

# SAR .223 (5.56MM)

## SPORTING RIFLE MANUAL

(ALSO APPLICABLE TO MODELS SAC & SAP)

**Warning:** Read Carefully before  
using your Firearm



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# This Booklet

The safety warnings in this booklet are important. By understanding the dangers inherent in the use of any firearm, and by taking the precautions described herein, you can enjoy complete safety in the use of your Australian Automatic Arms Rifle, Carbine or Pistol. Failure to heed any of these warnings may result in serious injury to you or others, as well as severe damage to the firearm or other property.

## Dangerous Weapons

Rifles, Carbines and Pistols are classified as FIREARMS or DANGEROUS WEAPONS and are sold by us with the specific understanding that we are not responsible in any manner whatsoever for their improper or negligent handling or resale under local laws and regulations. Australian Automatic Arms shall not be responsible in any manner whatsoever for malfunctioning of the firearm, or for physical injury or property damage, resulting in whole or in part from (1) criminal or negligent discharge, (2) improper or careless handling, (3) unauthorised modifications, (4) defective, improper hand-loaded, or reloaded ammunition, (5) corrosion, (6) neglect, or (7) other influences beyond our direct and immediate control. This limitation applies regardless of whether liability is asserted on the basis of contract, negligence or strict liability (including any failure to warn). Under no circumstance shall Australian Automatic Arms be liable for incidental or consequential damages such as loss of use of property, commercial loss and loss of earnings of profits.

### Ten Commandments of firearms safety

1. ALWAYS treat every gun as if it were loaded.
2. ALWAYS be sure the barrel is clear of any obstruction.
3. ALWAYS be sure of your backstop, what lies beyond and the safety of bystanders before you shoot.
4. ALWAYS use clean, dry, original factory-made ammunition of the proper type and calibre for your gun.
5. ALWAYS wear ear protection and shooting glasses when shooting.
6. ALWAYS carry your gun so that you can control the direction of the muzzle if you fall or stumble.
7. ALWAYS leave the safety on until you intend to fire.
8. NEVER leave an unattended gun loaded. Guns and ammunition should be stored separately, locked if possible, beyond the reach of children and careless adults.
9. NEVER allow your firearm to be used by anyone who has not read this Instruction and Safety Manual.
10. NEVER, NEVER - EVER - point any gun, loaded or unloaded, at anything you do not intend to shoot.

## Protect your eyes and ears

Always wear adequate shooting glasses and ear plugs or " earmuff " type protectors whenever you are shooting. Always make certain that persons close to you are similarly protected.

Unprotected eyes may be injured by powder gas, carbon residue, lubricant, metallic particles or similar debris which may emanate occasionally from any firearm in normal use.

Without ear protection, repeated exposure to shooting noise may lead to cumulative, permanent hearing loss.

# Introduction

*The SAR is a gas operated, locked breech, box magazine fed semi-automatic Sporting Rifle. The gas system situated on top of the barrel and separate from the breech mechanism, utilizes a fixed piston mobile cylinder design, permitting discharge of residual powder particles. A further advantage is the in-built mechanical delay, affording positive primary extraction.*

*Simple, reliable and rugged, the breech mechanism is restricted to a minimum in size and weight by the judicious use of chrome-moly steel.*

*The straight line construction of the SAR with its unique bolting system results in minimum recoil, and excellent handling characteristics.*

*These instructions are also applicable to Models SAC (Carbine) and SAP (Pistol)*

## Special Features

1. Modular Breech system
2. Non reciprocating retracting or cocking handle
3. All steel construction with re-inforced nylon for hand-guards, pistol grip and butt.
4. 20 round magazine
5. Dovetailed for scope rings.
6. Easy stripping.



