

S310



S310

USERS HANDBOOK

THIS HANDBOOK REFERS TO ALL S300 MODELS

CONGRATULATIONS ---- You are now the owner of a S310

Treated with the care that any precision instrument warrants, this rifle will give you good sport and reliable service.

***PLEASE READ THIS HANDBOOK BEFORE USING YOUR RIFLE,
IT CONTAINS IMPORTANT SAFETY & MAINTENANCE INFORMATION***

*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.*

****** THE SAFETY CODE ******

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

ALWAYS ---- REMEMBER AND APPLY THE SAFETY CODE

THE AIR CYLINDER IS A HIGHLY PRESSURISED UNIT AND MUST NOT BE MODIFIED OR MACHINES IN ANY WAY. DO NOT ATTEMPT TO PRESSURISE IF THERE ARE ANY LARGE SURFACE ABRASIONS OR DENTS. DO NOT STORE THE RIFLE IN PLACES SUBJECT TO HIGH TEMPERATURES .I.E. CLOSE TO FIRES OR BOILERS. DO NOT ATTEMPT TO DISMANTLE WHEN PRESSURISED, SEVERE PERSONAL INJURY MAY RESULT. DO NOT PRESSURISE BEYOND THE STATED MAXIMUM FILLING PRESSURE. ONLY USE CLEAN FILTERED COMPRESSED AIR. NEVER USE ANY OTHER GAS, PARTICULARLY INDUSTRIAL OR WELDING GASES SUCH AS OXYGEN, CARBON DIOXIDE, ACETYLENE, HYDROGEN, NITROGEN, ARGON ETC.

THIS RIFLE HAS BEEN SET UP AND TESTED ON AIR ARMS PELLETS (SEE PAGE 9).

IF ANY OTHER MAKE OR TYPE OF PELLET IS USED, THE RIFLE MUST BE RE-TESTED TO ENSURE THE MUZZLE ENERGY IS WITHIN THE LEGAL LIMIT.

WARNING - UNAUTHORISED DISASSEMBLY OF YOUR RIFLE WILL INVALIDATE THE WARRANTY.

VERY IMPORTANT INFORMATION, PLEASE READ

VELOCITY, MUZZLE ENERGY AND THE LEGAL USE OF AIR RIFLES.

The current laws on the ownership and use of air rifles make it very difficult for manufacturers to meet the needs of both the shooter and legislation when it comes to performance.

New or different pellets, lubricants and after-market services can alter the velocity of an air rifle significantly, long after the rifle has left the factory. Even the running-in process associated with any new product can alter the performance. These variables result in removal of any control by the manufacturer.

Because of this, AIR ARMS has adopted the principle that all air rifles that it produces will be set up on one brand and type of pellet. This pellet will be made known to the user of the rifle through the User Handbook. The choice of pellet is made on the basis of a compromise between quality, efficiency, price and availability and should be suitable for most applications. Whether the set up is changed or not, it is advisable to check the performance regularly, particularly after the running-in period.

Our rifles can be set up to suit any pellet that is or will come onto the market, however AIR ARMS will not set up a rifle to use an inefficient pellet that will knowingly result in over power on other pellets. If the owner/user decides to alter the set up for this purpose they must realise that the responsibility to check conformity with all relevant legislation rests on their shoulders.

It is a very serious offence to be in possession of an over powered air rifle and, if conviction results, can mean confiscation, a heavy fine, or imprisonment even a combination of all three.

AIR ARMS rifles are currently set up at the factory to produce between 11.3 and 11.5ft/lbs with the pellet specified below. This is to allow for any slight increase in performance after the running-in period, approximately 2000 shots. Please refer to the pellet table on back page for the make and type of pellet used to test and set up your rifle.

CHECKING PERFORMANCE

1. Use a reliable chronograph to check the pellet velocity. To use the formula below the reading must be in feet per second (FPS).
2. Use fine measurement scales to check the pellet weight. Note that the scales resolution must be to 100ths of a gram (0.00) or better. Alternatively find out the pellet weight from the supplier or manufacturer. To use the formula below the weight must be in grains. To change from grams to grains multiply by 15.432. i.e. 0.69 grams x 15.432 = 10.65 grains.
3. Use the formula $(FPS \times FPS \times Weight) / 450240 = \text{Muzzle Energy}$. i.e. $(700 \times 700 \times 10.65) = 5218500$ divide by 450240 = 11.59ft/lbs.

