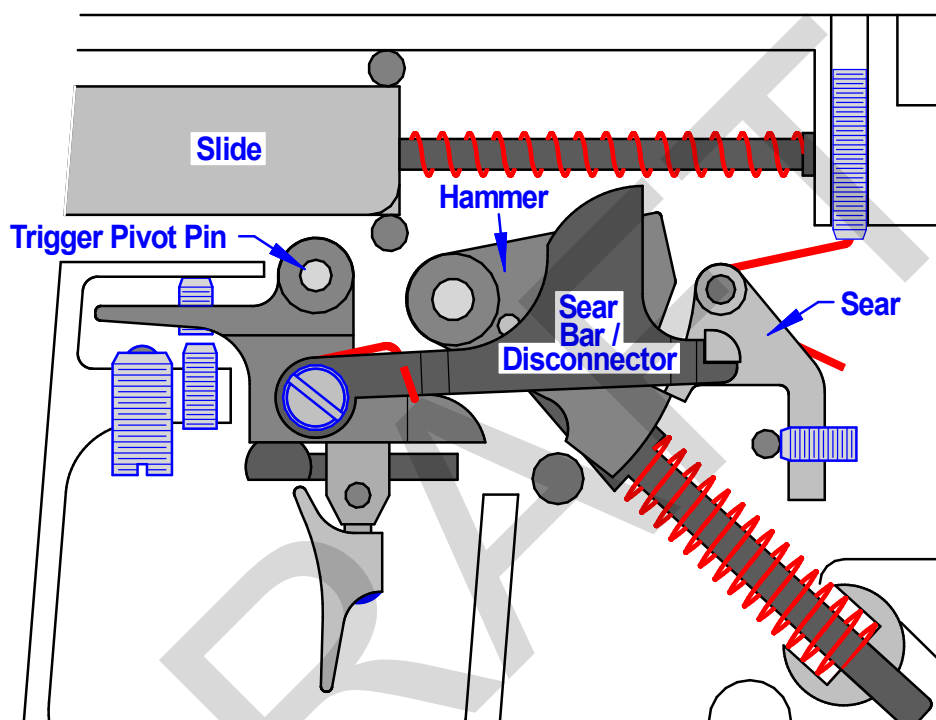


ADJUSTING THE PARDINI SP/HP TRIGGER

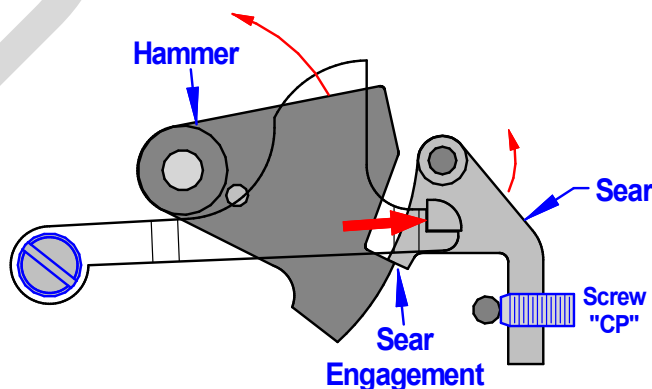
Doug White, MIT Sport Pistol Club

The Pardini trigger design is extremely flexible, and can be adjusted for a wide range of options. It can be configured for a crisp "breaking" trigger, or a 2-stage "rollover" style. The take-up (slack), 1st stage and 2nd stage lengths are all adjustable, as is over travel. The weight of the stages can be independently adjusted as well. The downside is that with all that adjustability, it is possible to configure the trigger so that it won't fire at all, and some of the adjustments require a fairly fine touch. Keeping notes as you go along, and understanding the way the mechanism works should help keep you out of trouble and allow backtracking if things go awry.