## General Data

### SAR .223 (5.56MM)

<i>Calibre</i>	<i>.223" (5.56mm)</i>
<i>Muzzle velocity</i>	<i>3,200 ft.p.s. (975 m.p.s.)</i>
<i>Total length</i>	<i>35.937" (912.8mm)</i>
<i>Barrel length</i>	<i>16.125" (409mm) without suppressor</i>
<i>Rifling</i>	<i>6 grooves one turn in 7 inches 6 grooves one turn in 9 inches</i>
<i>Feed device</i>	<i>20 rounds box type magazine</i>
<i>Operating principle</i>	<i>Gas operated with fixed gas vent, rotating bolt, semi-automatic fire.</i>
<i>Sight radius</i>	<i>16.250" (412.75mm)</i>
<i>Sight type</i>	<i>Front: Blade, adjustable for elevation zeroing Rear: Rotary disc adjustable for 100 metres, 200 metres and 300 metres. Windage drum adjustable for lateral positioning.</i>
<i>Weight with empty 20 round magazine (without sling)</i>	<i>7.75 lbs (3.515 kg)</i>
<i>Weight of empty 20 round steel magazine</i>	<i>5 oz. (142 g)</i>

## Notice

We specifically disclaim responsibility for any damage or injury whatsoever occurring in connection with, or as a result of, the use in the SAR of faulty, or non-standard or "remanufactured", or hand loaded (reloaded) ammunition.

## Operating Instructions

### MODELS:- SAR — SAC — SAP

To operate the rifle remove magazine by depressing magazine latch on right hand side (see Figure 1) and pulling magazine downwards. Grip retracting handle positioned midway along left handguard and pull towards you. This action will cause the breech mechanism to unlock and retract, exposing chamber for inspection through the ejection port. Inspect chamber and ensure that it is empty. The rearward action of the bolt carrier cocks the hammer which enables the engagement of the safety selector onto the safe position. **CAUTION:** Make sure the safety selector is rotated onto the safe position (see Figure 2).

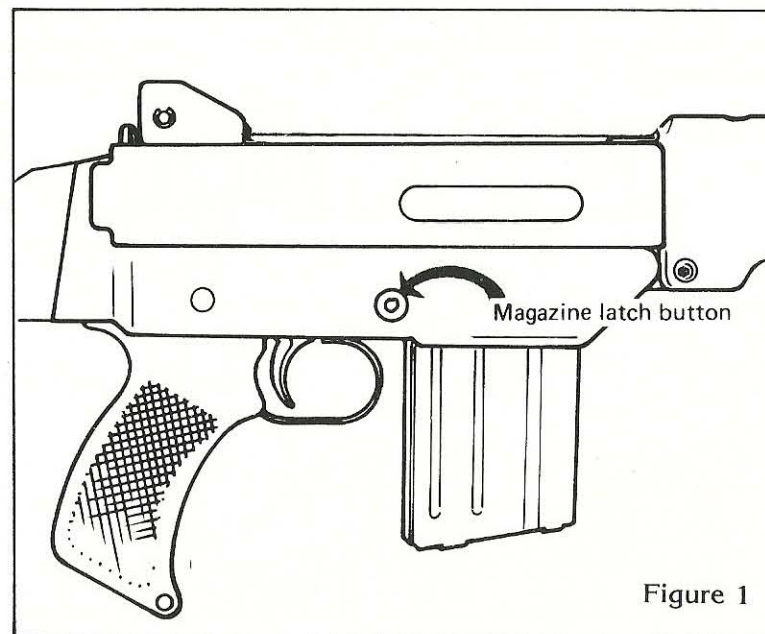
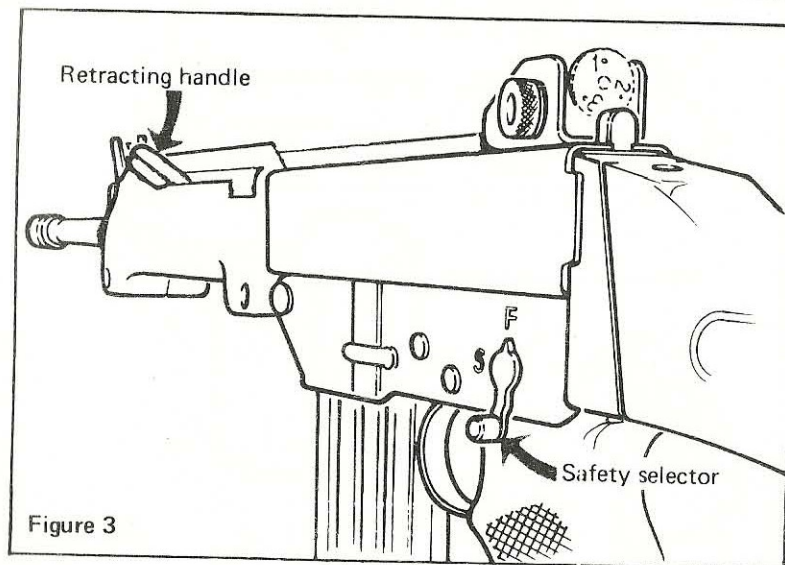
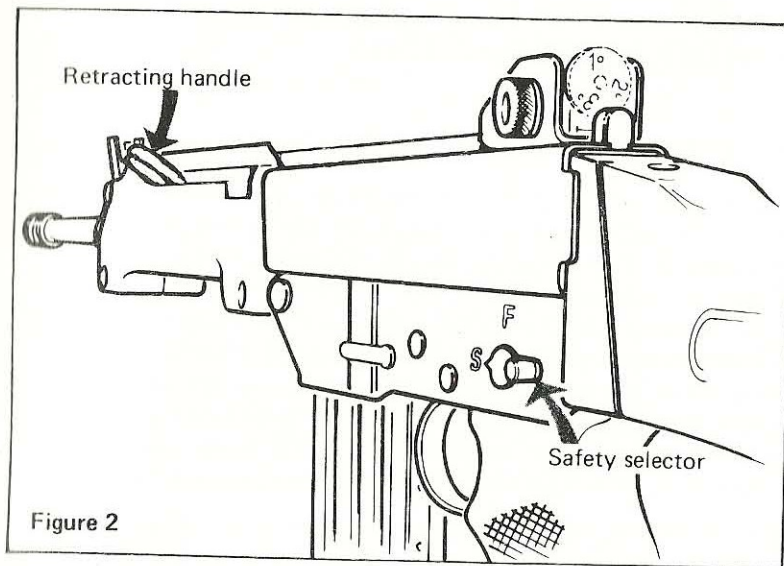