The current legal limit is 12ft/lbs.

If the rifle is not performing as it should, get advise from the supplying dealer or AIR ARMS.

CAUTION: THIS AIR RIFLE IS NOT A TOY AND MAY CAUSE DEATH OR SERIOUS INJURY IF MISUSED OR USED CARELESSLY. READ ALL INSTRUCTIONS BEFORE USING. THIS AIR WEAPON REQUIRES ADULT SUPERVISION IF THE USER IS UNDER 14 YEARS OLD. THE SUPERVISOR MUST BE AT LEAST 21 YEARS OLD. THE PURCHASER AND USER HAVE THE RESPONSIBILITY TO CONFORM TO ALL LAWS CONCERNING THE USE AND OWNERSHIP OF THIS AIR WEAPON.

******* WARRANTY *******

THIS PRODUCT IS WARRANTED TO THE RETAIL CONSUMER FOR 12 MONTHS FROM DATE OF PURCHASE AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP AND IS TRANSFERABLE. PROOF OF PURCHASE IS REQUIRED TO RECEIVE WARRANTY REPAIRS. RETAIN YOUR INVOICE AND RETURN THE CARD STAMPED OR SIGNED BY THE RETAILER.

WHAT IS COVERED

REPLACEMENT PARTS & LABOUR, RETURN TRANSPORTATION TO THE CONSUMER (MAINLAND UK ONLY).

WHAT IS NOT COVERED

TRANSPORTATION FROM THE CONSUMER TO AIR ARMS.
DAMAGE CAUSED BY MISUSE, ABUSE, LACK OF ROUTINE MAINTENANCE OR DIS-ASSEMBLY.
PARTS SUBJECT TO NORMAL WEAR & TEAR.
ANY OTHER EXPENSE INCURRED BY THE CONSUMER.
RETURN TRANSPORTATION TO CONSUMER OUTSIDE UK MAINLAND
NO WARRANTY IS IMPLIED AS TO THE FITNESS FOR ANY PARTICULAR PURPOSE

***** IMPORTANT INFORMATION *****

DO NOT STORE THE RIFLE IN A DAMP PLACE SUCH AS A GARDEN SHED OR GARAGE.

DO NOT STORE THE RIFLE IN A PLASTIC OR PVC TYPE GUN BAG.

NEVER LEAVE IT IN A COCKED CONDITION.

ALWAYS ENSURE THE LOADING BOLT IS FULLY CLOSED BEFORE FIRING.

GENERAL MAINTENANCE

REGULARLY CHECK THE TIGHTNESS OF ALL FIXINGS. DO NOT OVER-TIGHTEN, SOME PARTS ARE MADE FROM ALUMINIUM, STRIPPED THREADS WILL RESULT FROM OVER-TIGHTENING. PERIODICALLY CLEAN THE BARREL WITH A GOOD QUALITY CLEANER AND PULL THROUGH.

GENERAL LUBRICATION

REGULARLY APPLY A FEW DROPS OF GUN OIL TO THE LOADING BOLT:

IT IS ESSENTIAL TO WIPE OVER THE EXTERNAL SURFACES OF THE RIFLE WITH A SOFT OILY RAG TO MAINTAIN THE HIGH SURFACE FINISH. FAILURE TO DO THIS WILL RESULT IN SURFACE CORROSION.

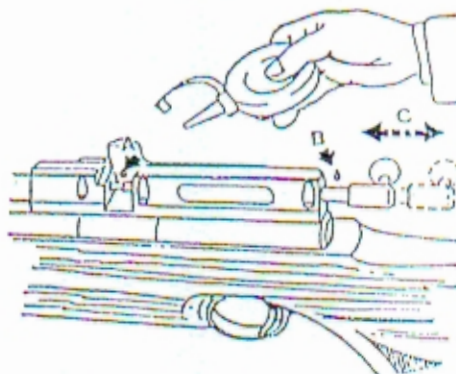
REGULAR INTERNAL LUBRICATION IS NOT NECESSARY. A SMALL AMOUNT OF GREASE IS APPLIED ON ASSEMBLY. RE-LUBRICATION WILL BE UNNECESSARY FOR A CONSIDERABLE TIME. IF THE OPERATION OF THE RIFLE BECOMES ROUGH, STIFF OR NOISY THIS COULD BE AN INDICATION THAT LUBRICATION IS REQUIRED AND SHOULD BE INVESTIGATED.

