

Revised January 2010

Dear Prospective Guild Member

Thank you for your interest in the American Pistolsmiths Guild. Enclosed is an application, a current membership roster, a copy of the Guild bylaws, and a set of inspection check sheets for the major categories of handguns.

The American Pistolsmiths Guild is seeking individuals who are experienced, exacting, pistolsmiths who have specialized skill that set them apart from general gunsmiths. These individuals must be thoroughly familiar with the guns that constitute their specialty and routinely engage in procedures which require a high level of skill as machinist, welder, and metal finisher.

The Guild is dedicated to the pistolsmithing craft and to the shooters and customers who patronize the profession. It is extremely important customers have confidence that Guild members are competent and honest craftsmen and women of great integrity. **The Guild will sanction and expel members who engage in unethical or irregular business practices.** The credibility of the Guild is, otherwise, at risk.

The American Pistolsmiths Guild will afford members the opportunity to display their work and meet the shooting public. Other services of the APG are to provide space on the Internet, distribute membership rosters, promote the presence of members through advertising, exchange information between members and other Guild organizations, refer customers and establish firearms industry standards through the APG Seal Of Approval.

The Guild is also active in pertinent legislative matters that effect the trade specifically and is in firm support of our Second Amendment rights.

Before filling out the application form, **please read the bylaws.** This book describes the guidelines and operating policies of the Guild organization.

Please complete the application and send it with your work samples to your appointed field representative. Include several **photographs** of your shop and interior, a list of **three business credit references**, and a list of six or more **customer references.**

Membership application requires submission of at least **two samples of an applicant's work.** Applicants must submit two guns for each area of expertise claimed. **If at some later date a Guild member decides to add an area of expertise to the lists, he or she must submit additional work samples.** Members may advertise with the approved Guild logo, only those areas of expertise where they have demonstrated to the guild the requisite competence.

The initial inspection of prospective members work will be conducted by a Guild field representative who will make a general evaluation to ascertain if the work is of generally acceptable quality. You may select from any one of the field representatives, listed below, for your specialty. **Please contact your representative before shipping or delivering guns** so the inspection can be scheduled and you can receive shipping details, FFLs, etc. Plan to **send \$65.00 for UPS or Fed Ex Overnight shipping** to cover the costs of return shipping, handling, signature and insurance. Your representative will review your guns against the Guild checklist and either recommend the guns be approved for detailed inspection or advise that they require further

attention and corrective efforts. If approval is denied, the guns must be re-examined, by the same field representative, before submission for a detailed Board of Directors inspection.

Please note, these check lists are by no means complete. **The Guild reserves the right to pass final judgment on any modifications**, with respect to safety, design, style, and finish, performed on guns that are submitted for inspection. Please also bear in mind the **representatives serve only as work inspectors** and are available for this limited purpose only.

Do not send work samples using customers guns or guns you have to have returned immediately! Inspectors will keep your guns anywhere from one to three months. The guns you submit to your designated field representative will have to be presented to the Guild general membership at the annual meeting and banquet.

Below is a partial list of representatives and their respective specialties: **(Call one for an "OK" before sending your firearm.)**

Model 1911 Semiautomatic pistols:

Alex Hamilton (Texas)	1-210-494-3063
Richard Heinie (Illinois)	1- 309-543-4535
Al Marvel (Maryland)...	1-410-557-6545
Mike Watkins (Iowa)	1-

Double Action revolvers:

Sandy Garrett (Virginia)	1-703-644-6504
Bill Jarvis (Montana)	1-406-961-4392
Ron Power (Missouri)	1-314-372-5684

Single action revolvers, semi automatics, derringers, and miscellaneous guns:

Hamilton Bowen (SA revolvers)	Tennessee	1- 615-984-3583
James Stroh (SA revolvers/non 1911 autos)	GA.	1-404-267-6163
Bill Jarvis (non 1911 autos)	Montana	1-406-961-4392

Once your guns meet with the approval of the field representative, the same guns you submitted to your field representative must be delivered, **in person**, to the annual membership meeting (held in conjunction with the NRA annual meetings). They will be subjected to a detailed disassembly and inspection and reviewed again against the check list requirements. It is imperative the applicants submit **complete and refined work**. While it is not necessary anyone embody all of the required modifications on the check list, all of these requirements must be accompanied by a written description of the work you performed.

The membership meeting is always held in conjunction with the annual NRA convention. The application will be reviewed at this time and voted on for tentative probationary membership by the meeting quorum. Once your guns are approved and judged satisfactory, **you will be accepted as a probationary member**. The probationary period will continue for **one year from the time of board inspection**, and, barring unsatisfactory behavior, the probationary membership will convert automatically to full and regular status. At this point, new members may represent themselves as full and regular members of the American Pistolsmiths Guild.

If you have questions please feel free to contact any Guild officer. Thank you again for your interest in the American Pistolsmiths Guild.

ALEX B. HAMILTON, Recording Secretary

SINGLE ACTION REVOLVER CHECK SHEETS

This check list consists of four major sections:

- 1.) Action tuning**
- 2.) Major component fitting**
- 3.) Installation of accessories**
- 4.) Finishing**

Each check sheet item or modification cited is required unless otherwise noted. Although optional modifications are not required, they will add to the quality and appearance of the revolver and will, consequently, make a favorable impression on the examiners. In a formal inspection, field representatives will apply the following notations to the blanks provided at the left margin:

- S**: Satisfactory
U: Unsatisfactory
NA: Not applicable

These sheets were originally devised for the new Ruger Blackhawk revolvers, but are generally applicable to all makes and models. Feel free to contact Guild officers with any questions.

