHEEK PIECE RAIL	1
2	S745	RAIL	1	E340	RAIL NUT	2	
3	KS445	No.6 x 0.50	3	RN430	M5 X 12 SKT BTN	2	
4	S640R-BK	STOCK RING	1	S750	No.6 x 0.50	3	
5	S655	M6 WASHER	1	S676-PT2	CHEEK PIECE - LAMINATE	1	
6	S760-PT2	FRONT SLING MOUNT - PT2	1	S676CP-BK	CHEEK PEICE - BLACK		
7	S760-PT1	FRONT SLING MOUNT - PT1	1	CZ078	SLEEVE NUT	2	
8	S775	CHEEK PIECE PILLAR BOTTOM PLATE	1	CZ028-1	4mm SPACER	1	
9	S755	REAR SLING MOUNT	1	CZ080-1	BUTT PAD	1	
10	S780	No.8 x 1.25	2	CZ080-2	BUTTPAD BACKING PLATE	1	
11	S740	CHEEK PIECE PILLAR	1	CZ080-4	LOCKING PLATE	1	
12	PS418	M5 X 20 SKT CAP	1	RN431	M5 WASHER	7	
13	S625	M6 X 40 SKT CAP	1	S642	M5 X 25 SKT BTN	2	
14	E425	ADJUSTER LOCKING BUSH	1	S641	M5 X 25 SLOTTED CH HD	1	
15	S770-PT1	CHEEK PIECE TOP CLAMP - PT1	1	S765	M6 X 6 SKT SET FT PT	1	



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.	ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	S310-SL-R	STRIKER BODY	1	15	S311	COMPRESSION SPRING	1
2	S322	M4 X 12 CSK SKT	1	16	S522	COMPRESSION SPRING	1
3	S313	TRIGGER CHASSIS	1	17	TX381	M5 X 6 SKT SET CONE PT TUFF LOC	1
4	S320-2	TOP SEAR	1	18	S524	M3 X 4 SKT SET CONE PT	2
5	S325-2	MIDDLE SEAR	1	19	S495	TOP SEAR SPRING	1
6	S321-2	BOTTOM SEAR	1	20	S420S-2	TRIGGER BLADE	1
7	S496	M3 X 6 SKT CAP	1	21	S421	M3 X 10 SKT SET FT PT	2
8	S316	M4 X 25 SKT CAP	1	22	TX432	ADJUSTER SCREW LOCKING PAD	1
9	TX460	M4 X 12 SKT CAP	1	23	S523	3/32" BALL BEARING	1
10	TX236	M4 X 16 SKT CAP	1	24	S521-2A	SAFETY BUTTON - PART ONE	1
11	RN106	M3 X 6 CSK SLOT	2	25	S521-2B	SAFETY BUTTON - PART TWO	1
12	S326	2 X 11.8 ROLLER	3	26	S526	3 X 1 SIR70	1
13	TX398	3 X 11.8 ROLLER	1	27	S314	TRIGGER GUARD	1
14	S319	COMPRESSION SPRING	1	28	S318	COVER PLATE	1



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