SILICONE OIL SHOULD NEVER BE USED ON MOVING PARTS.

DO NOT ALLOW EXCESS LUBRICATION TO PENETRATE TO THE STRIKER ROD (S340) AS THIS WILL EFFECT THE CONSISTENCY.

IT IS ADVISABLE TO HAVE THIS RIFLE SERVICED BY AIR ARMS OR A COMPETENT GUNSMITH. THE FREQUENCY OF SERVICES IS DETERMINED BY THE REGULARITY OF USE, BUT IN ALL CASES SHOULD BE AT LEAST ONCE A YEAR.

APPLY A DROP OF OIL AT THE POSITIONS 'A' & 'B'. MOVE THE BOLT BACKWARDS AND FORWARD TO SPREAD THE OIL ALONG THE BOLT STEM.

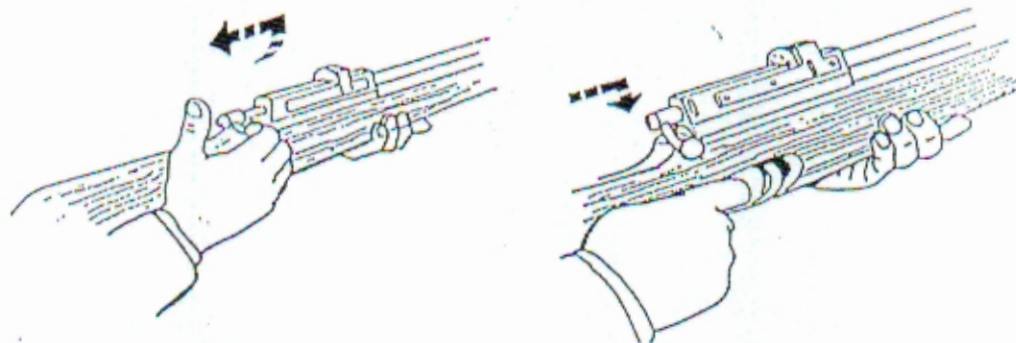


OPERATING INSTRUCTIONS

TO COCK THE RIFLE, HOLD SECURELY IN ONE HAND AND WITH THE OTHER TURN THE LOADING BOLT AND PULL BACKWARDS UNTIL THE TRIGGER MECHANISM ENGAGES.

NOTE! IT IS VERY IMPORTANT THAT THE LOADING BOLT IS PULLED RIGHT 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 BOLT IS NOT PULLED BACK FULLY.

IF YOU FIND THE MECHANISM HAS NOT COCKED COMPLETELY AND THE MAGAZINE HAS INDEXED, RE-COCK, BUT BEFORE CLOSING THE BOLT REMOVE THE MAGAZINE, 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 TWO PELLETS INTO THE BARREL.

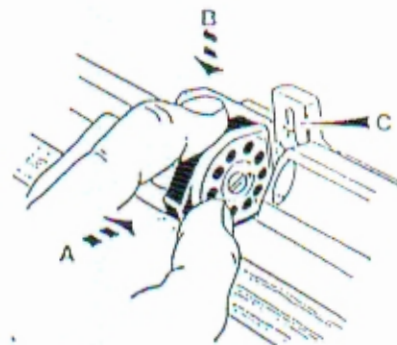
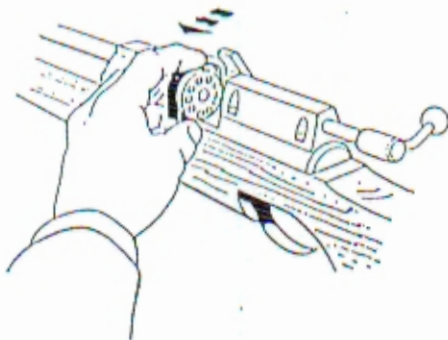


THE S300 HAS BEEN DESIGNED TO BE AMBIDEXTROUS AND CAN BE CHANGED FROM RIGHT TO LEFT HAND OPERATION WITHOUT THE NEED TO PURCHASE ANY SPECIAL PARTS, HOWEVER THE MECHANISM NEEDS TO BE DISMANTLED TO ENABLE CONVERSION AND IT IS ADVISED TO HAVE THIS WORK DONE BY AIR ARMS OR A COMPETENT GUNSMITH.