I. ACTION TUNING

— **1.) Smooth action cycle: action should run smoothly, free of roughness, hitching and binding.**

2.) Timing:

- a.) Unlock timing: cylinder stop must drop clear of the cylinder notches before rotation starts.
- b.) Carry up timing: cylinder bolting and hammer cocking should occur simultaneously. If the hammer cocking can be deliberately cocked without bolting, the timing is too slow.
- c.) 1st and 2nd hooks on the hand should not be too close together and allow binding or hitching on the ratchet teeth.

3.) Trigger pull:

- a.) Free of excessive creep.
- b.) Free of backlash.
- c.) Pull weight 2.5 to 4 pounds.
- d.) Sufficient trigger return spring pressure to allow the trigger to return reliably.
- e.) Sear engagement must be sufficient to preclude hammer push-off.

- f.) Trigger over-travel stop (optional):
 - i.) Trigger/sear surfaces clear half-cock notch on old style guns.
 - ii.) On Ruger New Models, sear surfaces must no 'bump' when hammer fall starts.
 - iii.) Installation attractive and unobtrusive.
- 4.) New Model Ruger's or similar: transfer bar must function correctly. Firing pin should not move when the hammer is lowered with the trigger forward.

II. MAJOR COMPONENT FITTING

1.) Cylinder:

- a.) End-float not to exceed .0005" to .001".
- b.) Cylinder should rotate freely on the basepin without binding.
- c.) Receiver cylinder bearing areas reasonably smooth and square.
- d.) Headspace correct for caliber chambered. .060" to .065" on standard cartridges.
- e.) Cylinder stop notch free of damage and burrs.
- f.) Front face of cylinder square.

2.) Barrel (custom barrel required)

- a.) Cylinder gap maximum .004" to .005" on guns with standard cylinders.
- b.) Cylinder must not drag on barrel extension during action cycling.
- c.) Barrel to cylinder gap square.
- d.) Forcing cone smooth, symmetric and of proper depth, checked with a plug depth gauge.
- e.) Front sight:
 - i.) On straight
 - ii.) Silver solder cleaned well and free of gaps.
 - iii.) Sight should sit flush with the corner of the muzzle crown.
- f.) Ejector housing:
 - i.) Should be pulled down to barrel and free of gaps.
 - ii.) Tube should be pulled up tight to the receiver face.
 - iii.) If installed on a short barrel, the end of the tube should be flush with the corner of the muzzle crown.

3.) Grip frame and receiver fit: Parts should align with no over or under lap. Polishing should match and corners sharp when parts are separated.

III. ACCESSORIES

*****Optional. Very few after-market accessories are available for single action revolvers. However, there are a few common ones that builders should be able to utilize.**

- 1.) **Scope mounts and bases:** Installed as per the makers instructions. Mount should be on straight and square with properly drilled and tapped holes.
- 2.) **Adjustable rear sights:** Must have proper functioning and free of binding.
- 3.) **Grips:** Should be attractively shaped, well fitted with no gaps, and fitting flush with the grip frame.

IV.) FINISH

1.) Metal preparation:

- a.) Surfaces ripple free; corners sharp; screw holes crisp.
- b.) Screw heads free of damage.
- c.) Welding should not show hardness which effects bluing or plating. Should be free of pits and inclusions and be properly finished.
- d.) Solder joints free of gaps and without excessive solder.

2. Finish proper:

- a.) Bluing and plating should be evenly applied, free of clouds, spots, and discoloration.
- b.) Matte finishes should be even with no over-spray.
- c.) If the receiver on Ruger revolvers are color case hardened, the firing pin bushing retaining pin should be finished and oriented properly.

3.) Serration's and checkering (optional):

- a.) Should be even with parallel lines and diamonds, sharp, and free of runovers and dents.

GENERAL REMARKS AND OBSERVATIONS:

MODEL 1911 AUTOLOADERS CHECK SHEETS

This check sheet consists of six major sections:

- 1.) Trigger fitting and tuning**
- 2.) Slide and frame fitting and related modifications.**
- 3.) Match barrel fitting and installation.**
- 4.) Fit and function of performance accessories and related modifications.**
- 5.) Miscellaneous modifications.**
- 6.) Finishing.**

Each sheet item or modification cited is required unless otherwise noted. Although optional modifications are not required, they can add to the quality of the gun and will, consequently, favorably impress the examiners. In a formal inspection, field representatives and annual meeting examiners will apply the following notation to the blanks provided at the left margin:

- S:** Satisfactory
U: Unsatisfactory
NA: Not applicable

These sheets were devised for the Colt Model 1911 and the various clones and may not be applicable to other autoloaders. In the event the applicant submits an autoloader not properly covered by these sheets, the officers, at their discretion, will appoint a committee of competent members to examine such pistols.

Feel free to contact Guild officers with any questions.

