

**BBR**

**A-BOLT**

**FIELD  
SERVICE  
MANUAL**



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## **BROWNING FIELD SERVICE MANUAL BBR & A-BOLT**

This manual is written to assist trained gunsmiths in the repair and servicing of Browning products. It should never be used by an untrained person to repair any firearm. Read the entire manual carefully and pay special attention to the portions dealing with safety.

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## BROWNING FIELD SERVICE MANUAL

### IMPORTANT SAFETY WARNINGS

Before carrying out any instructions given throughout this manual, be certain to read the **NOTES** and **CAUTION** notes given in regard to those instructions. Generally, these precautionary notes follow the related instructions. In any case, read all of the instructions, notes and cautions on any step involving assembly or reassembly before proceeding with that step.



Failure to obey a Safety Warning **CAUTION:** - may result in injuries to you or to others.

Failure to obey a **NOTE** regarding the repair process may result in incorrect procedure which could cause malfunctions and/or damage to the firearm.

### CAUTIONS:

1. Be certain the firearm is unloaded before proceeding with any service work.
2. Appropriate safety glasses should be worn by service personnel and bystanders when removing or reinstalling any springs or spring-loaded components.
3. As noted in the attached parts list on Page 3 - 5 some of the Browning supplied spare parts must be fitted by Browning Service Department in Arnold, Missouri, or qualified gunsmiths. No other person should attempt to fit these specific parts.
4. If for any reason it becomes necessary to load and discharge these firearms, it is recommended that reference be made to the Owners Manual for proper loading, handling and safety procedures. These manuals are supplied with each new rifle and extra copies may be obtained by contacting Browning, Route #1, Morgan, Utah, 84050.
5. Read all of the instructions, cautions and notes on any step involving assembly or disassembly before proceeding with that step.
6. Section VI provides the recommended points of lubrication and special tools needed.
7. **CAUTION:** Browning parts are made exclusively for Browning guns and are not recommended for use in other guns even though models may be similar. Inadequately fitted parts may be dangerous. All repairs should be done only by qualified gunsmiths.
8. **CAUTION:** Many parts are interchangeable between BBR and A-Bolt

and many are not. Refer to the parts list and do not attempt to interchange any parts unless the part numbers are identical.

## SECTION I

### GENERAL DESCRIPTION AND FUNCTIONAL OPERATION

The BBR and A-Bolt are centerfire, detachable Magazine, Bolt Action Rifles.

For functional operation explanation, assume the rifle is loaded and ready to fire. When the Trigger is pulled, it rotates about its pin disengaging the Sear. The Sear, in turn, releases the Firing Pin Sear. Both the Firing Pin Sear and Firing Pin (Firing Pin Assembly) are driven forward by the compressed Firing Pin Spring to fire the chambered round.

When the Bolt Handle is manually lifted, a camming surface on a portion of the Bolt Handle cams the Firing Pin Assembly to the rear compressing the Firing Pin Spring. At this time, the Trigger is allowed to regain beneath the Sear as the rear end of the Sear is allowed to raise under pressure from the Sear Spring.

The rotating Bolt rotates the Bolt Head and unlocks it from the locking surfaces of the Barrel Extension. When the Bolt Handle has fully rotated, a groove in the Bolt Body has aligned with the Bolt Retainer.

When the Bolt Assembly is retracted, the empty case is extracted from the chamber. Ejection occurs from pressure exerted by the compressed Ejector Spring and Ejector as the empty case clears the Ejection Port.

When the Bolt Assembly is manually moved forward, a fresh round is picked up from the Magazine and chambered. When the Bolt Handle is rotated downward, the Firing Pin Sear is brought forward slightly to rest against the Sear. If the Trigger is pulled before the Action is locked, the rifle cannot fire. This is prevented by the camming surface of the Bolt Handle restricting forward movement of the Firing Pin Assembly until the Bolt Handle has been completely rotated downward.

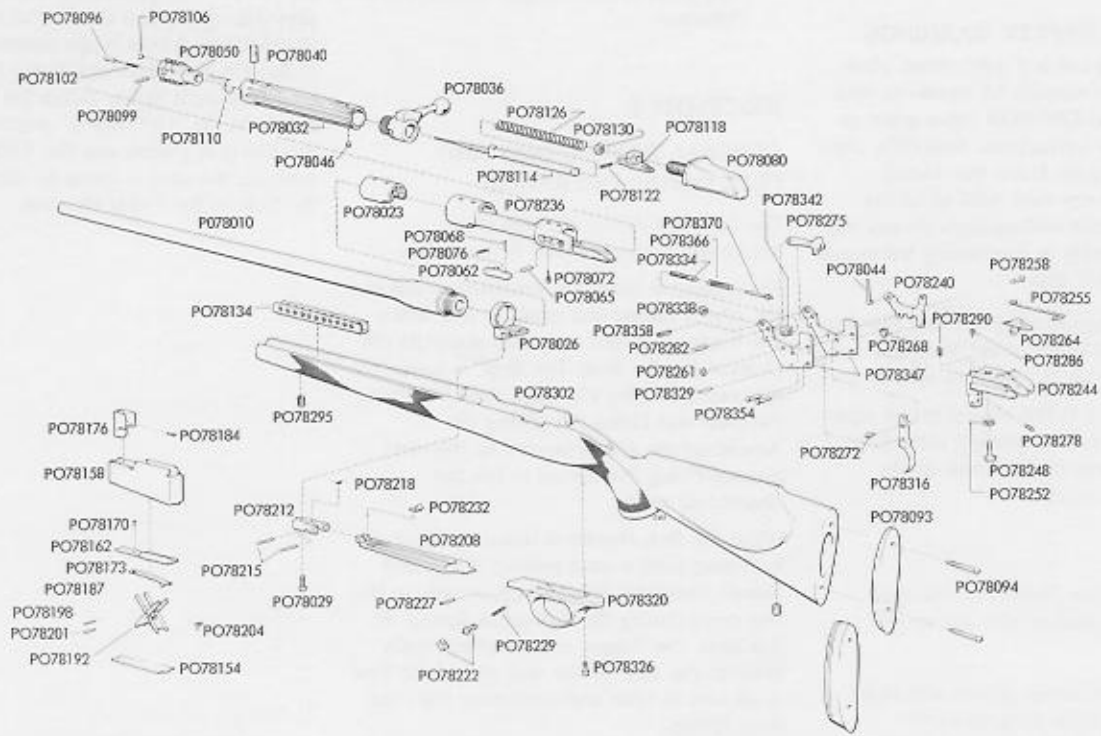
The rear end of the retracted Firing Pin Sear acts as a cocking indicator which is painted red and is visible at the rear end of the Bolt Shroud.

When the Safety Selector is moved to the "ON SAFE" position, the Safety is rotated by connection with the Safety Link. In rotating, the Safety prevents the Trigger from being pulled by providing interference with the Safety Stud which protrudes from the right side of the Trigger.