REMOVAL/REPLACEMENT OF MAGAZINE

REMOVAL

FULLY COCK THE RIFLE, GRIP MAGAZINE AND SLIDE OUT OF THE BOLT HOUSING. ONLY USE HORIZONTAL MOTION, DO NOT ATTEMPT TO LIFT THE MAGAZINE OUT VERTICALLY AS DAMAGE TO THE INDEXING SPRING 'C' MAY RESULT.

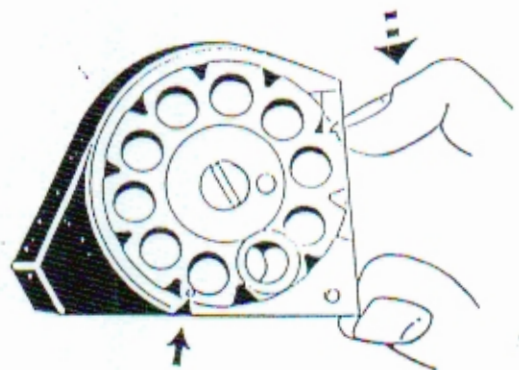
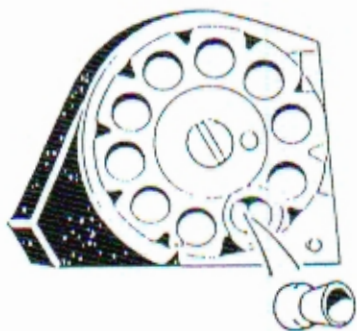


REPLACEMENT

WITH THE RIFLE STILL COCKED AND THE BOLT FULLY RETRACTED, SLIDE THE MAGAZINE INTO THE BOLT HOUSING HORIZONTALLY, AS IN ARROW 'A', APPLYING A SMALL AMOUNT OF DOWNWARD PRESSURE, AS IN ARROW 'B', TO MAINTAIN CONTACT BETWEEN BOTTOM FACE OF MAGAZINE AND LOCATION FACE ON BOLT HOUSING. TAKE CARE NOT TO DAMAGE THE INDEXING SPRING 'C'.

LOADING MAGAZINE

HOLD MAGAZINE CLEAR FACE UP AND DROP A PELLET INTO THE EMPTY CHAMBER, MANUALLY INDEX TO THE NEXT EMPTY POSITION AND REPEAT UNTIL THE MAGAZINE IS FULL. FINALLY LINE UP THE WHITE DOT WITH THE 'V' NOTCH IN THE CLEAR COVE.



ALTHOUGH THE ALIGNMENT OF THE DOT AND 'V' NOTCH IS NOT NECESSARY FOR THE CORRECT OPERATION OF THE RIFLE/MAGAZINE, IT WILL GIVE AN INDICATION OF WHEN THE LAST PELLET HAS BEEN LOADED INTO THE BREECH. AS THE PELLET CARRIER ROTATES THE DOT APPROACHES THE LEFT HAND FACE OF THE BOLT HOUSING. WHEN THE DOT DISAPPEARS INTO THE BOLT HOUSING THE MAGAZINE IS EMPTY.

TRIGGER ADJUSTMENT

THE TRIGGER IS A TWO STAGE UNIT WITH ADJUSTMENT ON BOTH STAGES. BE AWARE THAT THE ADJUSTMENT OF ONE SCREW WILL EFFECT THE ADJUSTMENT OF THE OTHER AND THE TRIGGER WILL ONLY WORK CORRECTLY IF THE BALANCE BETWEEN THE TWO IS MAINTAINED.

IF YOU HAVE NO EXPERIENCE OF ADJUSTING TWO STAGE TRIGGERS SEEK GUIDANCE OR LEAVE THE TRIGGER AS SET BY THE FACTORY.