I. TRIGGER FITTING AND TUNING

1.) Match trigger installation:

- a.) Trigger should move freely with no vertical or horizontal play.
- b.) Trigger must have some, take up slack, for safety.
- c.) The trigger overtravel screw should be adjusted so the hammer does not bump the sear when the trigger is pulled, the grip safety held in, and the trigger rotated and cycled by hand. Screw should be properly staked.
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- d.) The trigger should be properly beveled on the bottom so the sear spring does not contact the trigger bow before contacting the bow.
- e.) The yoke should not overhang the magazine well and bind the magazine.
- f.) The disconnecter should be polished on the front and rear of its paddle, maintaining the proper bevels. The disconnecter should not catch in the frame disconnecter hole and should not have excessive forward and back motion

2.)Sears:

- a.) Sear should have full and free movement throughout its entire range of movement.
- b.) Sear must have the proper and safe angle where it engages the hammer hooks, polished on the bottom legs, and polished where the engagement spring leg contacts the left leg.
- c.) Sear springs should be properly prepped with the sides trued and flattened, the working tips polished, and all bends in keeping with factory arch and tensions.

3.) Hammers:

- a.) Hammer must have hooks beveled, polished, and not cut below .018".
- b.) Hammer must have .005" to .010" clearance cuts on either side of the thumb spur to minimize frame contact.
- c.) The hammer should rotate freely throughout its entire range of movement.
- d.) The hammer should not follow the slide when the trigger is held back, or not held back, when the slide is violently released without a cartridge in the magazine.
- e.) The hammer halfcock notch should be trimmed approximately .035" on each side so the sear will not be damaged if the hammer falls to half-cock.
- f.) When the hammer is resting in the forward position, there should be no perceptible slack or free play. The hammer spring (mainspring) should be applying constant pressure on the hammer strut even when the hammer is all the way forward, at rest, and in the fired position.
- g.) Hammer and sear pivot pins should be a slip fit into the frame, but should not pivot when the hammer or sear is moved.

4.) Mainspring housing:

- a.) The housing should meet the bottom of the grip safety with plenty of contact between the two parts and just enough gap to allow the parts to work freely.
- b.) The mainspring (hammer spring) should be flat ground on each end and polished. The sides can also be flat ground and polished.
- c.) The mainspring cap should have the top ground down so it is in the highest position and still be able to effectively capture the hammer strut without slipping.
- d.) The mainspring cap retaining pin should hold the cap square and flush within the housing.
- e.) The mainspring housing should fit tightly and be flush with the bottom of the frame. The housing pin should be tight and not move under slight pressure.

5.) Trigger function/pull weight:

- a.) Trigger should be free of creep and catches, although, on combat or duty guns, a slight amount of creep will be permitted for safety.
- b.) Pull weight should be adjusted to suit the specific application, the skill level of the shooter, and the quality of the components used. The typical range of trigger pull weight is from **3.5 to 5 pounds using real weight** and not spring gauges.

III. SLIDE AND FRAME FITMENT AND RELATED MODIFICATIONS

1.) Slide to frame fit:

- a.) Side and vertical play must be reduced to a minimum that will allow the slide to move freely on the frame. Note: Clearly not all applications require the same degree of slide to frame fit. However, guns submitted for review should show evidence of fitting done properly, regardless of application.
- b.) Slide should not bind at any point, moving upon the frame. Once the gun is assembled, the slide should release quickly from the battery position.
- c.) The slide rails should be smooth and clear of machining and hammer marks.

2.) Ejector/extractor fit and function:

- a.) The extractor should be correctly beveled, adjusted, polished, and have the correct tension. The bottom of the hook and bottom of the groove should be rounded and polished.
- b.) The ejector should be proper for the caliber, not touching the slide, but blended into the rear of the slide for a finished appearance. It should be down, tight against the frame.

3.) Compensators:

- a.) (See also barrel fitting) The compensator and slide should fit together, uninterrupted lines. They should not touch or hammer each other.

III. MATCH BARREL INSTALLATION AND FITTING

1.) Bushings

- a.) Solid, oversize bushings are required.
- b.) Bushings should fit the slide tightly and have to be removed with a wrench.
- c.) The bushing should let the barrel slide through with minimal clearance and without resistance and should allow the barrel to cam up into the battery position without springing back.
- d.) The match barrel should be relieved, turned down, at least .005" for about .250" behind the muzzle to allow free cycling of the barrel when coming out of battery.

2.) Barrel to hood fit:

- a.) Should be fitted to the face of the slide with minimum clearance.

- b.) When the barrel is pushed up into the slide, there should be no spring-back.
- c.) Sides of the hood should have minimum clearance and barrel should not rock from side to side.
- d.) There should be no fore and aft movement when the barrel is in battery.
- e.) Barrel should drop free from the battery position with minimal or no pressure on the top of the barrel.

3.) Barrel lugs and lockup:

- a.) The match barrel should be installed so the slide stop is contacting both bottom lugs and the rear, top locking lug is contacting its notch in the slide, "TOP DEAD CENTER." Barrel lug must be marked.
- b.) Gun should lock and unlock smoothly without hitching or hesitation.
- c.) Top of the barrel should not rub the slide when locking and unlocking to prevent rolling the edges of the slide locking recess.
- d.) Welded lugs should follow the same rules as oversize fitted barrels and should not show excessive heating in critical areas.
- e.) The barrel link should move freely and serve to unlock the barrel, only, from the battery position.