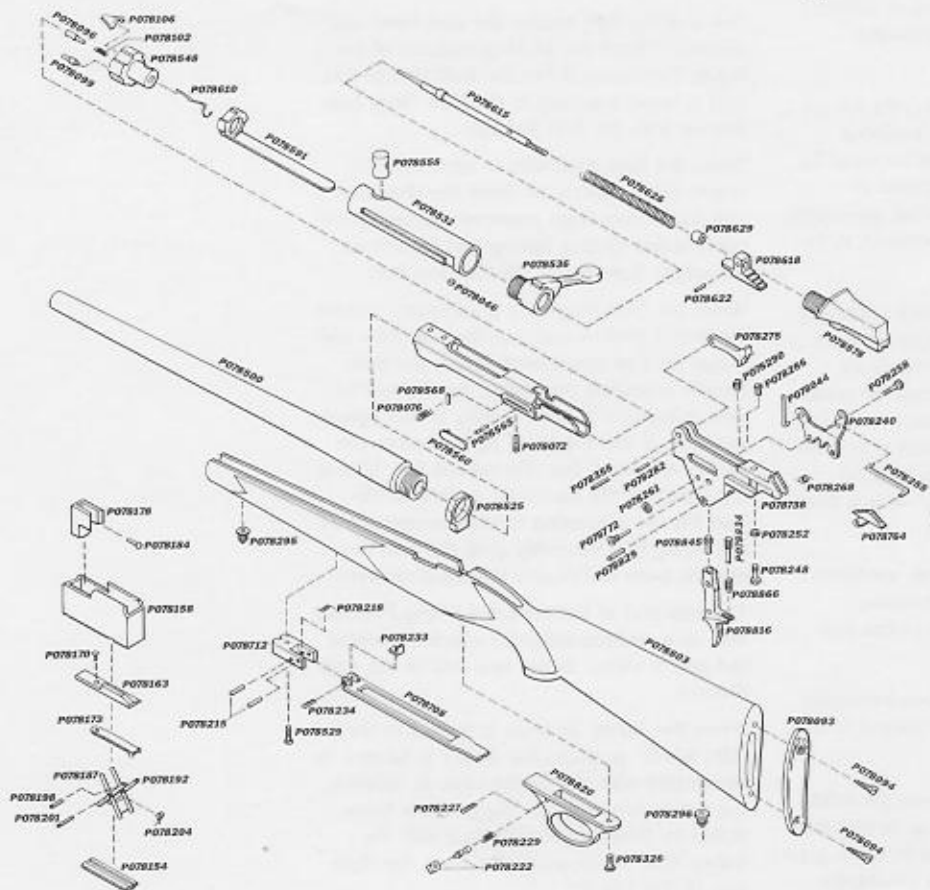
Additionally, as the Safety rotates to the "ON SAFE" position, the Bolt Handle Lock is moved upward, by connection with the Safety, to lock the Bolt Assembly in the closed position.

A Firing Pin Lock was added to later A-Bolt production. When the Safety is rotated to the "ON SAFE" position, a stud is made to protrude up through the bottom of the Receiver into a hole in the bottom of the Firing Pin Sear. Thus the Firing Pin is prevented from falling unless the Safety is placed in the "OFF SAFE" position. When the Safety is placed into the "OFF SAFE" position, the stud is made to retract out of the hole in the Firing Pin Sear.

## BROWNING BBR



## A-BOLT



Schematic is provided for parts identification only and should not be used as a guide to assemble guns.

CAUTION: Browning parts are made exclusively for Browning guns and are not recommended for use in other guns even though models may be similar. Inadequately fitted parts may be dangerous.

## SECTION II

### BBR & A-Bolt Rifles - High Power Bolt Action Rifles Standard and Magnum Calibers Regular, Short & Magnum Actions

Part No.	Part Name	Part No.	Part Name
** PO78023	Barrel Extension BBR	†* PO78C13	Barrel w/Fitted Receiver 7mm R Mag. Long Action Camo Stalker
* PO78526	Barrel Mounting Block A-Bolt Hunter/Camo	†* PO78A13	Barrel w/Fitted Receiver 7mm R Mag. Long Action Stainless Stalker
* PO78525	Barrel Mounting Block A-Bolt Medallion	†* PO78518	Barrel w/Fitted Receiver 7mm-08 A-Bolt Hunter
* PO78026	Barrel Mounting Block BBR	†* PO78517	Barrel w/Fitted Receiver 7mm-08 A-Bolt Medallion
PO78929	Barrel Mounting Screw A-Bolt Micro Medallion	†* PO78018	Barrel w/Fitted Receiver 7mm-08 Rem. Short Action Heavy BBR
PO78029	Barrel Mounting Screw BBR	†* PO78017	Barrel w/Fitted Receiver 7mm-08 Rem. Short Action Light BBR
PO78528	Barrel Mounting Screw Long Action A-Bolt	†* PO78514	Barrel w/Fitted Receiver 7mm R Mag. A-Bolt Hunter
PO78529	Barrel Mounting Screw Short Action A-Bolt	†* PO78513	Barrel w/Fitted Receiver 7mm R Mag. A-Bolt Medallion
* PO78A29	Barrel Mounting Screw Stainless Stalker	†* PO7857E	Barrel w/Fitted Receiver 7mm R Mag. Gold Medallion
†* PO78524	Barrel w/Fitted Receiver A-Bolt .223R Short Action Med.	†* PO7850E	Barrel w/Fitted Receiver 270 W Gold Medallion
†* PO7812L	Barrel w/Fitted Receiver A-Bolt .270W Long Action Med. LH.	†* PO7859E	Barrel w/Fitted Receiver 30-06 Gold Medallion
†* PO7809L	Barrel w/Fitted Receiver A-Bolt 30-06 Long Action Med. LH.	†* PO78523	Barrel w/Fitted Receiver 223R Short Action Hunter
†* PO7813L	Barrel w/Fitted Receiver A-Bolt 7mm R Mag Long Action Med. LH.	†* PO7815L	Barrel w/Fitted Receiver .300W Mag. Medallion LH.
†* PO78007	Barrel w/Fitted Receiver .243 Win. Short Action Light BBR	†* PO78534	Barrel w/Fitted Receiver .280 Rem. Medallion
†* PO78508	Barrel w/Fitted Receiver .243W A-Bolt Hunter	†* PO78535	Barrel w/Fitted Receiver .280 Rem. Hunter
†* PO78507	Barrel w/Fitted Receiver .243W A-Bolt Medallion	†* PO78527	Barrel w/Fitted Receiver .375 H & H Mag. Medallion
†* PO78503	Barrel w/Fitted Receiver .270W A-Bolt Hunter	†* PO7807J	Barrel w/Fitted Receiver .243W High Grade
†* PO78502	Barrel w/Fitted Receiver .270W A-Bolt Medallion	†* PO78C16	Barrel w/Fitted Receiver .300W Mag. Comp. Stalker
†* PO78512	Barrel w/Fitted Receiver .308W A-Bolt Hunter	†* PO78C21	Barrel w/Fitted Receiver .338W Mag. Comp. Stalker
†* PO78511	Barrel w/Fitted Receiver .308W A-Bolt Medallion	†* PO78C04	Barrel w/Fitted Receiver 25-06 Comp. Stalker
†* PO78522	Barrel w/Fitted Receiver .338 Mag A-Bolt Hunter	†* PO78C34	Barrel w/Fitted Receiver .280 Rem. Comp. Stalker
†* PO78521	Barrel w/Fitted Receiver .338 Mag A-Bolt Medallion	†* PO78923	Barrel w/Fitted Receiver .223R Micro Medallion
†* PO78501	Barrel w/Fitted Receiver 22-250 A-Bolt Hunter	†* PO78900	Barrel w/Fitted Receiver 22-250 Micro Medallion
†* PO78500	Barrel w/Fitted Receiver 22-250 A-Bolt Medallion	†* PO78907	Barrel w/Fitted Receiver .243W Micro Medallion
†* PO78002	Barrel w/Fitted Receiver 22-250 Rem. Short Action Light BBR	†* PO78919	Barrel w/Fitted Receiver .257R Micro Medallion
†* PO78003	Barrel w/Fitted Receiver 22-250 Rem. Short Action Heavy BBR	†* PO78917	Barrel w/Fitted Receiver 7mm-08 Micro Medallion
†* PO78008	Barrel w/Fitted Receiver .243 Win. Short Action Heavy BBR	†* PO78911	Barrel w/Fitted Receiver .308W Micro Medallion
†* PO78505	Barrel w/Fitted Receiver 25-06 A-Bolt Hunter	* PO78081	Bolt Assembly 22-250/243W BBR
†* PO78504	Barrel w/Fitted Receiver 25-06 A-Bolt Medallion	* PO7884L	Bolt Assembly .270 W, 30-06 A-Bolt LH.
†* PO78004	Barrel w/Fitted Receiver 25-06 BBR	* PO78084	Bolt Assembly 25-06, 30-06, .270 Win BBR includes: Bolt Body, Bolt Handle, Bolt Handle Pin, Bolt Head, Bolt Head Key, Bolt Shroud Ejector, Ejector Pin, Ejector Spring, Extractor, Extractor Spring, Firing Pin, Firing Pin Sear, Firing Pin Sear Pin, Firing Pin Spring and Firing Pin Washer
†* PO78019	Barrel w/Fitted Receiver 257 Roberts, Short Action Light BBR	* PO78083	Bolt Assembly 308W, 7mm-08, 257R BBR
†* PO78520	Barrel w/Fitted Receiver 257R A-Bolt Hunter	* PO7890L	Bolt Assembly 7mm R Mag. A-Bolt LH.
†* PO78519	Barrel w/Fitted Receiver 257R A-Bolt Medallion	* PO78090	Bolt Assembly 7mm Rem. Mag., 300 Win. Mag. & 338 Win. Mag. BBR includes same as PO78084
†* PO78006	Barrel w/Fitted Receiver 270 Win. BBR	* PO78530	Bolt Assembly .223R A-Bolt
†* PO78C02	Barrel w/Fitted Receiver 270W Long Action Camo Stalker	* PO78532	Bolt Body Long Action A-Bolt
†* PO78A02	Barrel w/Fitted Receiver 270W Long Action Stainless Stalker	* PO7832L	Bolt Body Long Action A-Bolt LH.
†* PO78510	Barrel w/Fitted Receiver 30-06 A-Bolt Hunter	PO78A32	Bolt Body Long Action Stainless Stalker
†* PO78509	Barrel w/Fitted Receiver 30-06 A-Bolt Medallion	* PO78032	Bolt Body Long Action BBR
†* PO78C09	Barrel w/Fitted Receiver 30-06 Long Action Camo Stalker	* PO78533	Bolt Body Short Action A-Bolt
†* PO78010	Barrel w/Fitted Receiver 30-06 Sprg. BBR	* PO78531	Bolt Body Short Action A-Bolt .223R
†* PO78A09	Barrel w/Fitted Receiver 30-06 Long Action Stainless Stalker	* PO78033	Bolt Body Short Action BBR
†* PO78016	Barrel w/Fitted Receiver 300 Win. Mag. BBR	* PO78538	Bolt Handle A-Bolt Hunter
†* PO78516	Barrel w/Fitted Receiver 300W Mag. A-Bolt Hunter	* PO78536	Bolt Handle A-Bolt Medallion
†* PO78515	Barrel w/Fitted Receiver 300W Mag. A-Bolt Medallion	* PO7836L	Bolt Handle A-Bolt Med. LH.
†* PO78011	Barrel w/Fitted Receiver 308 Win. Short Action Light BBR	* PO78C36	Bolt Handle Camo Stalker
†* PO78012	Barrel w/Fitted Receiver 308 Win. Short Action Heavy BBR	* PO78036	Bolt Handle BBR
†* PO78015	Barrel w/Fitted Receiver 338 Win. Mag. BBR	* PO78044	Bolt Handle Lock A-Bolt-BBR
†* PO78014	Barrel w/Fitted Receiver 7mm Rem. Mag. BBR	* PO7844L	Bolt Handle Lock A-Bolt LH.
		PO78046	Bolt Handle Pin A-Bolt-BBR
		* PO78A36	Bolt Handle Stainless Stalker
		* PO78558	Bolt Head Key Pin A-Bolt

