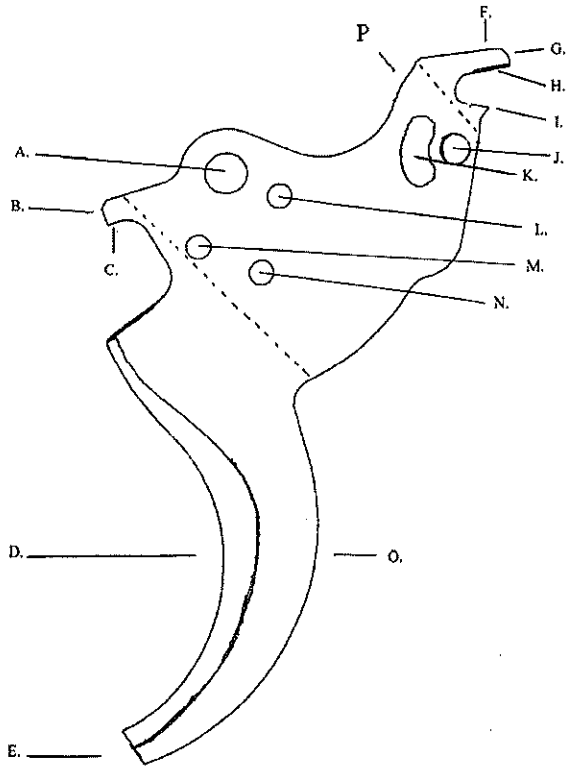
New S&W Trigger Fully CNC Machined
from solid billet steel

S&W Custom Trigger Kit

Power Custom Competition - Combat Trigger Kit is supplied with 1 twelve lb. trigger rebound slide spring, 2 trigger shims and 2 long trigger stop pins (1 extra, if needed) these need to be fitted to length when used as an over travel stop, for either double or single action. Trigger lever is heavy duty machined from spring steel. Hand Torsion Spring and hardened Pins are installed. Polished round, smooth trigger face that is designed for the serious competitor and for those that demand quality made parts in their revolver. Replaces the MIM trigger that is in the current made factory revolvers. Has extra metal in the needed surface areas that allow for final fitting by a gunsmith. Will drop in many of the current made K,L,N and X frame revolvers with little or no fitting. Manufactured from U.S.A. tool steel by modern machining EDM & CNC processes with diamond ground single action sear and hand finished surface. Will allow for a 2 1/2-3 lb. SA. pull if hammer has a good engagement notch. Heat treated, bright finished. Designed and manufactured like they should have been from the beginning.



Common Trigger Terminology

A. Trigger Stud Pivot Hole
B. Lever
C. Bottom of Lever
D. Face
E. Toe
F. Upper Pad
G. Bevel
H. Lower Pad
I. Engagement Point for Double Action Hammer release
J. Hand Pivot Hole
K. Hand Torsion Pin Relief
L. Torsion Spring Retainer Pin
M. Torsion Spring Stop Pin
N. Trigger Lever Pivot Retainer Pin
O. Rear
P. Stop. May contact frame on some models and act as an Over Travel Stop

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.