INCORRECT ADJUSTMENT CAN MAKE THE RIFLE UNSAFE.

THERE ARE THREE ADJUSTING SCREWS.

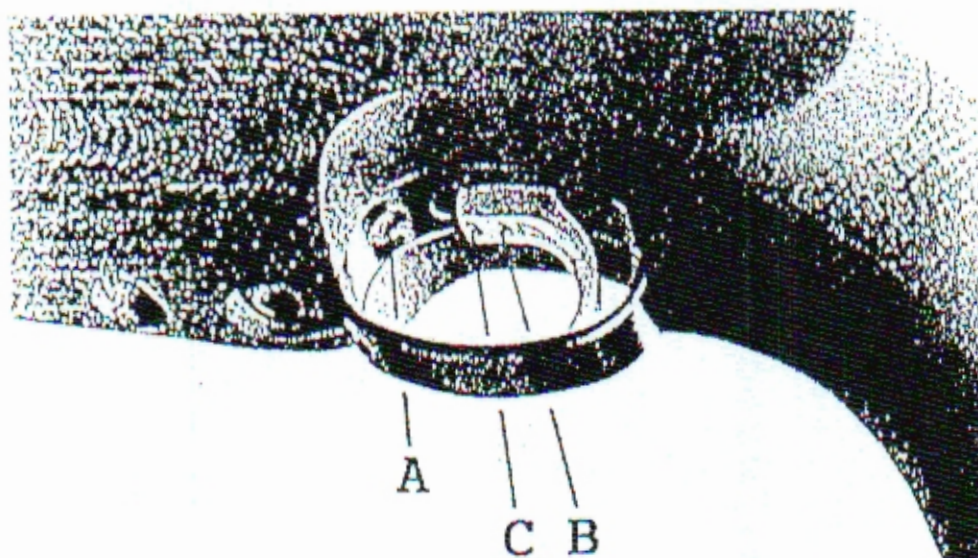
THE WEIGHT OF PULL SCREW (A) IS UNDER THE FRONT OF THE TRIGGER GUARD. CLOCKWISE MOVEMENT INCREASES THE WEIGHT OF PULL.

THE OTHER ADJUSTER SCREWS ARE IN THE TRIGGER BLADE.

SCREW (B) ADJUSTS THE EXACT LET-OFF POINT, CLOCKWISE ADJUSTMENT DECREASES THE LET-OFF POINT.

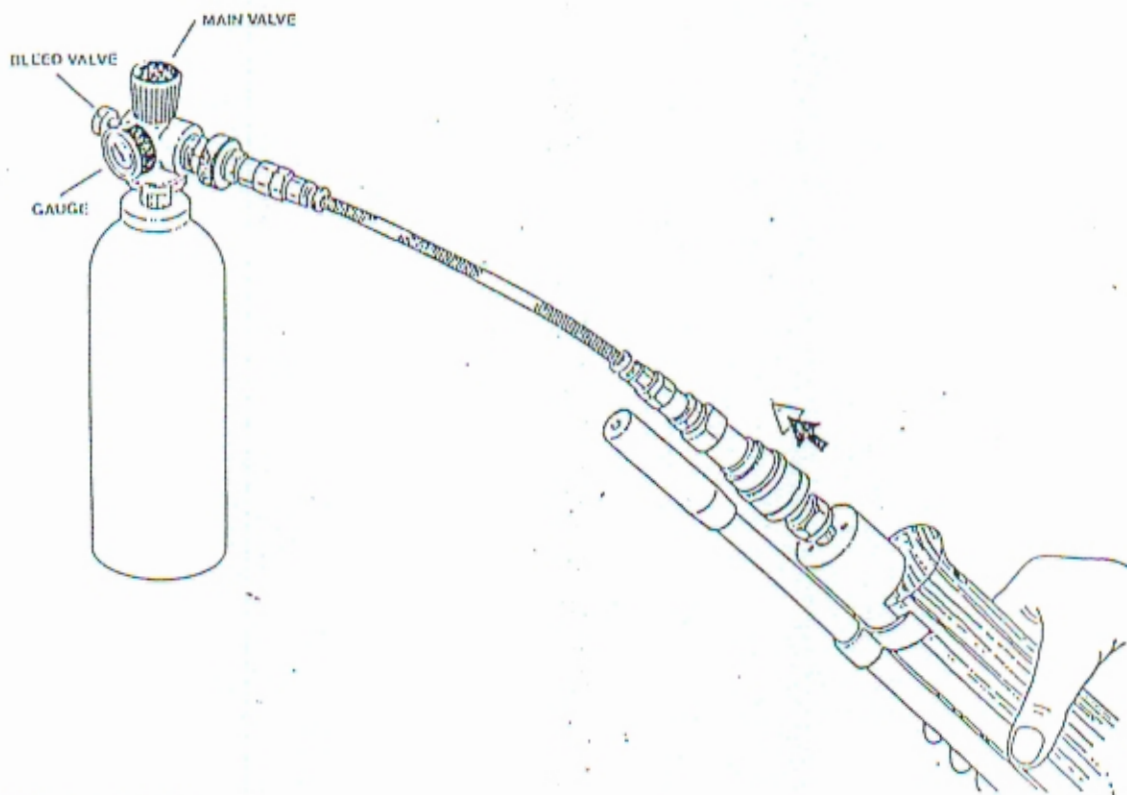
SCREW (C) ADJUSTS THE LENGTH OF THE FIRST STAGE TRAVEL, CLOCKWISE MOVEMENT DECREASES THE LENGTH OF TRAVEL.