4.) Chamber and throating:

- a.) Headspace should be set to **SAAMI** specifications.
- b.) Loaded cartridges should drop freely into the chamber and not protrude past the rear of the hood.
- c.) The barrel chamber should be opened at the bottom large enough to allow the largest hollow-point or the shortest wadcutter to enter without catching or slowing down on the bottom rim.
- d.) The bottom of the barrel chamber should be approximately .031" (in front of the frame ramp when the barrel is installed in the frame only using the slide stop).

5.) Compensators:

- a.) The compensator should do the job for which it was intended.
- b.) Clearance at the exit port should be approximately .010" to .020".
- c.) Clearance between the front of the slide and the rear of the compensator should be enough (approximately .003") to allow the barrel to go into battery without the two touching and hammering.

— d.) Cone style should be tight when in battery position, having no felt horizontal or vertical play.

— *****NOTE: BUSHINGLESS OR CONE STYLE BARRELS SHOULD LOCK UP AS TIGHTLY IN THE BATTERY POSITION AS A BUSHING BARREL, WITH NO DISCERNABLE MOVEMENT, VERTICALLY OR HORIZONTALLY.**

IV. FIT AND FUNCTION OF PERFORMANCE ASSESSORIES AND RELATED MODIFICATIONS

1.) Magazine wells:

— a.) Whether the full welded type or the Smith Alexander style, the well should be blended with the bottom of the frame so there is very little evidence of a joint.

— b.) There should be no overhanging edges to catch the edges of the magazine and the well should be polished and smooth.

2.) Safeties:

— a.) **All factory safety devices should be in place and fully functioning.**

— b.) A custom grip safety should be fitted so it works properly. It should be fitted so the metal of the frame and the safety blend together squarely with little side play. When the safety is in the safe position, you should be able to pull the trigger and not detect any movement of the hammer or feel any movement of the sear, whatsoever.

— c.) If the grip safety arm has been stretched by peening, there should be no signs of cracking or over working. If there is, the arm must be welded and repaired or replaced.

— d.) The thumb safety should move freely, but firmly into the safe position and come back to the safe position with a firm snap. It should not scrap or mar the frame finish when moved.

— e.) All safety features must be checked for safe operations, grip and thumb safeties, the disconnecter, and halfcock notch.

3.) Sights:

— a.) Front sights, staked or crimped, should be square and flush on the bottom and parallel to the length of the slide.

— b.) Dovetail sights should be nicely blended and not show daylight under the sight base or blade sections resting on the slide top surface.

— c.) A rear sight installed in an existing dovetail or modified dovetail should be straight and square and without any metal chips or burrs pushed up along the edges of the dovetail.

— d.) a rear sight installed in the low mount position should not have any light showing under or around the base where the slide was milled away. The milling cuts should be square with the bottom of the slide. BoMar sights can hang over the rear of

the slide on series 80 Colt Model 1911's or on other variants having firing pin block devices located in the top and rear of the slide.

- e.) Scope mounts, whether side or top mounted, must be installed straight and true to the axis of the bore and should hold the scope properly without warping or bending it out of line.
DO NOT DEFACE SERIAL NUMBERS WHEN INSTALLING MOUNTS.

V. Finishing

1.) Metal preparation:

- a.) Surfaces should be ripple free, the corners sharp, and screw holes crisp. Machine and rough polish marks should be removed.
- b.) Screw heads should be clean and free of burrs and damage.
- c.) Welding should not show hardness that shows in the bluing or plating. It should be free of pits and inclusions.
- d.) Solder joints should be free of gaps. No excess solder should show.

2.) Finish proper:

- a.) Bluing, plating, phosphate, and polymer coatings should be applied evenly, free of clouds, spots, and discoloration.
- b.) Matte finishes should be even and free of over-spray, especially in the bore.

3.) Checkering:

- a.) Should be even, with parallel lines, sharp, and free of run-overs and goobers.
- b.) Bordered checkering should have straight borders parallel to the lines of the checkering.

IV. MISCELLANEOUS MODIFICATIONS:

GENERAL REMARKS AND OBSERVATIONS:

DOUBLE ACTION REVOLVER
CHECK SHEETS

This check list consists of five major sections:

- 1.) **Cylinder fitting.**
- 2.) **Action tuning and fitting.**
- 3.) **Barrel fabrication and fitting.**
- 4.) **Miscellaneous modifications and accessories.**
- 5.) **Finishing.**

Each check sheet item or modification cited is required unless otherwise noted. Although optional modifications are not required, they will add to the quality and appearance of the revolver and will, consequently, make a favorable impression on the examiners. In a formal inspection, field representatives will apply the following notations to the blank provided in the left margin:

- S**: Satisfactory
- U**: Unsatisfactory
- NA**: Not Applicable

This check list is primarily keyed to Smith and Wesson revolvers, but will, in most particulars, apply to other makes and models. Also attached are other set of Armorer's checks and tests that will also be used to review the general fit and function of guns submitted, although, this series of check items may not be applied completely or specifically. Feel free to contact Guild officers with any questions.

I. CYLINDER FITTING AND FUNCTION

1.) Yoke and crane:

- a.) Yoke/crane must align with the center pin, rear bolt hole. May be out slightly at three o'clock to hold the yoke close to the frame, but not to the extent the cylinder binds.
- b.) Yoke/crane endfloat should not exceed .001".
- c.) Ball detente lock must function properly. Do not drill into the barrel threads.
- d.) Front of the cylinder must not hit the barrel extension upon closing.