Part No.	Part Name
PO78040	Bolt Head Key Pin BBR
* PO78548	Bolt Head 22-250 A-Bolt
* PO78048	Bolt Head 22-250 Rem. .243 Win. Short Action BBR Light & Heavy
* PO78546	Bolt Head .223R A-Bolt
* PO78549	Bolt Head .243W A-Bolt
* PO7850L	Bolt Head .270W, 30-06 A-Bolt L.H.
* PO78050	Bolt Head 25-06 Rem. 30-06 Sprg. 270 Win. BBR
* PO78550	Bolt Head 25-06 .270W, 30-06, 308W, 7mm-08, .257R A-Bolt
* PO7852L	Bolt Head 7mm R Mag. A-Bolt L.H.
* PO78552	Bolt Head 7mm R Mag. 300W, 338 Magnums A-Bolt
* PO78052	Bolt Head 7mm R Mag. 300W, 338W BBR
PO78562	Bolt Retainer A-Bolt Hunter/Camo
PO78560	Bolt Retainer A-Bolt Medallion
* PO7860L	Bolt Retainer A-Bolt Med. L.H.
PO78062	Bolt Retainer BBR
PO78565	Bolt Retainer Guide Pin A-Bolt
PO78065	Bolt Retainer Guide Pin BBR
PO78568	Bolt Retainer Pin A-Bolt
PO78068	Bolt Retainer Pin BBR
PO78072	Bolt Retainer Screw A-Bolt-BBR
PO78076	Bolt Retainer Spring A-Bolt-BBR
* PO78A62	Bolt Retainer Stainless Stalker
PO78580	Bolt Shroud A-Bolt Hunter/Camo
PO78578	Bolt Shroud A-Bolt Medallion
PO78080	Bolt Shroud BBR
* PO78A80	Bolt Shroud Stainless Stalker
* PO78093	Butt Plate A-Bolt-BBR
PO78094	Butt Plate Screws A-Bolt-BBR
PO78096	Ejector A-Bolt-BBR
PO78099	Ejector Pin A-Bolt-BBR
PO78102	Ejector Spring A-Bolt-BBR
PO78596	Ejector .223R A-Bolt
PO78106	Extractor A-Bolt-BBR
PO78610	Extractor Spring A-Bolt
PO78110	Extractor Spring BBR
PO78506	Extractor .223R A-Bolt
PO78615	Firing Pin Long Action A-Bolt
* PO78618	Firing Pin Sear A-Bolt
** PO78118	Firing Pin Sear BBR
PO78622	Firing Pin Sear Pin A-Bolt
PO78122	Firing Pin Sear Pin BBR
PO78616	Firing Pin Short Action A-Bolt
PO78116	Firing Pin Short Action BBR
PO78126	Firing Pin Spring BBR
PO78626	Firing Pin Spring Long Action A-Bolt
PO78625	Firing Pin Spring Short Action A-Bolt
PO78125	Firing Pin Spring Short Action BBR
PO78114	Firing Pin Type I BBR
PO78115	Firing Pin Type II BBR
PO78629	Firing Pin Washer A-Bolt
PO78130	Firing Pin Washer Type I BBR
PO78129	Firing Pin Washer Type II BBR
PO78134	Forearm Insert BBR
PO78133	Forearm Insert Short Action Heavy BBR
* PO78591	Gas Stop Assembly Long Action A-Bolt
* PO78592	Gas Stop Assembly Short Action A-Bolt
* PO78A91	Gas Stop Stipless Stalker
* PO78154	Magazine Base Long Action A-Bolt-BBR
PO78156	Magazine Base Short Action A-Bolt-BBR
* PO78158	Magazine Body Long Action A-Bolt-BBR