Figure 1

Figure 1

Insert magazine through lower receiver and push up until magazine latch engages magazine. If you desire to commence firing, ensure that the rifle is pointed in a safe direction then grip retracting handle and pull towards you. When the breech mechanism is fully to rear, release retracting handle without allowing your hand to ride the handle. The breech bolt will then move forward rapidly chambering a round. The safety selector can now be rotated onto the fire position (see Figure 3).



**CAUTION:** The SAR rifle, being of the self-loading type, will always chamber a round after each shot. Should you desire to stop firing, rotate safety selector onto the safe position, remove magazine, and pull the retracting handle fully to the rear and clear chamber.

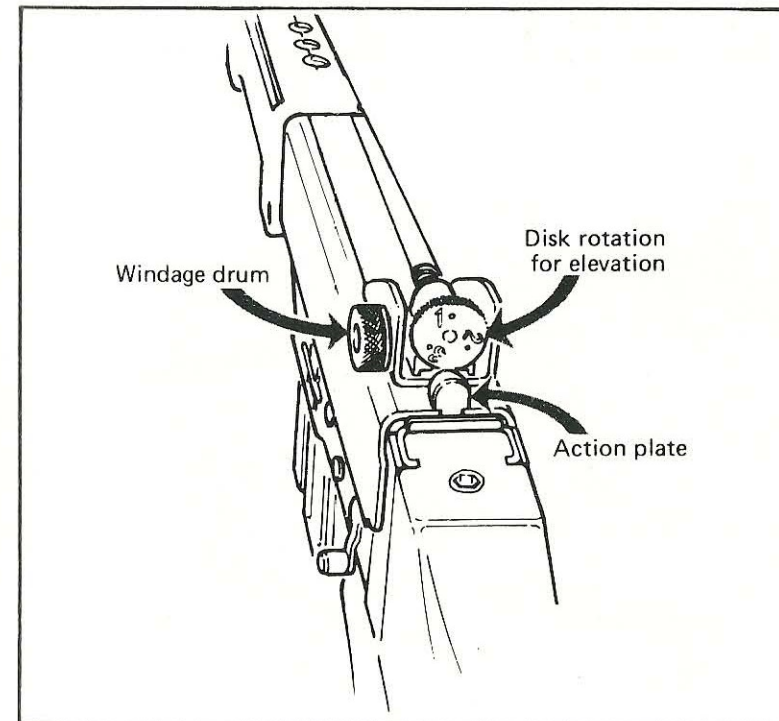


Figure 4

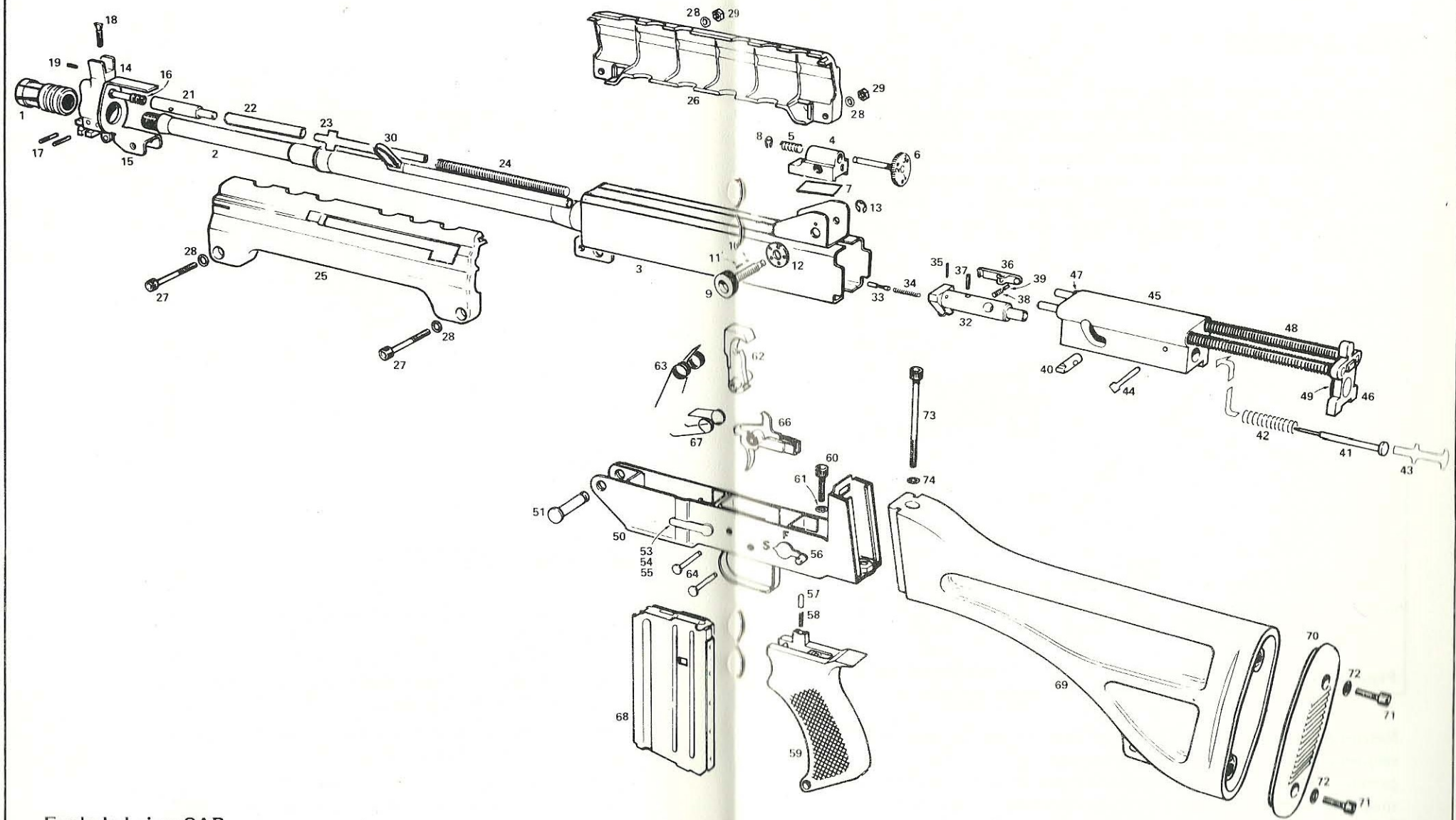
## Sighting System

The rear sight assembly is provided with windage and elevation adjustment. The rear disc sight is rotated for elevation by pulling the disc away from the sight base and indexing the disc to the desired range setting (see Figure 4). Setting 1 for 100 metres, 2 for 200 metres, 3 for 300 metres.

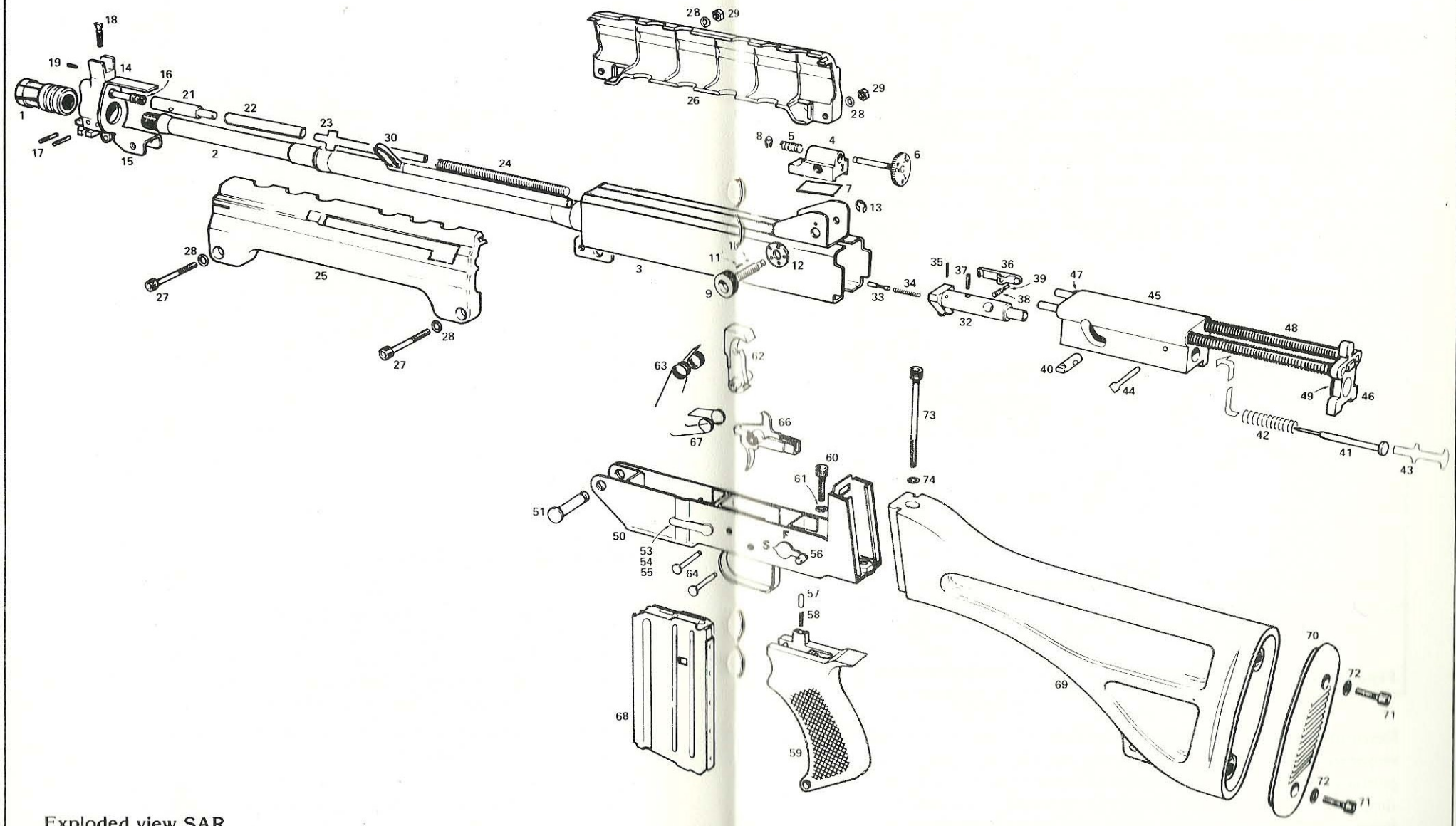
Rotating the windage drum will provide desired lateral positioning (see Figure 4).