It is best to start with an understanding of what all the pieces do. Here is a picture of the mechanism cocked and ready to fire:

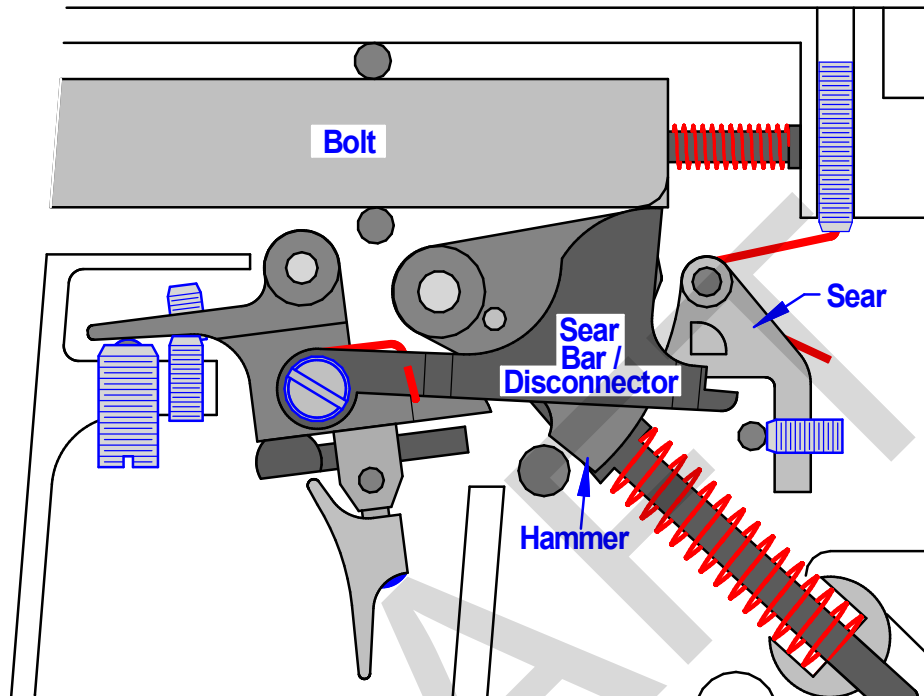


The figure below shows how the hammer is released. As the trigger is pulled to the rear, it pivots on the trigger pin, and the sear bar moves back. The sear bar pushes against a projection ("ear") on the left side of the sear, which forces the sear to rotate counterclockwise. This decreases the sear engagement until the hammer is released. The amount of initial sear engagement (and overall sear travel) is controlled by the screw "CP", which presses against a cross pin in the frame.

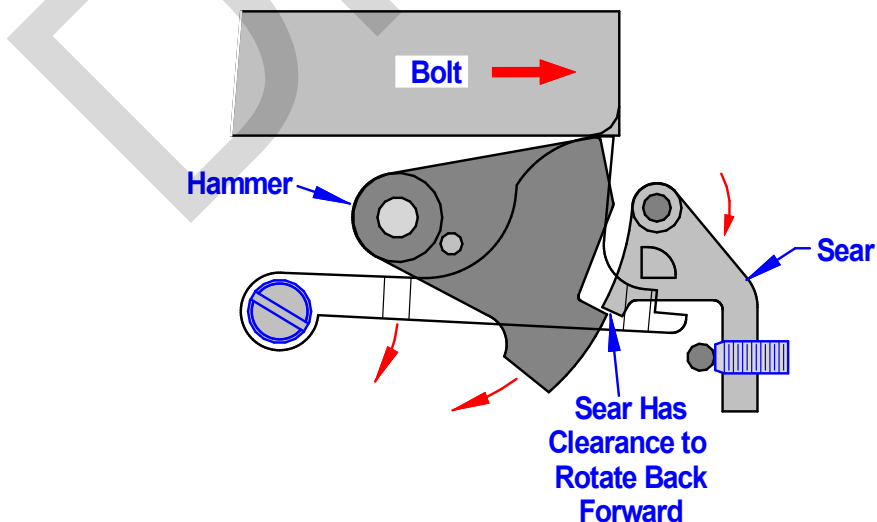


ADJUSTING THE PARDINI SP/HP TRIGGER

When the pistol fires, it has to cock the hammer, and reset the trigger. The bolt comes back, pushing both the hammer and the sear bar down (see figure below). The large bump on top of the sear bar provides the "disconnecter" function that allows the sear to re-engage the hammer, and prevents the hammer from falling again until the trigger is allowed to move forward.

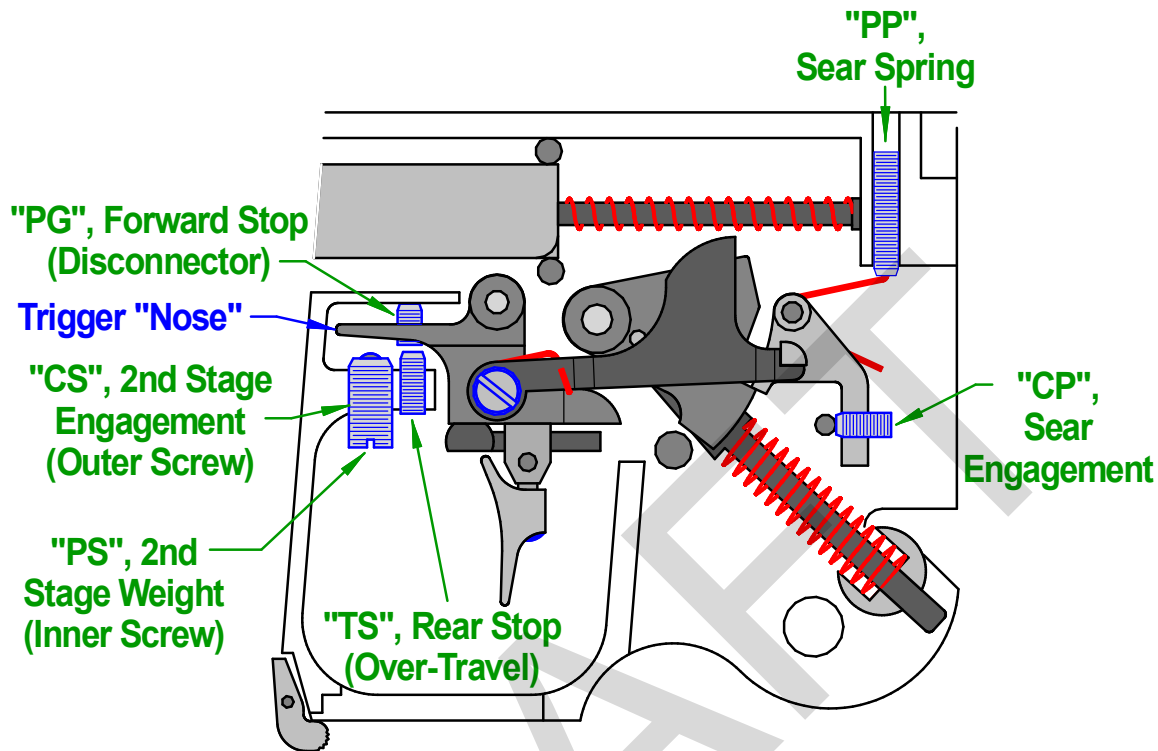


The figure below shows the details of the reset process. Once the sear bar/disconnector is pushed down out of contact with the "ear" on the sear, the sear is free to rotate clockwise under spring pressure. As the bolt closes, the hammer rotates upward until it is caught by the sear. When the trigger pressure is reduced sufficiently by the shooter, the trigger and sear bar move forward until the rear of the sear bar can snap back up in front of the "ear" on the sear. At that point, the trigger mechanism is fully reset and is ready to fire again.



ADJUSTING THE PARDINI SP/HP TRIGGER

Before going into the details of the adjustment process, here is a list of the various screws and what they do. The diagram below shows all the adjustment screws, along with the two-letter designation used by Pardini:



- Screw "CP":** As described earlier, this controls the amount of sear engagement. Turning the screw in (clockwise) reduces the sear engagement, and as a result, shortens the overall trigger pull length. One revolution of this screw shortens the trigger pull by approximately 0.7 mm (~ 30 mils).
- Screw "PP":** This varies the spring force on the sear. Combined with the friction of the sear against the hammer, this sets the weight of the 1st stage of the trigger pull. One full revolution clockwise will increase the 1st stage weight roughly 40 grams (1.4 oz).
- Screw "PG":** On the surface, this screw looks like you can just turn it in to shorten the length of the trigger pull. This is NOT how it works, and it tends to get people in trouble. PG does adjust the fully forward trigger position, but this also affects the amount of "slack" before the sear bar first hits the "ear" on the sear. This "slack" is required to allow the sear bar to pop up in front of the sear during the reset process. If PG is screwed in too far, the sear bar can't reset, and the trigger won't function. Oddly enough, in the latest Pardini manual, screw PG is only described in the Italian instructions, and is omitted in other languages. One revolution clockwise reduces the length of the slack by about 0.55 mm (22 mils)
- Screw "TS":** This is a conventional trigger stop that limits the amount of rearward travel after the sear releases the hammer. Some people like to set this so the trigger stops moving immediately after firing, but if the trigger stop is adjusted too finely, the trigger weight may become erratic and produce intermittent firing. Other shooters like their trigger to

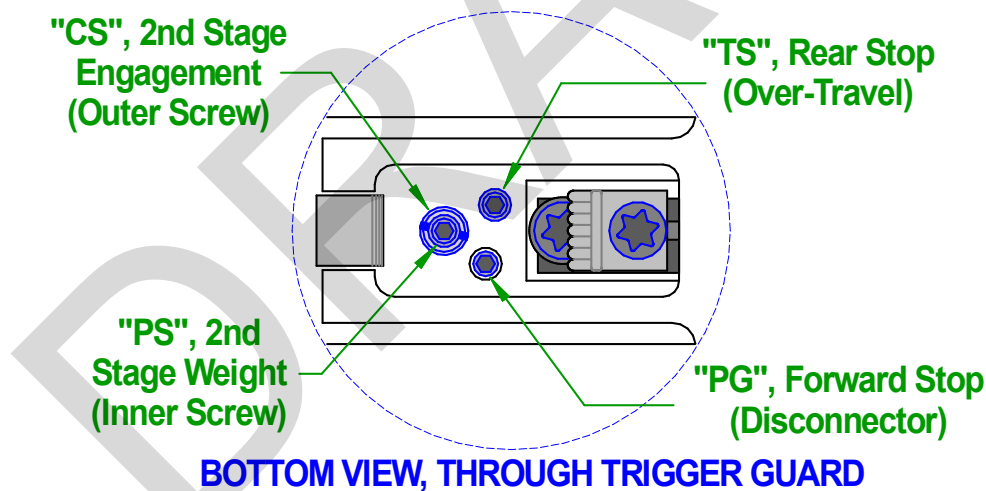
ADJUSTING THE PARDINI SP/HP TRIGGER

continue moving freely for some distance after the sear releases, and TS can be backed out (counterclockwise) to achieve this.

Screw "CS": This adjusts when the 2nd stage starts. There is small spring loaded ball in the top of the screw, and when the forward projecting "nose" of the trigger touches the ball, the 2nd stage begins. If this contact occurs just before the sear releases, you can create a "breaking" trigger, where the trigger pull weight jumps as it hits the ball, and then a small amount of additional rearward motion releases the sear. If you want a true single stage trigger that just moves smoothly until it fires, you can back this out (counterclockwise) so that the sear releases before the ball on top of screw CS ever comes into play. That may not provide adequate trigger weight, in which case you can screw CS in so that the ball is always engaged. The position of the onset of the 2nd stage moves roughly 0.8 mm (~ 32 mils) of trigger motion per revolution of the screw.

Screw "PS": This screw controls the spring force of the ball at the top of screw "CS," which sets the weight of the second stage. One revolution clockwise will increase the 2nd stage weight by about 110 grams (4 oz).

Making Adjustments: Screw "PP" is accessed through a hole in the top of the frame, near the left side and just in front of the rear sight. Screw "CP" is only accessible from the back of the frame, which requires removing the grip. All the other adjustments are made though a cutout in the bottom of the trigger guard:



All of the set screws require a 1.5mm hex key. Screw "CS" requires a flat bladed screw driver. The factory supplied tool pouch has the appropriate hex key, but Pardini does not supply a suitable screwdriver for screw "CS". The blade needs to be about 4.5 - 5 mm wide and ~ 1 mm thick.