Part No.	Part Name
PO78159	Magazine Body Short Action A-Bolt-BBR
PO78659	Magazine Body w/Insert Short Action .223R A-Bolt
PO78208	Magazine Floor Plate BBR
PO78C08	Magazine Floor Plate Camo Stalker
PO78714	Magazine Floor Plate Hinge A-Bolt Hunter/Camo
PO78712	Magazine Floor Plate Hinge A-Bolt Medallion
PO78212	Magazine Floor Plate Hinge BBR
PO78215	Magazine Floor Plate Hinge Pin A-Bolt-BBR
PO78218	Magazine Floor Plate Hinge Spring A-Bolt-BBR
PO78A12	Magazine Floor Plate Hinge Stainless Stalker
PO78230	Magazine Floor Plate Insert BBR
PO78222	Magazine Floor Plate Latch Assembly A-Bolt-BBR
PO78A22	Magazine Floor Plate Latch Assembly Stainless Stalker
PO78227	Magazine Floor Plate Latch Pin A-Bolt-BBR
PO78229	Magazine Floor Plate Latch Spring A-Bolt-BBR
PO78709	Magazine Floor Plate Long Action A-Bolt Hunter
PO78708	Magazine Floor Plate Long Action A-Bolt Medallion
PO78711	Magazine Floor Plate Short Action A-Bolt Hunter
PO78710	Magazine Floor Plate Short Action A-Bolt Medallion
PO78210	Magazine Floor Plate Short Action BBR
PO78A08	Magazine Floor Plate Stainless Stalker
PO78170	Magazine Follower Rivet A-Bolt-BBR
PO78163	Magazine Follower Short Action 22-250 A-Bolt-BBR
PO78565	Bolt Retainer Guide Pin A-Bolt
PO78164	Magazine Follower Short .243, 308, 257R, 7mm-08 A-Bolt-BBR
PO78173	Magazine Follower Spring A-Bolt-BBR
PO78673	Magazine Follower Spring .223R A-Bolt
PO78162	Magazine Follower 25-06, 30-06, 270W A-Bolt -BBR
PO78166	Magazine Follower 7mm, 300W Mag A-Bolt -BBR
PO78179	Magazine Ramp A-Bolt -BBR
PO78184	Magazine Ramp Rivet Long Action A-Bolt-BBR
PO78185	Magazine Ramp Rivet Short Action A-Bolt-BBR
PO78178	Magazine Ramp Short Action 22-250 A-Bolt-BBR
PO78685	Magazine Ramp Rivet Short Action .223R A-Bolt
PO78181	Magazine Ramp Short 243, 308, 257 7mm-08 A-Bolt-BBR
PO78679	Magazine Ramp .223R A-Bolt
PO78176	Magazine Ramp 25-06, 30-06, 270W, 7mm A-Bolt-BBR
PO78180	Magazine Ramp 300W Mag. A-Bolt-BBR
PO78233	Magazine Retainer Spring A-Bolt-BBR
PO78232	Magazine Retainer Spring BBR
PO78234	Magazine Retainer Spring Pin A-Bolt-BBR
PO78198	Magazine Spring Pin A-Bolt-BBR
PO78698	Magazine Spring Pin .223R A-Bolt
PO78187	Magazine Spring Strut Inner A-Bolt-BBR
PO78687	Magazine Spring Strut Inner .223R A-Bolt
PO78192	Magazine Spring Strut Outer A-Bolt-BBR
PO78692	Magazine Spring Strut Outer .223R A-Bolt
PO78201	Magazine Strut Pin A-Bolt-BBR
PO78701	Magazine Strut Pin .223R A-Bolt
PO78204	Magazine Strut Spring A-Bolt-BBR
* PO78739	Mechanism Housing A-Bolt Hunter/Camo
* PO78738	Mechanism Housing A-Bolt Medallion
* PO78248	Mechanism Housing Screw A-Bolt & Safety Block Screw BBR
* PO78252	Mechanism Housing Screw Washer A-Bolt & Safety Block Washer BBR
* PO78358	Mechanism Housing Set Pin A-Bolt & Trigger Side Plate Set Pin

Part No.	Part Name	Part No.	Part Name
* PO78A38	Mechanism Housing Stainless Stalker	* PO7802E	Stock Long Action Std. Gold Medallion
PO78740	Mechanism Housing Stock Washer A-Bolt	* PO78A01	Stock Long Action Std. Stainless Stalker
** PO78240	Safety A-Bolt-BBR	* PO78302	Stock Monte Carlo BBR
* PO78244	Safety Block BBR	* PO78305	Stock Monte Carlo Magnum BBR
* PO78765	Safety Blocking Pin A-Bolt & A-Bolt .22	* PO78808	Stock Short Action A-Bolt Hunter
* PO78770	Safety Lever A-Bolt & A-Bolt .22	* PO78803	Stock Short Action A-Bolt Medallion
* PO78771	Safety Lever Pin A-Bolt & A-Bolt .22	* PO78903	Stock Short Action A-Bolt Micro Medallion
* PO78773	Safety Lever Spring A-Bolt & A-Bolt .22	* PO78304	Stock Short Action Heavy BBR
* PO78255	Safety Link A-Bolt-BBR	* PO78303	Stock Short Action Light BBR
* PO78756	Safety Link Roll Pin A-Bolt & A-Bolt .22	PO78814	Telescope Mt. Filler Screw A-Bolt
* PO78258	Safety Pin A-Bolt-BBR	* PO78816	Trigger A-Bolt
* PO78261	Safety Pin Snap Ring A-Bolt-BBR	* PO78916	Trigger A-Bolt Micro Medallion
* PO78766	Safety Selector A-Bolt Hunter/Camo	* PO78876	Trigger Assembly A-Bolt
* PO78764	Safety Selector A-Bolt Medallion	* PO78376	Trigger Assembly BBR
* PO78264	Safety Selector BBR	* PO78A76	Trigger Assembly Stainless Stalker
* PO78A64	Safety Selector Stainless Stalker	* PO78316	Trigger BBR
PO78268	Safety Spring A-Bolt-BBR	PO78821	Trigger Guard A-Bolt Hunter
* PO78772	Safety Stud A-Bolt	PO78820	Trigger Guard A-Bolt Medallion
** PO78275	Sear A-Bolt-BBR	PO78920	Trigger Guard A-Bolt Micro Medallion
* PO78278	Sear Adjusting Screw BBR	PO78320	Trigger Guard BBR
* PO78282	Sear Pin A-Bolt-BBR	PO78326	Trigger Guard Screw A-Bolt-BBR
* PO78286	Sear Screw A-Bolt-BBR	PO78926	Trigger Guard Screw A-Bolt Micro Medallion
* PO78290	Sear Spring A-Bolt-BBR	PO78322	Trigger Guard Screw Front BBR
PO78297	Sight Assembly Rear Williams Type A-Bolt-BBR	PO78323	Trigger Guard Screw Helical BBR
PO78298	Sight Front Williams Type A-Bolt-BBR	* PO78A20	Trigger Guard Stainless Stalker
PO78299	Sight Ramp Williams Type A-Bolt-BBR	* PO78829	Trigger Pin A-Bolt
* PO78295	Sling Swivel Base Front A-Bolt-BBR	* PO78329	Trigger Pin BBR
* PO78296	Sling Swivel Base Rear A-Bolt-BBR	* PO78334	Trigger Pull Adjust. Screw BBR
* PO78805	Stock Long Action Mag A-Bolt Medallion	PO78834	Trigger Pull Adjusting Screw A-Bolt
* PO7805L	Stock Long Action Mag A-Bolt Med. L.H.	* PO78338	Trigger Pull Adjustment Screw Lock Nut BBR
* PO78806	Stock Long Action Mag. A-Bolt Hunter	* PO78342	Trigger Pull Adjustment Swivel BBR
* PO78C05	Stock Long Action Mag. Camo Stalker	* PO78845	Trigger Sear A-Bolt
* PO7805E	Stock Long Action Mag. Gold Medallion	* PO78347	Trigger Side Plate
* PO78A05	Stock Long Action Mag. Stainless Stalker	* PO78354	Trigger Side Plate Rivet
* PO78802	Stock Long Action Std. A-Bolt Medallion	* PO78866	Trigger Spring A-Bolt
* PO7802L	Stock Long Action Std. A-Bolt Med. L.H.	* PO78366	Trigger Spring BBR
* PO78801	Stock Long Action Std. A-Bolt Hunter	* PO78370	Trigger Spring Rod BBR
* PO78C01	Stock Long Action Standard Camo Stalker	* PO78A16	Trigger Stainless Stalker

\* Indicates part must be fitted by Browning Service Department or qualified gunsmith.