The front blade sight is further adjustable for elevation by rotating one half turn until the desired zeroing setting is attained. Use Allen key provided to unlock and lock small locking Allen screw to secure front sight.





Exploded view SAR



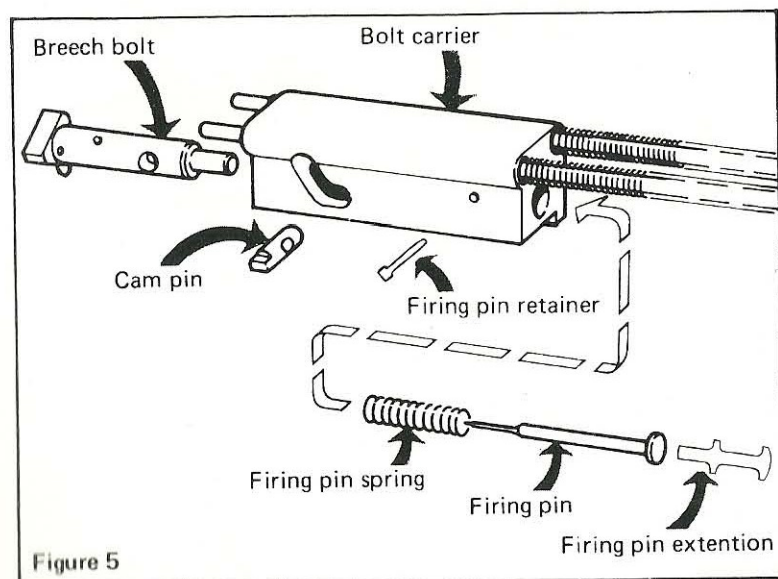
Exploded view SAR



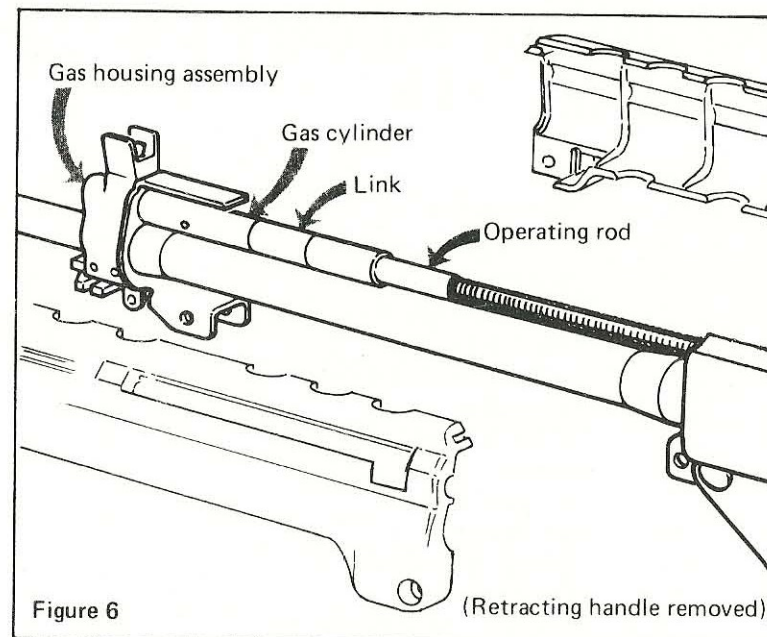
# Stripping instructions for cleaning

## Breech system

Ensure the magazine is removed from the rifle and check that chamber is empty as described in operating instructions. Push exposed top part of action plate (Figure 4) and the rifle will pivot open. Rearward action of the retracting handle will aid in the removal of the modular breech mechanism. **CAUTION:** Do not attempt to remove the bolt carrier from the action rod spring assembly. This is not necessary. Clean and oil lightly. Do not apply oil liberally.