REMEMBER THAT SMALL ADJUSTMENTS WILL MAKE A NOTICEABLE CHANGE TO THE OPERATION OF THE TRIGGER.



FILLING INSTRUCTIONS

- THE RIFLE MUST BE COCKED PRIOR TO FILLING.
- REMOVE THE END CAP FROM THE FRONT OF THE RIFLE. THE CAP IS REMOVED BY PULLING IN LINE WITH BARREL.
- PULL THE OPERATING RING BACK ON THE SNAP CONNECTOR FITTED TO THE END OF THE HOSE AND PUSH ONTO THE MALE CONNECTOR ON THE RIFLE.
- CHECK THAT THE BLEED VALVE IS SHUT ON THE MAIN VALVE (TURN CLOCKWISE TO SHUT).
- SLOWLY OPEN MAIN VALVE (ANTI-CLOCKWISE) AND OBSERVE GAGE. WHEN GAGE INDICATES REQUIRED PRESSURE, SEE BELOW *, CLOSE MAIN VALVE. (NOTE! AT LEAST 50 BAR PRESSURE IS REQUIRED BEFORE THE VALVE INSIDE THE RIFLE SEALS, AIR MAY BE HEARD TO ESCAPE FROM THE BARREL UNTIL THIS PRESSURE IS REACHED.)
- OPEN BLEED VALVE (ANTI-CLOCKWISE) TO RELEASE AIR IN FILLING HOSE.
- RELEASE SNAP CONNECTOR BY PULLING OPERATING RING BACKWARDS AND DISENGAGING.
- REPLACE END CAP.



