

Matrix Precision 15 Pc Armorer's Kit for SIG

Tool reference and service procedures

For Models: P220, P224, P225, P226, P227, P228, P229 and P239

READ FIRST — SAFETY

1. **Clear the firearm before you begin.** Remove the magazine, lock the slide back, and confirm the chamber is empty both visually and by touch. Keep ammunition out of the work area.
2. **Wear eye protection.** Several of these procedures put springs under compression. Springs and detent bearings can launch without warning.
3. **Contain small parts.** Work over a parts tray. Pins and springs are easily lost.
4. **Match the tool to the part.** Using a punch of the wrong diameter or the wrong face profile is the most common cause of marred pins and damaged frames. Refer to the punch selection chart on the last page.
5. **Support the work.** Use the slide block for all slide pin work. Never strike a pin with the slide unsupported.

These instructions cover use of the tools in this kit. They are not a substitute for the firearm manufacturer's service manual. If a procedure is beyond your training, refer the work to a qualified armorer or gunsmith.

[X]MATRIX PRECISION ARMS Armorer's Kit



Every tool is numbered to match its position in the case insert. Those numbers are used throughout these instructions.
Slide block is located under the tool tray.

Tool inventory

#	TOOL	USED FOR
1	Mainspring Seat Tool	Installing and removing the mainspring seat
2	Forceps	Holding the sear; setting the decocking lever spring
3	3.5 mm Pin Holder	Stamped slides with outer and inner roll pins
4	Magnet Tool	Holding the decocking lever bearing captive
5	Sear Spring Tool	Loading the sear spring
6	Hammer	Driving punches and pins
7	3 mm Long punch	Aligning the sear stack; 3 mm slide pins
8	3 mm Concave punch	Domed pins
9	3.5 mm Long punch	Stamped slide pin and hammer pivot pin
10	3 mm Half Round punch	Long extractor slides
11	3 mm Coil Pin punch	Coil pins
12	2 mm Long punch	Hammer stop pin
13	2 mm Starter punch	Starting 2 mm pins
14	Needle Tool	Mag catch; aligning the hammer stop and spring
—	Slide Block	Supporting the slide during all pin work

Quick reference

Which tools each job calls for. Full procedures follow.

JOB	TOOLS	PAGE
Mainspring seat	1	3
Sear stack	2 5 7	3
Mag catch	14	4
Hammer stop	12 13 14	4
Decocking lever	2 4	5
Slide pin work	3 6 7–11	5–6

1 Mainspring Seat

Tools: **1** Mainspring Seat Tool

This tool captures the seat directly, so you are never levering against the frame or the part. That removes the risk of damaging either.

1. After installing the hammer strut, check to make sure that the hammer strut rear hook is visible underneath the small pin in the hammer.
2. Slide the mainspring onto the hammer strut followed by the mainspring seat.
3. Engage the Mainspring Seat Tool squarely into the mainspring seat.
4. Compress the mainspring and drive the seat into position.
5. Confirm the seat is fully home.
6. **To remove**, reverse the sequence with the same tool.



Step 2 — mainspring and seat slid onto the hammer strut.



Step 3 — the Seat Tool engaged squarely in the seat.

2 Sear Stack

Tools: **2** Forceps **5** Sear Spring Tool **7** 3 mm Long punch

1. Install the ejector.
2. Insert the 3 mm Long punch through the frame to align the components of the sear stack.
3. Using the Forceps, complete 3 steps:
 - place the sear into position
 - place the sear spring into the sear
 - install the safety lever
4. Feed the sear pin in from the opposite side, following the punch out as the pin goes in. Maintain steady pressure so alignment is never lost during the handover.
5. Tension the sear spring using the Sear Spring Tool.



Step 3 — sear, sear spring and safety lever placed with the Forceps.



Step 4 — the sear pin follows the punch out.



Step 5 — tensioning the sear spring.