Removal of the breech bolt from the bolt carrier assembly, if required, is accomplished as follows: (see Figure 5). By pressing on rear of firing pin extension, pin retainer will then drop out from bolt carrier. Firing pin extension, firing pin and firing pin spring can then be removed. Pull out cam pin and remove breech bolt. **CAUTION:** Remember cam pin must be inserted in bolt body from correct side (see Figure 5). Assembly is the reversal of the above. Be sure to push firing pin retainer pin below bolt carrier surface.



## Gas system

Remove both handguard screws with Allen key supplied. **CAUTION:** Retracting handle assembly is held onto left handguard by return spring. Unhook return spring from front of handguard and remove handguard.

Grip Operating Rod and compress spring. Remove link from Gas Cylinder in rearward direction. Failure to do this may result in damage. Remove cylinder, clean piston if necessary and reassemble in reverse order.

**CAUTION:** Do not remove gas housing assembly from barrel. (see Figure 6).

## Barrel

Clean bore and chamber and remove all traces of oil.

## Trigger mechanism

Stripping this system from the lower receiver is not necessary. Check visually and lightly oil.

# Parts list for Models SAR, SAC and SAP

View Part No.	Name of Part
1	Flash Suppressor
2	Barrel (Restricted)
3	Upper Receiver (Restricted)
4	Base Rear Sight
5	Spring - Base Rear Sight
6	Disc Sight
7	Spring & Base - Disc Sight
8	Retainer - Disc Sight
9	Windage Drum
10	Ball Detent
11	Spring - Ball Detent
12	Positioner
13	Retainer - Windage Drum
14	Gas Housing (Restricted)
15	Cap Handguard
16	Piston
17	Roll Pins / Gas Housing (2)
18	Front Sight
19	Locking Allen Screw - Front Sight
21	Gas Cylinder
22	Link
23	Operating Rod
24	Return Spring - Operating Rod
25	Handguard - Left
26	Handguard - Right
27	Allen Screws - Handguards (2)
28	Internal Shake Proof Washers (4)
29	Nuts - Allen Screws Handguards (2)
30	Retracting Handle
32	Breech Bolt (Restricted)
33	Ejector
34	Spring - Ejector
35	Roll Pin - Ejector
36	Extractor
37	Pin - Extractor
38	Spring Extractor

View Part No.	Name of Part
39	Spacer Spring - Extractor
40	Cam Pin
41	Firing Pin
42	Spring - Firing Pin
43	Extension - Firing Pin
44	Retainer Roll Pin - Firing Pin
45	Bolt Carrier (Restricted)
46	Action Rod Plate Assy (Restricted)
47	Retainer Action Rod
48	Action Springs (2)
49	Buffer
50	Lower Receiver Assy. (Restricted)
51	Main Pivot Pin
52	
53	Magazine Latch
54	Button - Magazine Latch (Not shown)
55	Spring - Magazine Latch (Not shown)
56	Safety Selector
57	Detent - Safety
58	Spring Detent - Safety
59	Pistol Grip
60	Allen Screw - Pistol Grip
61	Internal Shake Proof Washer (as 28)
62	Hammer
63	Spring - Hammer
64	Pivot Pins (2)
65	
66	Trigger Assy (Restricted)
67	Spring - Trigger
68	Magazine - 20 Rounds (assy)
69	Butt
70	Butt Plate } <b>SAR &amp; SAC only</b>
71	Allen Screws - Butt Plate (2)
72	Internal Shake Proof Washer (as 28 ) (2)
73	Allen Screw - Butt Securing
74	Internal Shake Proof Washer (as 28)

## Design

*Australian Automatic Arms are designed in Australia  
and manufactured at Kempton Tasmania Australia  
Patented in all principal countries of the world.*



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