FILLING PRESSURE

4.5mm/.177" cal 190 BAR

5.5mm/.22" cal 180 BAR

SERIES 310 PARTS LIST

PART No.	PART DESCRIPTION	PART No.	PART DESCRIPTION
RN170	TRIGGER STOP SCREW	S422	LOCKING PAD
RN193	FIXING SCREW	S425	BOLT HANDING PIN
TX239	FIXING SCREW	S427	BOLT HOUSING/BODY SEAL
S301	BOLT HOUSING SCREW	S430	CHASSIS COVER SCREW
S302	TRANSFER POINT ADJUSTER	S450	STOCK - STD BEECH
S303	LOCKING SCREW	S450W	STOCK - WALNUT
S306	FIRING VALVE SPRING	S451	STOCK - WALNUT THUMB-HOLE
S307	AIR METERING SCREW	S455	FRONT STOCK SCREW
S310	STRIKER BODY	S456	REAR STOCK SCREW
S311	CHASSIS BLOCK SCREW	S456A	STOCK SCREW WASHER
S312	CHASSIS BLOCK	S459	MUZZLE END
S315	TRIGGER GUARD	S465	BONDED SEAL
S316	FIXING SCREW (FRONT)	S470	MALE SNAP CONNECTOR
S317	FIXING SCREW (REAR)	S475	END CAP RETAINER
S318	TRIGGER WEIGHT ADJ. SCREW	S480	END CAP
S319	TRIGGER WEIGHT SPRING	S495	TOP SEAR SPRING
S320	TOP SEAR	S496	TOP SEAR SPRING SCREW
S322	FIXING SCREW	S500	BOLT HOUSING
S323	FIXING SCREW	S501	BOLT HOUSING BUSH (5.5mm/.22")
S324	COVER PLATE SCREW	S502	BOLT HOUSING BUSH (4.5mm/.177")
S325	BOTTOM SEAR	S505	MAGAZINE RETAINING CLIP
S326	CHASSIS PIN (SMALL)	S506	FIRING VALVE BODY
S327	CHASSIS PIN (LARGE)	S515A	MAGAZINE INDEXING POST
S328	CHASSIS PIN SPACER (LARGE)	S520	STRIKER
S329	CHASSIS PIN SPACER (SMALL)	S520-1	STRIKER BUSH
S331	MAIN SPRING	S525	SPRING SPACER
S335	CYLINDER TUBE	S530	REAR SPRING GUIDE
S336	CYLINDER TUBE SEAL	S535	BARREL SEAL CARRIER (4.5mm/.177")
S340	STRIKER GUIDE ROD	S536	BARREL SEAL (4.5mm/.177")
S345	SLEEVE	S537	BARREL SEAL CARRIER (5.5mm/.22")
S355	LOADING BOLT SCREW	S538	BARREL SEAL (5.5mm/.22")
S360	POT	S540A	BOLT STEM (4.5mm/.177")
S370	FIRING VALVE ASSEMBLY	S540B	BOLT STEM (5.5mm/.22")
S380	BRIDGE CLAMP	S550	SIDE PLATE
S390	FILLING VALVE BODY	S555A	MAGAZINE (4.5mm/.177")
S400A	BARREL (5.5mm/.22")	S555B	MAGAZINE (5.5mm/.22")
S400B	BARREL (4.5mm/.177")	S560	CAM PLATE
S405	BARREL SCREW	S565	SIDE PLATE SCREW
S420	TRIGGER BLADE	S580	SOUND MODERATOR
S421	TRIGGER ADJUSTING SCREW	S581	MODERATOR SCREW
PARTS BELOW FOR THUMB-HOLE STOCK ONLY			
RN435	FIXING SCREW	RN458	BUTT PAD SPACER (OPTIONAL)
RN452	LOCK NUT AND GUIDE	RN460	FIXING SCREW
RN456	BUTT PAD	RN460A	BELVILLE WASHER
RN457	BUTT PAD BASE		

IT IS HIGHLY RECOMMENDED THAT ONLY GENUINE AIR ARMS PARTS ARE FITTED TO YOUR RIFLE. THE USE OF NON-GENUINE PARTS WILL INVALIDATE YOUR WARRANTY. PLEASE QUOTE THE RIFLE & PART NUMBERS IN ANY CORRESPONDENCE.

THE MAKE AND TYPE OF PELLET USED TO TEST AND SET-UP YOUR RIFLE IS INDICATED BELOW

AIR ARMS HUNTER .22	16.0 grains	
AIR ARMS FIELD .22	16.0 grains	
AIR ARMS FIELD .177	8.5 grains	

USING THE CORRECT PELLET IS VERY IMPORTANT FOR ACCURACY AND PERFORMANCE OF YOUR AIR RIFLE. AIR ARMS PELLETS ARE HIGH QUALITY PRECISION PELLETS AND WILL GIVE EXCELLENT RESULTS EQUAL TO OR BETTER THAN ANY OTHER TYPE CURRENTLY ON THE MARKET.

IF YOU CHOOSE NOT TO USE AIR ARMS PELLETS, IT IS MOST IMPORTANT TO READ PAGE 1 OF THIS HANDBOOK IN RESPECT OF CHECKING VELOCITY AND CALCULATING MUZZLE ENERGY.
ONLY USE HIGH QUALITY PELLETS.

NOTES