Installing a Mold on APSX-PIM

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This guide covers the complete process for installing a mold on the APSX-PIM injection molding machine — from initial power-up through final parameter setup. Follow each step carefully and in order for safe, accurate mold installation.

> **Reference:** Download the APSX-PIM Mold Installation Dimensions drawing (PDF) from apsx.com for precise platen measurements. A detailed video walkthrough is also available at: youtu.be/0AroLuoZH6A

SECTION 1 — Power Up & Preparation

1. Plug the power cord into a standard wall outlet.
2. Plug the USB cable into the tablet PC.
3. Remove the fan assembly cover by unscrewing the two nuts.
4. Remove the temperature sensor from the current mold by loosening the small screw on the front of the mold.

Important: Always use a mold with a total thickness equal to or greater than 2 inches for proper clamping. Thinner molds will not clamp correctly and may damage the machine.

SECTION 2 — Removing the Existing Mold

Shoulder Bolt Mounts (Left Side)	Claw Mounts (Left Side)
Remove the four shoulder bolts on the left side. These bolts are intentionally slightly longer to maintain a gap between the mold and the nozzle plate — this prevents heat loss from the barrel. Using a PEEK insulator at the back of the left-side mold is also recommended for most materials.	Loosen the mold claw bolts on the left side while holding the mold by hand with a half-inch wrench. Push the claws out away from the mold, then carefully slide the mold upward.

Right side of the mold: Loosen the mold claws on the right side and slide them back to the outer position, away from the mold. Set the old mold aside.

SECTION 3 — Installing the New Mold

1. Slide the new mold's **right side** into position.
2. Push the claws fully into the grooves, then finger-tighten the bolts on both the front and back sides. The top surface of the mold should sit slightly lower than Block 3's top surface for proper alignment.
3. Install the left side mold to Block 4 using the shoulder bolts.
4. Clamp the mold by pressing Engage Clamp Fast. When the clamp is approximately 1/8 inch from the mold, switch to Engage Clamp Slow.

SECTION 4 — Installing Molds with Ejector Pins

1. Push the claws fully into the grooves, then finger-tighten the bolts on both the front and back sides. The top 2 surface of the mold should sit slightly lower than Block 3's top surface for proper alignment.
2. Adjust the clamp switch position so that the ejector pins are fully extended. The machine stops when the clamp switch detects Block 3.
3. Press Home Clamp Slow once. Gradually slide the clamp switch to the right while watching the ejector pins and the checkbox at the bottom of the user screen.
4. When satisfied with the switch position, tighten the bolt on the switch.

CAUTION: Moving the switch too far right may cause the ejector bearing to strike the back of the mold this can cause serious damage.

SECTION 5 — Final Setup & First Run

1. Reinstall the fan assembly and reattach the temperature sensor to the new mold.
2. Add plastic material to the hopper.
3. Turn the heat button on and wait until the set barrel temperature is reached.
4. Configure your injection molding parameters. Use Save to store a new profile or Open to load an existing one before pressing RUN in Single Cycle mode.

Clamp Time Adjustment: If the mold contacts the other half at high speed, or switches to slow mode too early, adjust the Clamp Time setting. Aim for approximately a 1/8-inch gap at the end of the clamp time to achieve accurate clamp force readings.