

Grand Masters, L.L.C.

D.B.A. as Power Custom

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Smith and Wesson Revolver Items

All assemblies and parts are CNC machined and Wire EDM processed from the best quality steel which are requirements for maximum durability and optimum service. All hammers are made from tool steel, heat treated to RC 56 - 58 through out. They are not case hardened. All hammers are provided with all internal parts such as; sear with sear spring, main spring stirrup with pin, and oversized pins. The pins are 2mm X 6mm, and are hardened providing for stronger and longer wearing parts.

Pre 1997 hammers are provided with the new oversized, longer hammer noses manufactured from S-7 tool steel, properly heat treated tough and strong for the longevity of hard service. Hammer noses with spring is installed in the hammer with new hammer nose rivet that is lightly staked in. The hammer nose needs to be fitted and checked for proper operation. If necessary, the rivet may be easily removed for proper fitting (see hammer nose fitting instructions). These parts will stand up to dry firing, and are guaranteed not to break. It is not recommended to dry firing these weapons due to wear on the hole in the frame having premature failure and enlargement, but these noses will hold up.

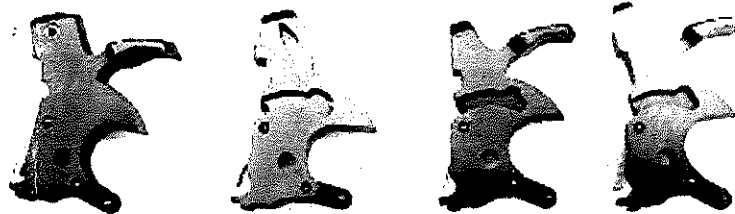
For Post 1997 Revolvers with Frame Mounted Firing Pins

<u>Part#</u>	<u>Description</u>	<u>Application</u>	<u>Features</u>
0-7-1	Hammer	K & L Frame	D/A Only - No Spur
0-7-2	Hammer	N Frame	D/A Only - No Spur
0-7-3	Hammer	K & L Frame	Target w/Spur - D/A & S/A
0-7-4	Hammer	N Frame	Target w/Spur - D/A & S/A
0-7-5	Hammer	X Frame	Target w/Spur -
P-2-1	Firing Pin	J, K, L, N, & X Frame	All Models

It is recommended that the Post 1997 Hammers be used with the Power Custom Frame Mounted Firing Pins. Firing Pins are not included with these hammers, but are sold separately.

Pre 1997 with Hammer Noses

P-2-2	Hammer	K Frame	Target w/Spur - D/A & S/A
P-2-3	Hammer	L Frame	Target w/Spur - D/A & S/A
P-2-4	Hammer	N Frame	Target w/Spur - D/A & S/A



*Old World Craftsmanship Coupled With Modern
Technology and Design Produces The Finest*

GUNSMITHING REQUIRED

Smith & Wesson double action revolver parts function

NOTE!! See the diagram of the Hammer, the double action sear, Trigger and the legend of parts.

The post-97 and pre-97 have the same nomenclature except the pre -97 has a spring loaded hammer nose and rivet instead of the post-97 which uses a firing pin with a rebound spring that is maintained in the frame with a cross pin that also acts as the firing pin stop. On the post-97, it may be necessary to fit the hammer stop (2). The face (1) can NOT HIT the frame as it will peen the firing pin hole to where the pin will not retract. The clearance should .003 inch optimum with maximum .008 inch. More space here allows for less power transfer to the firing pin by the hammer. The above is IMPORTANT for all post-97 models.

Function of moving parts when the trigger is pulled in double action (D.A.)

The hook (B) of the trigger pulls the cylinder stop down by (C). This leaves the cylinder free to rotate. The cylinder stop spring pushes the cylinder stop against the cylinder. This causes a slight drag (mark). The hand moves upward and engages the ratchet which rotates the cylinder until the cylinder stop drops in cylinder stop notch. The trigger lever starts pushing the rebound slide to the rear against the rebound spring. As the slide moves to the rear, the hammer block is allowed to drop down from the "safety position" which is between the face of the hammer and the frame. The upper pad (F) of the trigger lifts the D.A. sear (16) by the foot face (18) to start the hammer to the reward position. This only works until the cam (I) picks up the hammer foot (8), as the trigger is moved all the way to the rear, the foot (8) slides off the cam (I) of the trigger allowing the hammer to drop under mainspring tension. Pressure from the mainspring connected to the stirrup (22) is released, the hammer travels forward. The hammer nose (firing pin) enters the bolster bushing and protrudes through the hammer nose bushing. This detonates the primer which ignites the powder and the expanding gases that push the bullet forward out the barrel.

For single action S.A., all the parts function the same way as in D.A. except the hammer is cocked by the spur (14). When the hammer is drawn back, the top side of the foot (8) lifts the trigger by the lower pad (H). The trigger S.A. sear (Q) slides around the top of the hammer foot radius (6) and drops in the S.A. notch (7). Action is now ready for S.A. pull. For SAFTY, S.A. pull should be 2 ½-3 lbs. and hammer should not be able to be pushed off when cocked.

As the hammer falls, the corner of the hammer foot (8) must NOT contact the trigger cam (I). The corner of foot (8) may need altered to prevent this problem. As the trigger returns to the full position the bevel (Q) slides down the face of the D.A. sear (16) and the D.A. sear face bevel (17) allows the trigger lower pad (H) to rest on the top side of hammer foot (8) after the D.A. sear snapped over the top of trigger bevel (G) allowing upper pad (F) to be in position to lift the hammer by D.A. sear (18). The hammer block safety is engaged between the hammer stop (2) and the frame. Trigger lever (B) is in cylinder stop. Another either D.A. or S.A. cycle of the action is ready. Generally the width of hammers and triggers will work ok on the post 97 models. On the pre 97 models they may too wide for you particular model. In this case the hammer/trigger boss cutter is used to center parts in frame and prevent side friction, they may need to be lowered to allow proper fitting. The power custom hammer boss or trigger boss cutter maybe used on the frame side. If parts are too narrow, the correct amount of hammer/trigger shims are used (see shims instructions).

When the Thumb Piece is pushed forward or the cylinder is opened, the rear stop of the bolt slides under point 12 (12) of the hammer, preventing hammer cocking.