2.) Extractor/Ejector:

- a.) Should operate smoothly with all guide pins in place.
- b.) Ratchet teeth should be free of burrs and must not be "staked" to achieve timing.
- c.) Ratchet teeth should be .003" to .007" below the center of the extractor and should not rub frame.
- d.) Ejector rod runout should not exceed .006".

3.) Cylinder assembly:

- a.) Opening and closing should smooth with a proper bolt fit in the front and back.
- b.) Cylinder stop must be properly fitted where utilized (as a cylinder lug). Ratchet must enter recoil shield ramp smoothly when cylinder is closed. Excess rearward float will require stop/lug replacement.
- c.) Cylinder should turn smoothly and freely in the receiver.
- d.) headspace must be correct for the cartridge. Standard cartridges would be .060" to .064".
- e.) Cylinder endfloat not to exceed .001".
- f.) Front bolt, if utilized, should fit and function properly.
- g.) Face of cylinder should be square. Gap should not vary over .001" with barrel.
- h.) Recoil shield ramp should be smooth, free of burrs and tool marks.

II. ACTION TUNING AND FITTING

1.) General function:

- a.) Cycle should be smooth, free of galloping, stacking, hitching, binding, knuckling, sear clicking, etc.
- b.) Cylinder must time and carryup correctly and evenly on all chambers. Bolting (cylinder stop drop) must occur before the hammer falls in DA and SA modes.
- c.) Both DA and SA cycles should exhibit sufficient mainspring tension for reliable ignition.
- d.) All safety devices, hammer block, rear bolt plungers, and springs must be in place for functioning.
- e.) Cylinder stop/bolt must be fitted properly, holding the cylinder and preventing throwby.

2. Trigger:

- a.) Pull weight in single action mode should be, 2.5 pounds minimum for match guns and 3.5 to 4 pounds in service guns.
- b.) SA pull should be clean and crisp with a minimum of .004" overtravel.
- c.) Hammer should not "push off" under thumb pressure.
- d.) DA pull must be heavy enough for reliable ignition and positive trigger return.

3.) Hammers:

- a.) Should not rub side of frame.

- b.) Smith and Wesson hammer nose/firing pins should protrude a minimum of .045" to .060".
- c.) If the hammer spur is removed, the single action notch should be removed. Rear of the hammer bolt contact point must not be removed (on S& W only).
- d.) Hammer must not push off under thumb pressure in single action mode.

*****NOTE: Please review the attached armorer sheets which will be employed in an examination, particularly with respect to duty weapons.**

III. BARREL FABRICATION AND FITTING

1.) Custom barrel required and for standard barrels where applicable.

- a.) Should exhibit an attractive contour.
- b.) Crown should be even, true, and free of burrs.
- c.) Barrel should be free of sharp edges.
- d.) Barrel should not be screwed into the frame with excessive torque causing bore disfigurement.
- e.) Forcing cone should be smooth, concentric, and of proper depth, measured with a plug gauge.
- f.) Face of the barrel extension should be square with the cylinder face.
- g.) Barrel to cylinder gap should be .004" to .007" maximum (.009" on service guns).

IV. ASSESSORIES AND MISCELLANEOUS MODIFICATIONS

1.) Sights:

- a.) Sights and ribs (required on custom barrels) must be installed neatly, square, and level.
- b.) Front sights must be square and parallel to the centerline of the gun.

2.) Chamfered chamber mouths: Must not be excessively deep when cut in a pistol that chambers a cartridge of high pressure.

3.) Scope mounts:

- a.) Must be drilled neatly, straight, and level.
- b.) Drilled and tapped holes must be properly executed.

V. FINISHING

1.) Metal preparation:

- a.) Surfaces ripple free; corners, sharp; screw holes crisp.
- b.) Screw heads free of damage.
- c.) Welding should not show hardness which effects bluing or plating. Should be free of pits and inclusions and be properly finished.
- d.) Solder joints should be free of gaps; no excess solder.

2.) Finish proper:

- a.) Blueing and plating should be evenly applied, free of clouds, spots, and discoloration.
- b.) Matte finishes should be even; no over-spray.

3.) Serration's and checkering (optional):

- a.) Should be even, with parallel lines.
- b.) Diamonds should be sharp and free of runovers.

GENERAL OBSERVATIONS AND REMARKS:

**AMERICAN PISTOLSMITHS GUILD
SMITH AND WESSON REVOLVER
INSPECTION GUIDELINES AND PROCEDURES**

Unload revolver and remove all ammunition for the inspection area.

I. EXTERNAL CHECKS

- A. All screws tight.
- B. Open and close cylinder six times and check for:
 - 1. Hard opening and closing.
 - 2. Cylinder stop engages cylinder slots.
 - 3. Thumb piece hard to move or sticks.
 - 4. Yoke loose on yoke screw.
- C. Check thumb piece for wink.
- D. Check hammer "knuckling" on mainspring.
- E. Open cylinder:
 - 1. Check ratchets for burrs.
 - 2. Push up on ejector roe and check for extractor pins.
 - 3. Inspect charge holes for bulging, scoring, etc.
 - 4. Check bolt slots for peening.
 - 5. Check for loose extractor rod and runout.
 - 6. Check firing pin protrusion.
- F. Close cylinder:
 - 1. Check double action timing.
 - a. With and without dummies.
 - b. Multiple orientation.
 - c. Pull through rapidly to check for "throw by".
 - d. Right and left Double Action Carry-up
 - 2. Check single action timing.
 - 3. Check for hand "sings" on ratchet.
 - 4. Cylinder must not open when hammer is cocked.
- G. Check for end-shake.
 - 1. Cylinder
 - 2. Yoke
- H. Check headspace and barrel to cylinder gap (to factory specs). Rear of barrel face must be square with cylinder.
- I. Check forcing cone with plug gauge for proper depth. Forcing cone must not be eroded or cracked.
- J. Check barrel alignment and ranging with gauges (all six charge holes).