† Part may be purchased only by holders of current valid Federal Firearms License.

\*\* Indicates part is not sold. Must be installed by Browning Service Department.

NOTE: Unless otherwise indicated, part is interchangeable between gauges/calibers.

## SECTION III

### INSPECTION AND DISASSEMBLY INTO SUB-ASSEMBLIES

**NOTE:** All instructions, NOTES and CAUTIONS contained in this manual apply to both the BBR and A-Bolt unless otherwise stated.



**CAUTION:** Make certain the rifle is unloaded before any inspection or disassembly operations are performed.

#### 1. PRE-DISASSEMBLY INSPECTION



**CAUTION:** When performing the following inspection sequences, perform them in the exact order given without performing additional actions.

- A.** Check the BBR Firing Pin Sear (cocking indicator just forward of the Safety Selector) to see that it is chrome plated.

**NOTE:** Some early BBR Firing Pin Sear were not chrome plated. Later BBR and all of the A-Bolt production contained chrome plated Firing Pin Sear.



**CAUTION:** If the BBR Firing Pin Sear is not chrome plated, perform no repairs and return the rifle to the Arnold Browning Service Center immediately for modification to a recall notification. The rifle must be modified to correct a potentially unsafe condition. Due to its critical nature, involving the Firing Pin Sear as well as the Trigger Assembly, instructions for modification are not given in this manual.

If the Firing Pin Sear is chrome plated, proceed with the following inspection sequences: (Both BBR and A-Bolt)

- B.** With the Action cocked, place the Safety Selector to the "ON SAFE" position.  
Pull the Trigger much harder than normal with the index finger of both hands and see that the Firing Pin does not fall.
- C.** Release the Trigger. The Firing Pin should not fall when the Safety is moved to the "OFF SAFE" position.
- D.** Open the Action. The Firing Pin should not fall when the Bolt Handle is raised.

- E.** With the Action cocked and closed, place the Safety Selector to the "OFF SAFE" position.

Partially disengage the Sear by slightly pulling the Trigger.

Slowly release the Trigger. You should feel the searing surfaces fully re-engage.



**CAUTION:** If the rifle fails inspection sequences (B) through (E), return the rifle to the Browning Service Center in Arnold, Missouri or, in case of the BBR, exchange the complete Trigger Assembly for an updated one available from the Browning Parts Department in Arnold, Missouri.

- F.** Check the Trigger pull for a let-off force of 3 3/4 to 4 1/4 lbs. (BBR) or 3.5 to 6.5 lbs. (A-Bolt).

**NOTE:** If the Trigger pull force does not meet the criteria given, procedures for adjustment will be described later in this manual.

#### 2. DISASSEMBLY INTO SUB-ASSEMBLIES

##### A. STOCK

Remove the Barrel Mounting Screw and the Trigger Guard Screw.

Open and withdraw the Bolt, grasp the Bolt in one hand and the Forearm with the other.

While applying upward pressure on the Bolt with one hand, strike the Barrel horizontally on a padded surface as shown in Figure # 1.



FIGURE # 1

This action will permit removal of the Stock without damage.

##### B. BOLT ASSEMBLY

Depress the forward end of the Bolt Retainer and withdraw the Bolt Assembly from the Receiver.

##### C. TRIGGER ASSEMBLY (Figure #2)

Using an 8mm wrench, remove the Safety Block Screw and washer.

Remove the Trigger Slide Plate Set Pin with a 3/32" punch and remove the Trigger Assembly, withdrawing the Bolt Handle Lock from the Receiver.

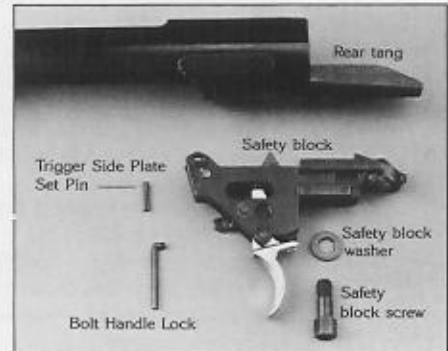


FIGURE # 2

## SECTION IV

### DISASSEMBLY OF SUB-ASSEMBLIES INTO COMPONENT PARTS, INSPECTION AND REASSEMBLY OF SUB-ASSEMBLIES

#### 1. DISASSEMBLY OF THE BOLT ASSEMBLY (Figure #3)

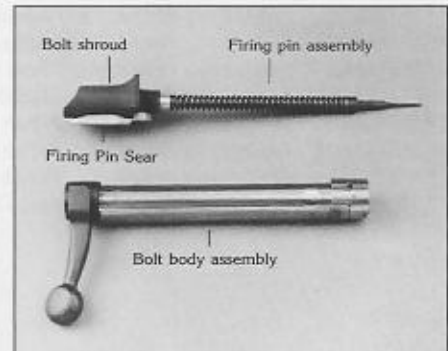


FIGURE # 3

##### A. BOLT BODY ASSEMBLY

With the Bolt Assembly cocked, grip the rear end of the Firing Pin Sear in a smooth jaw vise as shown in Figure # 4.

**NOTE:** The rear end of the Bolt Shroud should be snug against the side of the jaws.

Grasp the Bolt Body and pull against the vise to compress the Firing Pin Spring.

While pulling against the vise, unscrew the Bolt Body Assembly from the Bolt Shroud.



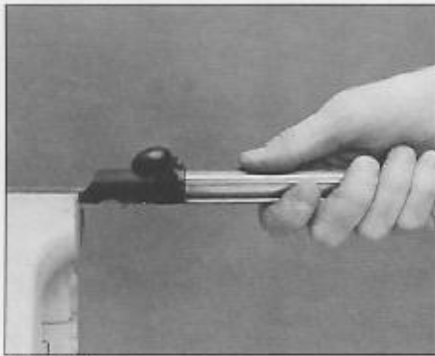


FIGURE #4

**NOTE:** After one turn of the Bolt Body Assembly, it will be easy to unscrew without pulling against the vise.

Grip the Firing Pin Assembly in one hand and release it from the vise.



**CAUTION:** Use care not to let the Firing Pin Assembly fly out of the vise.

## 2. DISASSEMBLY OF THE FIRING PIN ASSEMBLY (Figure #5)

### A. BOLT SHROUD

Grip the lower edge of the Firing Pin Sear in a smooth jaw vise as shown in Figure #6.