3 Mag Catch

Tools: 14 Needle Tool

1. **To install**, pay attention to the position of the mag catch stop. The appendage should be down (facing the frame), creating the shape of a step. Use the Needle Tool to depress the mag catch stop, and push in the mag catch.
2. **To remove**, engage the Needle Tool into the mag catch stop, and depress the catch as required to release it, then withdraw it from the frame.



Step 1 — the Needle Tool depresses the mag catch stop as the catch is pushed in.

4 Hammer Stop

Tools: 12 2 mm Long punch 13 2 mm Starter punch 14 Needle Tool

1. Position the hammer stop and its spring in the frame.
2. Use the Needle Tool to bring the hammer stop and spring into alignment, **inserting the tool from the right**. (The video and picture show inserting the Needle Tool from the left, but we have found it is easier from the right.) The needle tip will pick up the bores where a full-diameter punch will not.
3. Follow the Needle Tool through with the 2 mm Long punch from the left side of the frame.
4. Install the hammer stop pin, driving the punch out with it, **from the right side** (opposite the video and the pictures).
5. **To remove the hammer stop pin**, use the 2 mm Starter punch to get the pin started, then use the 2 mm Long punch to drive it all the way out.



Step 1 — hammer stop and spring positioned in the frame.



Step 2 — the Needle Tool brings the bores into alignment.



Step 4 — the hammer stop pin drives the punch out.

5 Decocking Lever

Tools: 2 Forceps 4 Magnet Tool

1. Use the Magnet Tool to place the decocking lever bearing into its pocket in the frame, and hold it captive there.
2. With the bearing held, position the decocking lever and its spring.
3. **While still holding the magnet in place**, use the Forceps to set the spring.
4. Release the magnet only once the lever and spring are captured.
5. Check the lever for free movement and correct return.



Step 2 — lever and spring positioned against the held bearing.



Step 3 — the Forceps set the spring while the magnet still holds.

6 Slides

Tools: 3 Pin Holder 6 Hammer 7-11 Punch Set — Slide Block

1. Seat the slide into one of the slide block's two pockets. The pockets are sized for a variety of slides — use the one that supports your slide fully along its length. If you have a short extractor P229 (Legacy slide) you may need to position it into the shallow pocket in the Slide Block so that it sits flat.
2. Select the correct punch for the pin type. See the punch selection chart on the next page.
3. Drive the pin with the Hammer, then, when the pin is almost all the way in, use the punch, keeping it square to the pin. Start with light taps and confirm the pin is moving straight before continuing. For coil pins use the short 3 mm punch with the nub.
4. **For pin removal**, reposition the slide over the block's cavities so the pin has somewhere to exit. For coil pins use the short 3 mm punch with the nub to get them started.



Slide Block located under the tool tray.



Step 3 — drive the pin with the punch square to the bore.



Step 4 — slide repositioned over the block's cavities for removal.

Punch selection

Different slides use different pin types. Match the punch face to the pin.



Match the punch face to the pin type before driving.

PIN OR SLIDE TYPE	#	PUNCH	WHY
Stamped slides, outer and inner roll pins	3	3.5 mm Pin Holder	Holds the roll pin captive and square while starting it
Standard 3 mm slide pins	7	3 mm Long punch	Flat face and full length for straight 3 mm pins
Domed pins	8	3 mm Concave	The cupped face engages with the dome to align it
Stamped slide pins and hammer pivot pins	9	3.5 mm Long punch	Sized for the larger 3.5 mm pins
Long extractor slides	10	3 mm Half Round	The half round profile matches the hole
Coil pins	11	3 mm Coil Pin punch	The nub enters the coil and keeps the punch aligned

Tool care

1. Wipe tools down after use.
2. Inspect punch tips before each job. A mushroomed or bent tip will mar the pin and wander off center — replace it rather than working around it.
3. Return each tool to its numbered position in the case. The layout is the inventory — a gap tells you what is missing before you close the case.

Replacements for all the punches and tools are available on our website.