22.
- K. Check barrel crown for burrs and square.

- L. Open cylinder and check cylinder for proper function (all six charge holes).
- M. Check for "three winks".
 - 1. Cock hammer (overall).
 - 2. Hammer down and trigger to rear (wink in trigger).
 - 3. Hammer at rest (hammer pretravel).
- N. Static weight test (to factory specs).
- O. Check locking bolt for proper engagement with extractor rod.
- P. Check trigger pull:
 - 1. Double action should be smooth with a clean break. Also check for hammer shift on stud.
 - 2. Single action (no creep).
- Q. Check for clearance between trigger and trigger stop (to factory specs).
- R. Check ejection of empty shells (grips should not interfere).
- S. Check for hammer hitting trigger.
- T. Check hammer for push-off.
- U. Trigger guard must not be thinned or altered.

II. INTERNAL CHECKS:

- A. Remove grips.
- B. Loosen yoke screw and remove cylinder. Tighten yoke screw. Check yoke alignment with gauge.
Remove yoke screw and yoke.
 - 1. Check yoke for over peening of yoke button:
 - 2. Over peening and stretching of yoke barrel.
- C. Place cylinder on yoke and check for freedom of rotation.
- D. Remove side plate and check for presence of hammer block (safety). **It must be in place and functional!**
- E. Remove strain screw and mainspring to check for:
 - 1. Factory springs (no spring kits).
 - 2. Over bowing.
 - 3. Broken stirrup finger or fractures.
 - 4. Metal shaving conditions.
- F. Remove hammer assembly and check for:
 - 1. Single action cocking notch, foot and rebound seat damage or improper alteration.
 - 2. Check sear:
 - a. Proper angle.
 - b. Free movement and recovery.
 - c. High pin.
 - 3. Check stirrup for:

- a. Damage.
- b. Free movement.
- c. High pin.
- 4. Check hammer nose for:
 - a. Damage.
 - b. Properly staked.
 - c. Free movement and recovery.

- G. Remove rebound slide assembly to check for:
 - 1. Factory spring (17 coils).
 - 2. Burrs on nose.
 - 3. Hammer seat (proper angle).
 - 4. No excessive stoning or polishing

- H. With trigger and hand assembly in the revolver, check hand for:
 - 1. Alignment in window.
 - 2. Free movement and recovery.

- I. Remove trigger and hand assembly and check trigger for:
 - 1. Hook, bevel, and cam damage or alteration.
 - 2. High pins.
 - 3. Burrs on lever.

- K. Remove cylinder stop:
 - 1. Check bevel for proper angle.
 - 2. Recovery surface for burrs.
 - 3. Ball of stop should not be altered.
 - 4. Spring (all coils present).

- L. Check hammer trigger studs for:
 - 1. Alignment.
 - 2. Looseness.

- M. Check frame lug for:
 - 1. Looseness.
 - 2. Proper orientation and secure staking.

- N. Check locking bolt for:
 - 1. Free movement.
 - 2. Remove and check for proper bevel.

Reassemble revolver in reverse order and check function in both single and double action. Revolver should be test fired with factory ammunition to ensure proper function. WHEN TEST FIRING, ALWAYS WEAR EYE AND EAR PROTECTION.

III. APPEARANCE

- A. Bluing:
 - 1. Polishing
 - a. No washed out holes or lettering.
 - b. No edge or corner distortions.
 - c. No wheel burns.
 - d. No scratches.

- e. No screw slot damage.
 - 2. Masking of matted areas should be clean and sharp.
 - 3. Bead blasting should be even. Check for evidence of "overblasting" in barrel.
- B. Sights, ribs, and scope bases:
- 1. Firmly attached.
 - 2. Square to frame.

IV. PPC BARREL INSTALLATION

- A. Underlug tight and square to the frame. Underlug radius should match the O. D. of the barrel.
- B. Diameter of barrel should be consistent (entire length).
- C. Flats should be consistent in width (entire length, both sides).
- D. Finish comparable to frame.
- E. Length of six inches overall.
- F. Crown should be clean and true (machined).
- G. Ball détente bolt lock:
 - 1. Must secure yoke without movement.
 - 2. Be positive.
 - 3. Détente must not be drilled into barrel threads.
- H. Check over-travel stop in trigger:
 - 1. Drilled and tapped on center.
 - 2. Location above center of trigger bow.

COMMENTS AND OBSERVATIONS:

**AMERICAN PISTOLSMITHS GUILD
RUGER REVOLVER
INSPECTION GUIDELINES AND PROCEDURE**

Unload revolver and remove all ammunition from the inspection area.

I. EXTERNAL CHECKS

- A. Check trigger guard for looseness.