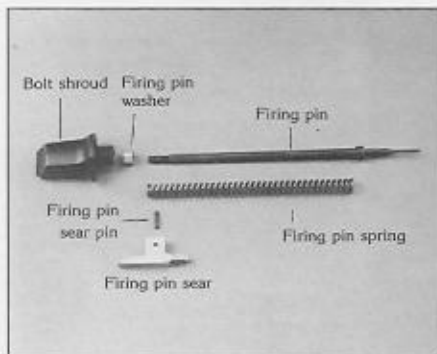


FIGURE #5

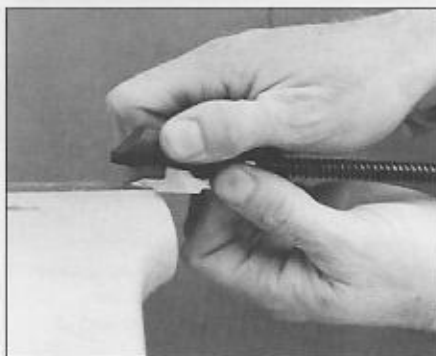


FIGURE #6

Pull forward on the Bolt Shroud and remove it by lifting upward on its rear end, also shown in Figure #6.

### B. FIRING PIN SEAR AND PIN, FIRING PIN, SPRING AND WASHER

Remove the Firing Pin Sear Pin with a 1/8" punch.

Separate the Firing Pin Sear, Firing Pin, Firing Pin Spring and washer.

## 3. INSPECTION OF THE FIRING PIN ASSEMBLY COMPONENTS

### A. FIRING PIN SEAR



**CAUTION:** As previously instructed in Para. 1 of Section III, "PRE-DISASSEMBLY INSPECTION", inspect the BBR Firing Pin Sear to make sure it has been chrome plated.

If the Firing Pin Sear has been polished to a bright finish and there is some question as to whether it has been chrome plated, check it with cold blue. If chrome plated, cold blue will not turn it dark.

**NOTE:** The forward most end of the Firing Pin Sear that contacts the Bolt Handle's camming surface should not be chrome plated.

The Firing Pin Sear must be chrome plated to properly release from the Sear when the rifle is fired. **DO NOT ATTEMPT TO CHROME PLATE THE FIRING PIN SEAR YOURSELF.**

Once again - if the BBR Firing Pin Sear is found not to be chrome plated, perform no repairs and return the rifle immediately to the Browning Service Center in Arnold, Missouri for modification.

If the Firing Pin Sear is found not to be chrome plated, in addition a modification may be required to the Trigger. Assembly involving restricted parts.

**NOTE:** Later A-Bolt production incorporated a roller on the forward end of the Firing Pin Sear. This roller contributes to an easier opening bolt when the Action is being cocked. The Firing Pin Sears with rollers are interchangeable with those Firing Pin Sears containing no rollers.

### B. FIRING PIN

Inspect the Firing Pin for straightness to prevent excessive friction in its movement when installed in the Bolt Assembly.

### C. FIRING PIN WASHER

Inspect the beveled edge of the Firing Pin Washer for burrs. Roughness

there will contribute to hard opening.

Deburr or chamfer the edge with a cone shaped stone in a Dremel tool or drill motor.

### D. FIRING PIN SPRING

Early A-Bolt production rifles contained only 33 coils in a Firing Pin Spring. Count the coils in the Firing Pin Spring and if 33 are found, replace with a new spring which will contain 36 coils. This is to prevent the possibility of a misfire.

## 4. REASSEMBLY OF THE FIRING PIN ASSEMBLY

Position the Firing Pin Spring on the Firing Pin.

Position the Firing Pin Washer on the Firing Pin orienting the beveled edge of the washer to the rear.

**NOTE:** Do not use the Firing Pin Washer in conjunction with a Firing Pin Spring containing 36 coils.

Install the Firing Pin Sear on the Firing Pin orienting the Cocking Indicator to the rear. Install the Firing Pin Sear Pin and center it.

Grip the Firing Pin Sear in a smooth jaw vise as shown in Figure #6. Compress the Firing Pin Spring with one hand and install the Bolt Shroud to the rear of the Firing Pin Washer.

## 5. DISASSEMBLY OF THE BOLT BODY ASSEMBLY (Figure #7)

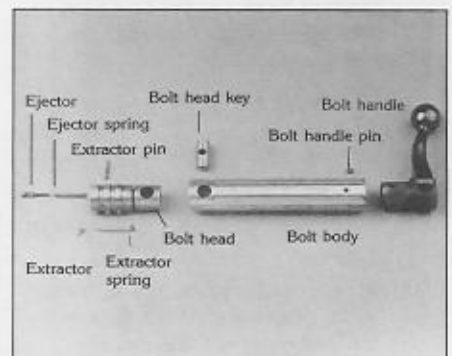


FIGURE #7

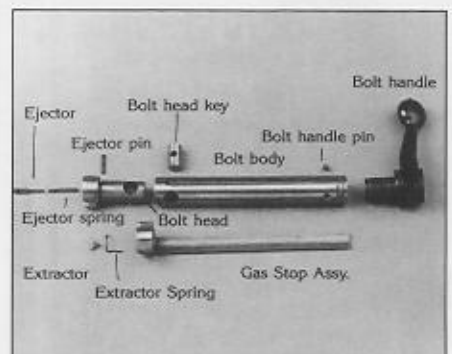


FIGURE #7

### A. BOLT HANDLE AND BOLT HANDLE PIN

Remove the Bolt Handle Pin with a 3/32" punch.

**NOTE:** On the A-Bolt the Bolt Handle Pin must be driven through the Bolt Body.

Open the jaws of a vise and rest the Bolt Handle on the vise as shown in Figure #8.

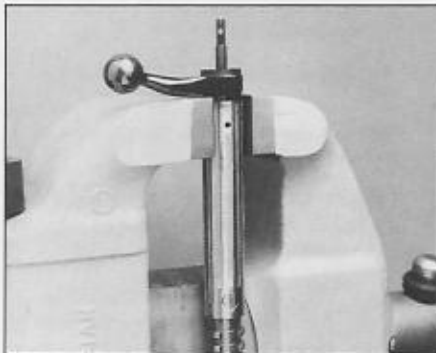


FIGURE #8

**NOTE:** Do not grip the Bolt Body with the vise.

Insert an old Firing Pin into the Bolt Body, also shown in Figure #8.

Drive the Bolt Body away from the Bolt Handle.

### B. BOLT HEAD AND BOLT HEAD KEY

Using a large brass punch, remove the Bolt Head Key, the Bolt Head Assembly, and on the A-Bolt the Gas Stop Assembly.

**NOTE:** If required, grip the Bolt Body in a smooth jawed vise and drive away the Bolt Head using a large brass punch.

### C. EXTRACTOR AND EXTRACTOR SPRING

Remove the Extractor Spring, located in the groove around the neck of the Bolt Head, and the Extractor.

### D. EJECTOR, EJECTOR SPRING AND PIN

Grip the neck of the Bolt Head in a vise as shown in Figure #9.

Using a 1/16" punch, partially remove the Ejector Pin from the side closest to the Ejector as shown in Figure #9.

Withdraw the punch and remove the Ejector and Ejector Spring.



**CAUTION:** Use care while withdrawing the punch not to let the Ejector fly out of the Bolt Head.



FIGURE #9

## 6. INSPECTION OF THE BOLT BODY ASSEMBLY COMPONENTS (Figure #7)

### A. BOLT BODY

Inspect for cracks in the Bolt Body, paying particular attention to the milled grooves.

Replace if cracked.

Inspect for burrs in the Bolt Retainer slot. Roughness here may contribute to hard opening. Remove burrs with a fine cut pillar file.

### B. BOLT HEAD

Inspect for cracks or broken-out areas, especially around the Extractor slot.

Deburr the Ejector Spring hole with a #29 reamer or drill bit.

### C. BOLT HANDLE

Inspect the camming surface for roughness and polish if required. Roughness here will contribute to hard opening.

Inspect the notch as shown in Figure #10 for adequate depth to hold the nose of the Firing Pin Sear when the Bolt Handle is rotated fully opened.

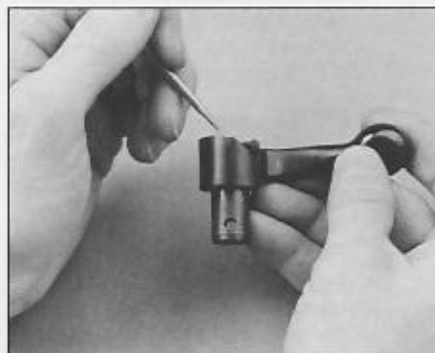


FIGURE #10

## 7. REASSEMBLY OF THE BOLT BODY ASSEMBLY (Figure #7)

### A. EJECTOR AND EJECTOR SPRING

Place the Bolt Head in a vise as

shown in Figure #9 and reinstall the Ejector, Ejector Spring and seat the Ejector Pin with a 3/32" punch.



**CAUTION:** Use care not to let the Ejector fly out of the Bolt Head.

### B. EXTRACTOR AND EXTRACTOR SPRING

Position the Extractor in the face of the Bolt Head for installation making sure the edge milled for the cartridge rim is positioned downward.

Install the Extractor Spring.

### C. BOLT HEAD ASSEMBLY

Position the Bolt Head in the Bolt Body. In case of the A-Bolt, place the Gas Stop Assembly for installation between the Bolt Body and the Bolt Head positioning the Extractor Spring beneath the forward end of the Gas Stop Assembly.

**NOTE:** Make sure the Extractor is located 180° away from the Bolt Retainer slot in the Bolt Body.

### D. BOLT HEAD KEY

Start the Bolt Head Key in the Bolt Body and Bolt Head aligning the hole in the key longitudinally with the Bolt Body.

To aid in alignment, position the forward end of the Firing Pin in the Bolt Head Key as shown in Figure #11.

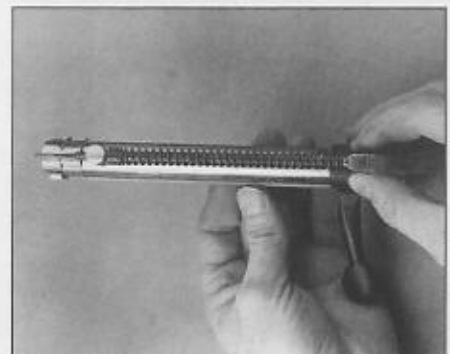


FIGURE #11

Withdraw the Firing Pin and drive the Bolt Head Key flush with a rawhide mallet.

Insert the Firing Pin Assembly in the Bolt Body and check alignment of the Bolt Head Key and the straightness of the forward end of the Firing Pin.

### E. BOLT HANDLE AND BOLT HANDLE PIN

Align the Bolt Retainer slots in the Bolt Body and Operating Handle as

shown in Figure # 12 and drive the Operating Handle in place with a rawhide mallet. In case of the A-Bolt, the Bolt Retainer slot in the Bolt Body does not extend into the Operating Handle.

Just make sure when aligning the Bolt Handle Pin, the Operating Handle must be installed 180° away from the Bolt Retainer slot in the Bolt Body.

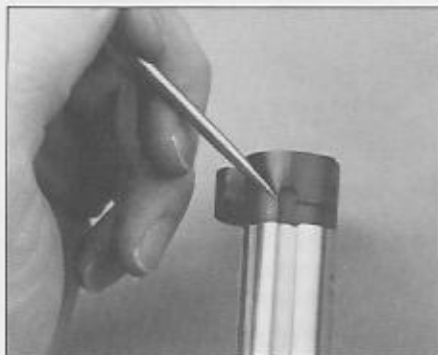


FIGURE # 12

**NOTE:** An alternate method to install the Bolt Handle is to press into place using the jaws of a vise.

After the Bolt Handle is in place, check for true alignment of the Bolt Retainer slots or Bolt Handle Pin holes. If out of alignment, grip the Bolt Body in a smooth jaw vise. Align the Operating Handle by tapping the end of the handle with a rawhide mallet.

Install the Bolt Handle Pin.

#### 8. REASSEMBLY OF THE BOLT BODY AND FIRING PIN ASSEMBLIES (Figure #3)

Open the jaws of a vise slightly wider than the thickness of the Firing Pin Sear. Using a block of wood as shown in Section VI, Para. 2.A, compress the Firing Pin Spring as shown in Figure # 13 and grip the rear end of the Firing Pin Sear with the vise.



FIGURE # 13



**CAUTION:** Use care in compressing the Firing Pin Spring not to let the Firing Pin Assembly fly out of the vise.

With the Firing Pin Spring fully compressed, screw the Bolt Body fully onto the Firing Pin Assembly.

Unscrew the Bolt Body Assembly less than one turn until the point of the Firing Pin Sear aligns with the Bolt open notch on the Bolt Handle.

Release the vise and allow the point of the Firing Pin Sear to drop into the Bolt open notch.

#### 9. DISASSEMBLY OF THE BARRELED RECEIVER ASSEMBLY

##### A. BOLT RETAINER, PIN, SPRING AND SCREW (Figure # 14)

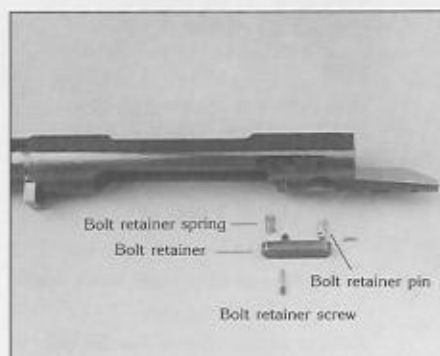


FIGURE # 14

Normally, the only reason to remove the Bolt Retainer Assembly would be to reblue the Barreled Receiver Assembly or to replace the Bolt Retainer Pin.

To disassemble, remove the Bolt Retainer Screw and remove the Bolt Retainer, spring and screw.

##### B. SIGHTS

If the Barreled Receiver is to be reblued and the rifle being repaired has sights installed, remove the front and rear sights by unscrewing from the Barrel.

##### C. RECEIVER AND BARREL ASSEMBLY

Disassembly of the Receiver and Barrel Assembly should not be attempted. If replacement of component parts is required, the replacement of the entire assembly is necessary.

#### 10. INSPECTION OF COMPONENT PARTS AND REASSEMBLY OF THE BARRELED RECEIVER ASSEMBLY

Inspect the Locking Lugs in the Barrel Extension for signs of over pressurization. If the rifle has been over

pressurized, the edges of the Locking Lugs will be slightly rounded.

Replace the assembly if signs of over pressurization exist.

Reinstall the Bolt Retainer Assembly and sights, if removed.

#### 11. INSPECTION AND ADJUSTMENT OF THE TRIGGER ASSEMBLY



**CAUTION:** The proper adjustment and configuration of the Trigger Assembly is critical. Observe the following recommended procedures explicitly.

##### A. INSPECTION OF THE SAFETY STUD

Inspect the screw slot end of the Safety Stud, as shown in Figure # 15, for an approximate diameter of 3/16" (BBR only).

If smaller than 3/16", return the complete rifle to the Browning Service Center in Arnold, Missouri or exchange the complete Trigger Assembly for an updated one available from the Browning Arnold Parts Dept.

