

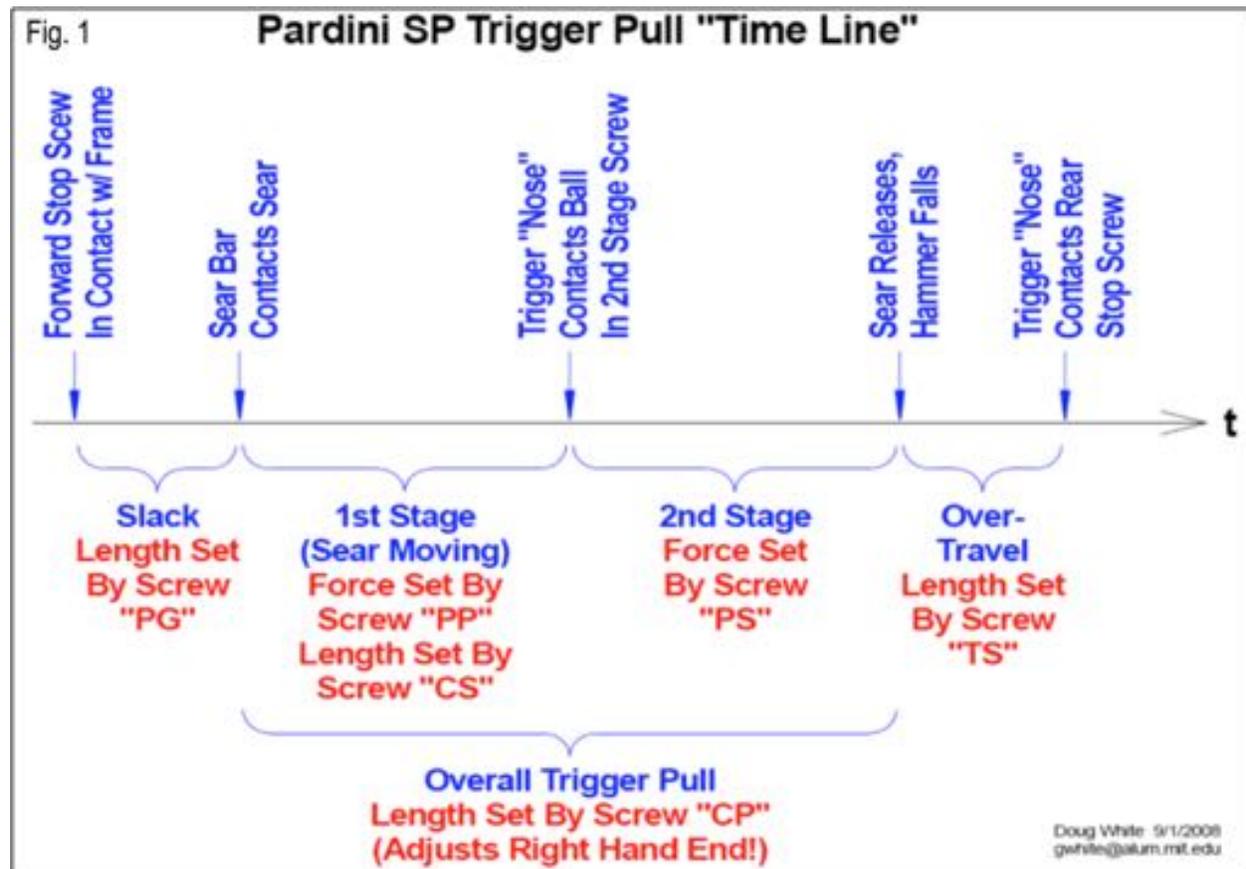
## Trigger Adjustment: Pardini New SP, HP, & SPBE

See Emil Milev's video on adjusting trigger on Facebook:

<https://www.facebook.com/milev.emil/videos/vob.100000144853698/962368347111318/?type=2&theater>

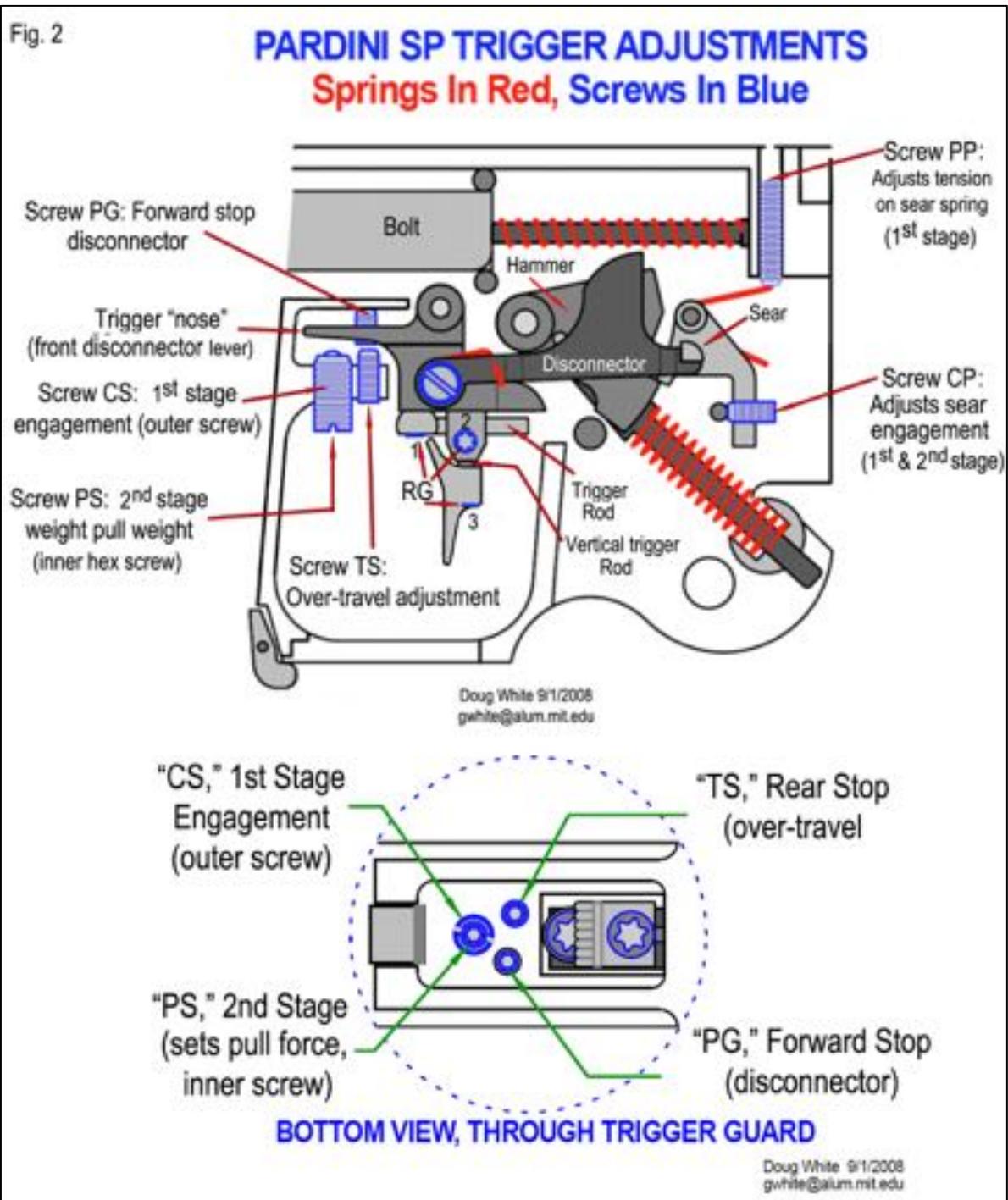
Before handling pistol, make sure it is unloaded, an empty magazine, and the red dry-fire tab are in place. All adjustments should be carried out holding the pistol upside down. These pistols have a two-stage trigger where the pressure needed to release the sear is divided between two stages: (1) Initial "free play" of trigger pull, followed by (2) overcoming sear resistance (Fig. 1). The basic mechanics of the trigger pull are simple: pulling the trigger causes the disconnecter to release the sear and additional trigger pull releases the sear and fires the pistol. The disconnecter function is to re-engage the sear after firing to prevent automatic fire. Design of the mechanism enables the user to fine-tune the trigger. Only adjust screws  $\frac{1}{8}$  to  $\frac{1}{4}$ -turn at a time. Keeping notes of adjustments made (number of turns and direction) will facilitate subsequent reference.

THE recent HP, SP, and new SPBE (new) models have an oval-shaped window just above the trigger which enables observation of how screw tunings affect pre-travel, 1<sup>st</sup> stage, and post-travel trigger adjustments. Removal of grip enables viewing of the sear. Please note and heed all warnings listed in red.



### SUMMARY TRIGGER ADJUSTMENTS

**A. CHANGING TRIGGER POSITIONS:** The three **RG** screws enable adjusting the trigger in multiple dimensions: forward and backward, up and down, and rotating the trigger right or left upon its axis. (Note: *over-tightening the steel RG screws into aluminum parts may cause stripping of threads; suggest using the purple Loctite 222.*) (Fig. 2).



#### **B. 1<sup>st</sup> STAGE ADJUSTMENTS**

**Screw PP:** Turn clockwise to increase trigger pull weight (to over 1360 grams, ~3.0 lbs.), and counterclockwise to reduce pull weight to less than 1000 grams (2.2 lbs.); see Fig. 2.

**Screw PG:** This regulates the disconnecter engagement of the sear (Fig. 2). Turn clockwise to reduce the slack before prior to the 1<sup>st</sup> stage trigger.

**Screw CP:** Turn clockwise to reduce 1<sup>st</sup> stage travel. **CAUTION:** if this screw is adjusted too far clockwise, the sear will not re-engage. Once the desired adjustment is achieved, **ALWAYS re-adjust screw PG to ensure that the disconnecter is correctly adjusted on the sear.** (The disconnecter may be tested for function after the pistol is fired: keep trigger pulled and cock pistol; there should be a distinct click as the disconnecter resets).

**Screw CS** (outer slotted screw): Turn clockwise to increase length of 1<sup>st</sup> stage travel or counterclockwise to reduce (travel can disappear becoming a single stage trigger).

### C. 2<sup>nd</sup> STAGE ADJUSTMENTS

**Screw PS** (inner hex screw): Turn clockwise to increase the 2<sup>nd</sup> stage trigger pull weight.

**Screw TS** is the adjustable trigger-stop (over-travel). Turning clockwise reduces over-travel. **CAUTION: if this screw is adjusted too far clockwise, the trigger will cease to function.**

### **From the Pardini Manual: Detailed Description of Trigger Screw Adjustments**

**SCREW RG:** There are three **RG** torx screws that allow adjustment of trigger positions along three axes (forward—rearward, up—down, and turning on axes) (Fig. 1). Screw **RG 1** attaches the trigger rod to the base of forward disconnecter, **RG 2** attaches the trigger to the vertical trigger rod is located at the top of the trigger and controls the movement of the trigger in forward-backward direction along the trigger rod. For individuals with a long index finger: 1) Remove all RG screws, 2) Reverse the trigger rod, and 3) Reassemble the trigger. Note: there are two holes at the base of the forward disconnecter to which the trigger rod may be attached.

**SCREW TS** adjusts the trigger backstop (over-travel), how far back the trigger travels *after the shot*. Turn clockwise 1/8-turn at a time and produce a shot. Do this until the pistol can't shoot any more. Turn 1/8 counterclockwise at a time until you have a shot. Then adjust to your preference. Do not make over-travel too short as it can touch the trigger stop before the shot, making the trigger heavier and unpredictable.

**SCREW CP** adjusts how much the sear engages the hammer. Turn clockwise 1/8-turn at a time, press trigger and pull the bolt. After that, release the trigger slowly, until it engages. Do this until the desired reengagement. **Making the sear-hammer engagement too short is unsafe and MAY cause doubles or automatic fire.**

**SCREW CS** adjusts the length of the 1<sup>st</sup> stage. When looking from through the side window, the tip of the screw must be close (two stages trigger) or not touch the lever (one stage). Most shooters prefer to have a distinctive 2<sup>nd</sup> stage and screw CP sets the boundary between the two stages. If adjusting it with 2<sup>nd</sup> stage, the lever should be close to the tip of the **SCREW CS** and when squeezing the trigger it will touch and press on it.

**SCREW TS** (the trigger stop) stops the over-travel of the trigger. When the trigger is squeezed and stopped by, the lever should have a gap between the screw and itself. You want the lever to press on the head only and not on the screw. If trying to adjust the trigger from the beginning, it's a good idea to turn **CS** counterclockwise until the head is not touching the lever. Now you have it out of the way until adjusting the trigger travel dimensions. After you're done with it, turn **SCREW CS** clockwise until you get two-stage trigger. At this point follow the instructions for the trigger weight (or 2<sup>nd</sup> stage if two-stage trigger).

**SCREW PS** adjusts the 2<sup>nd</sup> stage trigger pull weight. At this point, you have adjusted the length and the stages (one or two). Turning **PS** clockwise will increase the 2<sup>nd</sup> stage trigger weight and vice versa. Use small turns and measure the weight. If a two-stage trigger is preferred and you have it adjusted already, you can adjust the 1<sup>st</sup> stage *weight* with Screw **PP**. It is located inside an opening on the frame next to the rear sight. Turn it clockwise to increase the 1<sup>st</sup> stage weight and counterclockwise to decrease it.

## ADJUSTING THE PARDINI SP/HP TRIGGER, by Don Nygord

This pistol is designed to have a two-stage pull and most shooters who acquaint themselves with the two-stage system end up liking it as opposed to the one-stage American "High Standard or S&W Model 41" trigger. Since we will be doing lots of dry firing, make sure the dry-fire plug is in the pistol's chamber of the SP and SPBE (not necessary for the HP).

1. We need to start with screw **CP** which accessible only after taking the grip from the gun. Back out screw **CP** about 2 turns counterclockwise.

2. Back out strews **PG** and **TS** counterclockwise about 2 turns. At this point, you should have play between the trigger bar/dis-connector and the sear and you should have plenty of sear engagement with the hammer. You may or may not have two stages to the trigger pull.

3. Back out **PS** counterclockwise about 2 turns. Back out **CS** a couple of turns. Now you should have a long continuous creepy pull with lots of "free-play" or take-up. At this point, while the trigger pull is like that of a double action revolver, you will at least have a "safe" gun.

4. Now let us refine: turn **CS** in clockwise until you feel the "2<sup>nd</sup> stage" appear about at the end of the pull. (You will have contacted the spring-loaded ball bearing inside **CS**. (The load on the ball bearing is determined by screw **PS**). You can fine-tune the length of this "2<sup>nd</sup> stage" by tiny adjustments in **CS** until you get the kind of feel you like. Most shooters want this to be "crisp" or in other words a short 2<sup>nd</sup> stage (the part you squeeze off at the end of the pull).

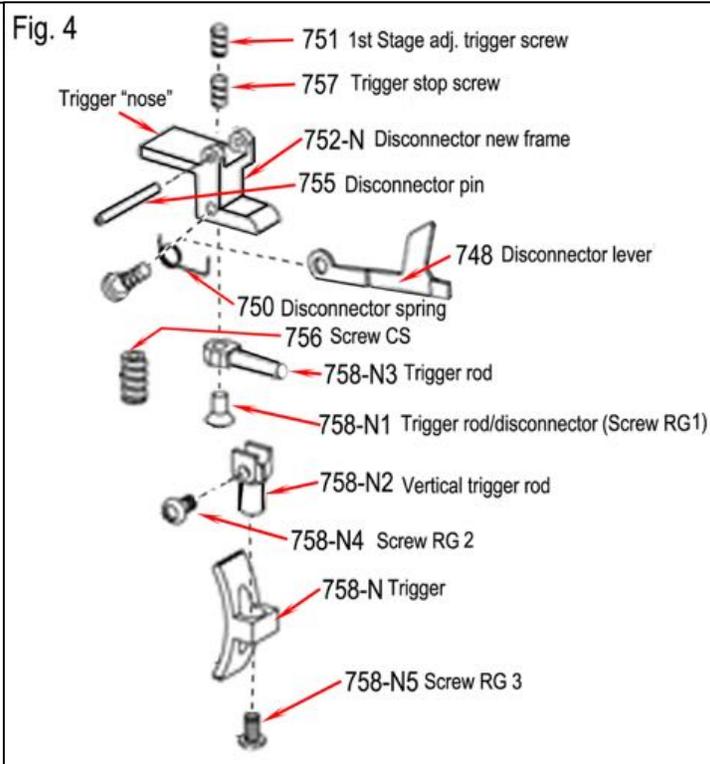
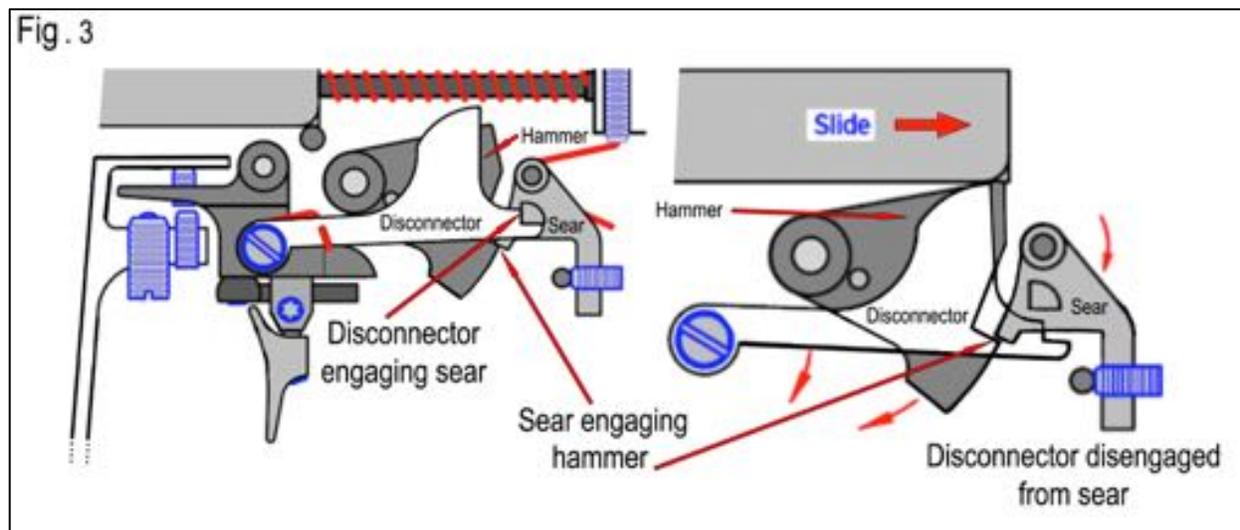
5. Now, there are two parts to the 1<sup>st</sup> stage of the trigger pull. The initial part is the taking up of the gap between the trigger bar (or disconnecter nose) and the ear of the sear - this is usually called the "free play." The other part is the real "1<sup>st</sup> stage" and in this pistol design, you are sliding the sear almost all the way out of the hammer notch during this stage. **YOU MUST maintain some contact between the hammer and the sear.** The most common error in trying to customize the feel of the trigger on this gun is to "dial out" all the 1<sup>st</sup> stage and make the trigger like a Model 41. **This may make the gun "double" or potentially dangerous automatic fire.** The degree of sear engagement (1<sup>st</sup> stage) is controlled with screw **CP** and may be viewed on the right side circular opening with he grip removed.

6. Turn screw **CP** clockwise until definite 1<sup>st</sup> stage travel is achieved (after the free play take-up). Leave as much travel in as you can tolerate. At the end of this 1<sup>st</sup> stage travel and before the hammer falls, you will contact the spring-loaded ball bearing at the 2<sup>nd</sup> stage, which is short and crisp. If not, go back to 3 and 4 and readjust until distinct stages are evident.

7. Turn screw **PG** clockwise to adjust the free play or take-up. Make sure that the trigger bar will go up into position after the gun is cycled, and after the trigger released, leave a tiny bit more of play for reliability.

8. Now, adjust the weight of the total pull to 2.0-lbs for NRA rules and 1000 grams for UIT rules (2¼-lbs.). The weight of the 1<sup>st</sup> stage is controlled by the sear spring (which simply increases tension on the sear) and by screw **PP**. The weight of the 2<sup>nd</sup> stage is controlled by screw **PS**, located within screw **CS**. The total weight is usually divided up equally between the 1<sup>st</sup> stage and the 2<sup>nd</sup> stage. This makes the pull "self-calibrating." In matches, the arousal level often creates deceptive sensory input: one day the trigger feels very heavy and another it feels very light. With this set-up, you know that when you take up the 1<sup>st</sup> stage you have applied ~½ the total pressure. This can be very comforting in a major match where you do not want to be too conservative on the trigger and lose time and yet, we do not want to inaccurately or accidentally discharge the pistol. So, turn the appropriate screws the appropriate amount until you get the balance of weights on 1<sup>st</sup> and 2<sup>nd</sup> stage you prefer.

9. Finally, adjust the over-travel of the trigger after the hammer falls. Turn screw **TS** clockwise until you have the amount of over-travel you prefer (some over-travel is necessary).



**Acknowledgements:** This summary was derived from the most recent Pardini manual, excellent drawings and diagrams by Doug C. White, and from information posted online by the late Don Nygord. The material has been edited in September 2016. Please report comments on Target Talk (<http://www.targettalk.org/index.php?sid=8379427ce21ac71d1bd4faaf79759e0b>) or Bullseye L forum (<http://www.bullseyeforum.net>).