- B. Open and close cylinder six times and check for:
 - 1. Hard opening and closing.
 - 2. Cylinder latch engages cylinder slot.
 - 3. Cylinder release button is too hard or sticks.
 - 4. Crane loose in frame.
 - 5. Cylinder hits frame.

- C. Check cylinder release button for:
 - 1. Free movement.
 - 2. Recovery.
 - 3. Flush with Ratchet seat surface.

- D. Check for hammer hit on back of trigger and pawl.

- E. Open cylinder:
 - 1. Check ratchets for burrs.
 - 2. Push up on ejector rod and check for ejector pins.
 - 3. Inspect charge holes for bulges, etc.
 - 4. Cylinder latch slots for peening.
 - 5. Check for loose ejector rod runout (except GP 100 and Redhawk).
 - 6. Check firing pin protrusion (factory specs).
 - 7. Check pawl protrusion.

- F. Close cylinder:
 - 1. Check double action timing.
 - a. With and without dummies.
 - b. Pull through rapidly and check for throw-by.
 - c. Right and left double action carry-up
 - 2. Check single action timing.
 - 3. Pawl sings of ratchets.
 - 4. Cylinder must not open when hammer is cocked.

- G. Check for end-shake:
 - 1. Cylinder.
 - 2. Crane.

- H. Check headspace and barrel to cylinder gap (to factory specs). Rear of barrel face must be square with cylinder.

- I. Check forcing cone with plug gauge for proper depth. Forcing cone must not be eroded or cracked.

- J. Check barrel alignment and ranging with gauges (all six charge holes).
- K. Check barrel crown for burrs and square.
- L. Open cylinder and check cylinder latch for proper function (four positions).
- M. Check for two winks:
 - 1. Cock hammer (overall).
 - 2. Hammer at rest (trigger pretravel).
- N. Static weight test:
 - 1. Double action (Mainspring weight).
 - 2. Single action (Cylinder open).
- O. Check latch for proper engagement with ejector rod (except GP 100 and Redhawk).
- P. Check trigger pull:
 - 1. Double action with clean break (no hammer shift on stud).
 - 2. Single action (no creep).
- Q. Check ejection of shells. Grips should not interfere.
- R. Check hammer for push off.

II. INTERNAL CHECKS

- A. Remove grips.
- B. Remove hammer strut assembly and mainspring.
 - 1. Mainspring
 - a. Factory
 - b. Closed ends.
 - 2. Strut
 - a. Burrs.
 - b. Damage.
 - c. Alterations.
- C. Remove hammer pivot assembly.
- D. Remove hammer assembly:
 - 1. Check single action cocking notch For:
 - a. Damage
 - b. Improper alteration.
 - c. Engagement to factory specs.
 - 2. Check hammer dog for:
 - a. Proper relief.
 - b. Free movement and recovery.
 - 3. Check transfer bar recess (Factory specs.).
- E. Remove trigger guard assembly.
- F. Remove transfer bar and check for:

- 1. Burrs.
- 2. Damage and fractures.

- G. Remove pawl and spring plunger and check for:
 - 1. Burrs.
 - 2. Damage and fractures.

- H. Remove trigger and check for:
 - 1. Tail and nose:
 - a. Damage.
 - b. Improper alteration.
 - 2. Factory spring (to factory specs.).

- I. Remove cylinder latch and check:
 - 1. Bevel for improper angle.
 - 2. Recovery surface for burrs.
 - 3. Ball of latch should not be altered.

- J. Check hammer pivot assembly for:
 - 1. Damage.
 - 2. Excessive wear.

- K. Check front latch for:
 - 1. Free movement.
 - 2. Burrs.

Reassemble revolver in reverse order and check for function in both single and double action mode. Revolver should be test fired with factory ammunition to ensure proper function. When test firing, always wear ear and eye protection.

III. APPEARANCE

- A. Bluing:
 - 1. Polishing
 - a. No washed out holes or lettering.
 - b. No edge or corner distortions.
 - c. No wheel burns.
 - d. No scratches.
 - e. No screw slot damage.
 - 2. Masking of matted areas should be clean and sharp.
 - 3. Bead blasting should be even. Check for evidence of over blasting in barrel.

- B. Sights, ribs, and scope bases:
 - 1. Firmly attached.
 - 2. Square to frame.

IV. PPC BARREL INSTALLATION

- A. Underlug tight and square to frame. Underlug radius should match O. D. of barrel.
- B. Diameter of barrel should be consistent over its entire length.

- C. Flats should be consistent in width over the entire length and on both sides.
- D. Finish comparable to frame.
- E. Length of six inches overall.
- F. Crown should be clean and true (machined).
- G. Ball détente yoke lock:
 - 1. Must secure yoke without movement.
 - 2. Be positive.
 - 3. Détente must not be drilled into barrel threads.
- H. Check over-travel stop in trigger guard:
 - 1. Drilled and tapped on center.
 - 2. Point of contact on center bow.

GENERAL COMMENTS AND OBSOERVATIONS:

**AMERICAN PISTOLSMITHS GUILD
COLT REVOLVER
INSPECTION GUIDELINES AND PROCEDURE**

Unload revolver and remove all ammunition from the inspection area.

I. EXTERNAL CHECKS

- A. All screws tight.

- B. Open and close cylinder six times and check for:
 - 1. Hard opening and closing.
 - 2. Bolt engages cylinder slots.
 - 3. Latch hard and sticks.
 - 4. Crane loose in frame.