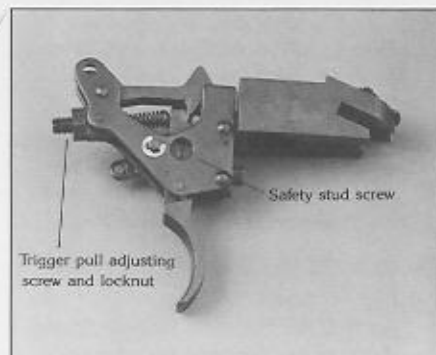


FIGURE # 15

##### B. SEAR ENGAGEMENT INSPECTION

Rotate the Safety to the "OFF SAFE" position and inspect for a minimum of .030" Sear engagement with the Trigger.



**CAUTION:** If the Sear engagement is less than .030", do not attempt to adjust it. Return it immediately to the Browning Service Center in Arnold, Missouri, or in case of the BBR, exchange the Trigger Assembly for a new one which is available at the Browning Parts Department in Arnold, Missouri. The adjustment will require the fitting of a new Safety Stud which can only be fitted by personnel at the Browning Service Center in Arnold, Missouri.

### C. SAFETY INSPECTION

Place the Safety to the "ON SAFE" position. Pull the Trigger firmly. There should be no discernible movement of the Trigger before there is mechanical interference between the Safety Stud and the Safety.

If movement of the Trigger is detected, do not attempt to adjust but return the rifle to the Browning Service Center in Arnold, Missouri or in case of the BBR, exchange the complete Trigger Assembly for an updated one which is available at the Browning Parts Department in Arnold, Missouri. Adjustment requires the fitting of a Safety Stud which is a restricted part and should only be fitted by personnel at Browning's Service Center at Arnold, Missouri.

### D. TRIGGER PULL ADJUSTMENT

Trigger pull adjustment will be discussed during final assembly prior to Stock installation.

### 12. INSPECTION AND DISASSEMBLY OF THE MAGAZINE FLOOR PLATE ASSEMBLY (Figure # 16)

Normally, disassembly of the Magazine Floor Plate Assembly is not required except for replacement of a broken Magazine Retainer Spring.

To replace the Magazine Retainer Spring, remove the two (2) Magazine Floor Plate Hinge Pins and partially remove the Magazine Retainer Spring Pin.

### 13. REASSEMBLY OF THE FLOOR PLATE ASSEMBLY

Reinstall the Magazine Retainer Spring and seat the Magazine Retainer Spring Pin making sure it does not protrude from the sides of the Magazine Floor Plate.

Install one of the Magazine Floor Plate Hinge Pins through the forward hole in the Floor Plate Hinge and Hinge Spring.

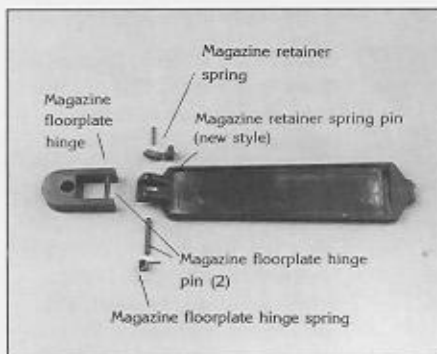


FIGURE # 16

**NOTE:** Proper orientation of the hinge is shown in Figure #16.

Compress the two arms of the Hinge Spring together and install the second Hinge Pin.

### 14. FINAL ASSEMBLY AND ADJUSTMENT

#### A. TRIGGER ASSEMBLY INSTALLATION AND ADJUSTMENT

Position the Trigger Assembly (including the Bolt Handle Lock) on the Barreled Receiver and install the Safety Block Screw, washer and the Trigger Side Plate Set Pin (Figure #2).

Install the Bolt Assembly and check the Trigger pull for a let-off force of 3 3/4 to 4 1/4 lbs (BBR) and 3 1/2 to 6 1/2 lbs. (A-Bolt).

#### BBR

To lighten the Trigger pull, loosen the Trigger Pull Adjusting Screw Lock Nut and turn the Adjusting Screw counterclockwise and vise versa to make it heavier.



**CAUTION:** Never adjust the Trigger pull to a value lower than 3 3/4 lbs.

After adjustment of the Trigger pull, tighten the Trigger Pull Adjusting Screw Lock Nut securely to prevent it from loosening.

#### A-BOLT

To lighten the Trigger pull, turn the Trigger Pull Adjusting Screw clockwise and vise versa to make it heavier.



**CAUTION:** Never adjust the Trigger pull to a value lower than 3 1/2 lbs.

#### B. STOCK INSTALLATION AND ADJUSTMENT

Place the Action in the Stock and check for interference between the Stock and the rear Tang and Safety Block (Figure #2). Relieve wood as necessary (especially in the BBR).

Check the Barrel channel and relieve wood if necessary to obtain a free-floating Barrel.

Check the cut-out in the Stock for signs of interference with the Magazine and relieve wood as necessary.

#### C. MAGAZINE FLOOR PLATE AND MAGAZINE INSTALLATION

Install the Magazine Floor Plate,

Barrel Mounting Screw and Trigger Guard Screw.

Install the Magazine making sure the small tab at the rear end of the Magazine is beneath its retainer at the rear end of the Magazine Floor Plate.

### 15. FINAL INSPECTION

Perform inspection sequences "B" thru "F" given in Para. 1 of Section III, "PRE-DISASSEMBLY INSPECTION" in their entirety.

## SECTION V

### TROUBLESHOOTING/POSSIBLE CAUSES/SOLUTIONS



**CAUTION:** Make sure the rifle is unloaded before performing any troubleshooting.

#### 1. BOLT INTERFERES WITH THE MAGAZINE

A. Improper installation of the Magazine. The rear tab of the Magazine is not positioned under its retainer at the rear end of the Magazine Floor Plate.

B. Stock or Magazine Floor Plate Hinge inletted too deep causing the Bolt to drag on the Magazine.

#### 2. BOLT HARD TO ROTATE OR ROUGH IN OPERATION

A. Cracked Bolt Body.

B. Burred Firing Pin Spring Washer.

C. Burred Bolt Handle threads.

D. Burred Bolt Retainer groove in the Bolt Body.

E. Misalignment of the Bolt Head Key with the Firing Pin.

F. Galled camming surface on the Bolt Handle and galled Firing Pin Sear.

G. Scope Base Screws too long dragging on the Bolt.

#### 3. MISFIRES

A. Weak Firing Pin Spring. In regard to the A-Bolt, check to make sure the Firing Pin Spring has 36 coils. See page 7.

B. Misalignment of the Bolt Head Key with the Firing Pin.

## SECTION VI

### SPECIAL INSTRUCTIONS

#### 1. RECOMMENDED POINTS OF LUBRICATION DURING REASSEMBLY

The use of Browning Gun Oil is recommended. Always use oil sparingly. In the areas to be lubricated where grease is called for, a name-brand gun grease is sufficient.

- A. Oil the Firing Pin.
- B. Grease the engaging surfaces of the Sear and Trigger.
- C. Grease the Bolt Handle threads and camming surface.
- D. Oil exterior surfaces.

#### 2. SPECIAL TOOLS

- A. Block of hardwood  $3/4"$  x  $2"$  x  $3"$  with  $1/4"$  hole  $2"$  deep as shown in Figure # 17.

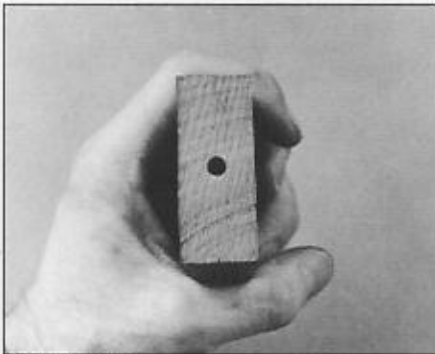


FIGURE # 17