- C. Check latch for proper operation and recovery.

- D. Check for hammer hits on rebound lever.

- E. Open cylinder:
 - 1. Check ratchets for burrs.
 - 2. Push up on ejector rod and check for loose extractor pin and loose extractor.
 - 3. Inspect charge holes for scoring, bulging, etc.
 - 4. Check bolt slots for peening.
 - 5. Check for loose extractor rod and run-out.
 - 6. Check firing pin protrusion.
 - 7. Check ratchet race for excessive peening.
 - 8. Check nose of hand for proper clearance in window.

- F. Close cylinder:
 - 1. Check tightness of crane to frame.
 - 2. Check double action timing:
 - a. With and without dummies.
 - b. Multiple orientation.
 - c. Pull through rapidly to see if cylinder misses bolt.
 - d. Right and left indexing.
 - 3. Check single action timing.
 - 4. Hand "sings" or ratchets.
 - 5. Slow bolt (timing to factory specs).

- G. Check for end to end cylinder play.

- H. Check headspace and barrel joint (to factory specs).

- I. Check forcing cone with plug gauge for proper depth.

- J. Check barrel alignment and ranging with gauges (all six charge holes).

- K. Check barrel crown for burrs and square.

- L. Check timing of bolt and rebound lever.
- M. Static weight test:
 - 1. Double action mainspring weight.
 - 2. Single action (cylinder open).
- N. Check trigger pull:
 - 1. Double with clean break and without shifting on stud.
 - 2. Single action (no creep).
- O. Check for barrel looseness and alignment.
- P. Check for hard ejection of shells (grips should not interfere).
- Q. Check hammer for push-off.

II. INTERNAL CHECKS

- A. Remove grips.
- B. Loosen crane lock assembly and remove crane and cylinder.
- C. Remove cylinder from crane. Replace crane and tighten crane lock assembly. Check alignment of crane with thimble gauge. Remove crane and lock assembly.
- D. Remove side plate.
- E. Check for clearance between bolt and frame.
- F. Check timing and condition of hand.
- G. Remove mainspring pin and mainspring.
 - 1. Check mainspring for:
 - a. Factory springs (no kits).
 - b. Proper contour.
 - c. Broken stirrup fingers or fractures.
 - d. "Shaved" condition.
- H. Remove rebound lever pin and check for indications of hammer hitting lever.
- I. Check hammer for "overhaul".
- J. Check hammer for excessive movement on stud.
- K. Remove hammer assembly:
 - 1. Check single action cocking notch for:
 - a. Damage.
 - b. Improper alteration.
 - 2. Check strut for:
 - a. Pin loose.
 - b. Free movement and recovery.
 - 3. Check stirrup for:
 - a. Damage.

- b. Free movement.
- c. Pin loose.
- 4. Check hammer nose (D & E models) for:
 - a. Damage.
 - b. Properly riveted.
 - c. Free movement and recovery.

- L. Remove firing pin stop plate and firing pin assembly (“T” models) and check for:
 - 1. Firing pin stop plate:
 - a. Fractures.
 - b. Peening.
 - 2. Firing pin:
 - a. Damage to nose head.
 - b. Return spring unaltered.
 - c. Burrs.

- M. With trigger and safety lever in revolver check:
 - 1. Tail:
 - a. Damage.
 - b. Improper angle.
 - 2. Safety lever pin loose.
 - 3. Burrs on lever.
 - 4. Safety lever assembly:
 - a. Damage.
 - b. Alteration.

- P. Remove latch pin and check for damage.

- Q. Check to see if bolt is loose in frame. Also check proper tension and recovery.

- R. Remove bolt and check for excessive wear and alteration:
 - 1. Head (contour matches leads).
 - 2. Stop shoulder.
 - 3. Actuator tip.
 - 4. Bolt spring proper length.

- S. Check hammer and trigger studs for:
 - 1. Alignment.
 - 2. Looseness.

- T. Check latch for:
 - 1. Operation.
 - 2. Latch spring guide present.
 - 3. Latch spring proper length and number of coils.

Reassemble revolver in reverse order and check function in both single and double action. Revolver should be test fired with factory to insure proper function. When test firing always proper eye and ear protection.

III. APPEARANCE

- A. Bluing:
 - 1. Polishing.
 - a. No washed out holes or lettering.
 - b. No edge or corner distortions.
 - c. No wheel burns.
 - d. No scratches.
 - e. No screw slot damage.
 - 2. Masking of matted areas should be clean and sharp.
 - 3. Bead blasting should be even. Check for evidence of "over blasting" in barrel.
- B. Sights, ribs, and scope bases:
 - 1. Firmly attached.
 - 2. Square to frame.

IV. PPC BARREL INSTALLATION

- A. Underlug tight and square to the frame. Underlug radius should match underlug of barrel.
- B. Diameter of barrel should be consistent the entire length.
- C. Flats should be consistent in length the entire length and on both sides.
- D. Finish comparable to frame.
- E. Length of six inches overall.
- F. Crown should be clean and true (machined).
- G. Ball détente yoke lock:
 - 1. Must secure yoke without movement.
 - 2. Be positive.
 - 3. Détente must not be drilled into barrel threads.
- H. Check over travel stop in trigger:
 - 1. Drilled and tapped off center.
 - 2. Location above center of trigger bow.

GENERAL OBSERVATIONS AND COMMENTS: