

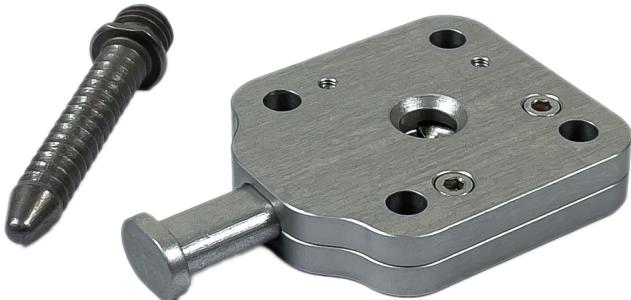
MAINTENANCE GUIDE

PLU-PE | Pediatric Pin Lock Unit

EN

This guide provides instructions for basic servicing of the PLU-PE locking unit.

If the button fails to lock or unlock properly, follow the steps below to restore correct function.



Tools Required

Utility knife

2.5 mm Allen key

Consumables Required

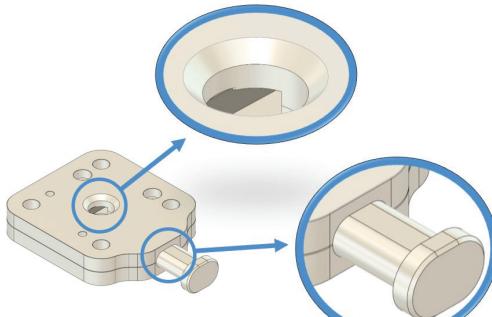
Dry PTFE spray lubricant

Paper towel

Maintenance Procedure

Step 1 – Removal

1. Detach the locking unit from the prosthetic leg assembly.
2. If available, use compressed air to blow into the center hole of the locking unit, aiming into the gap between the housing halves.
3. Also blow into the **gap between the button and housing**.



4. Press the **button** several times and check if it moves freely.

Step 2 – Lubrication

1. If movement remains restricted, spray **dry PTFE lubricant** into the same gaps used for air cleaning.
2. Press the button repeatedly and verify free motion.
3. If the issue persists, proceed to disassembly.

Step 3 – Preparation for Disassembly

1. Set up a **clean, flat workspace** with good lighting.
2. Place a **small container** nearby to store removed components and prevent loss.

Step 4 – Disassembly

1. Using a **2.5 mm Allen key**, loosen and remove all **four M3 bolts**.
2. Insert a **utility knife blade** carefully between the housing halves and **gently pry them apart**. Work around multiple edges to separate evenly without bending or binding.
- Caution:** The spring may eject during opening. Capture it immediately and place it in the container.
3. Once opened, remove all internal parts.

Step 5 – Cleaning and Inspection

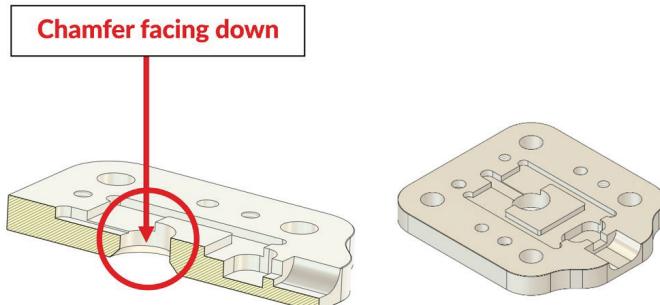
1. Wipe all parts using a **cloth moistened with isopropyl alcohol**.
2. Blow dry with compressed air if needed.
3. Inspect all components carefully:
 - **Button:** check for bending/damages.
 - **Locking tab:** inspect for wear or rounding/bending.
 - **Spring:** ensure it is straight, evenly coiled, and unobstructed.
4. If any damage or irregularity is found, stop the repair and contact support@amparo.world for replacement parts.

Caution: Damaged parts must not be reused!

Step 6 – Reassembly

Step 6.1 – Internal Component Assembly

1. Lay the PLU-PE housing flat, with **chamfer facing down**.

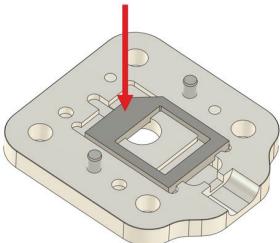


2. Apply a light coat of **PTFE spray** to the internal surfaces.

Caution: Ensure all surfaces are clean and dry before PTFE application.

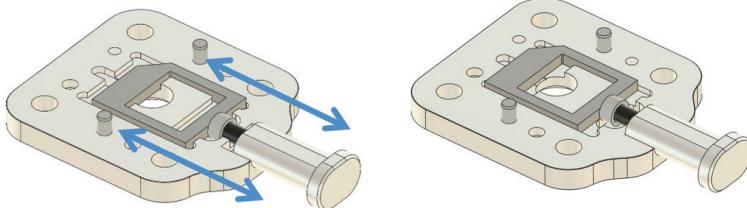
3. Place the **locking tab** into its slot, **chamfer facing down**, as shown below.

Locking tab flat surface facing up

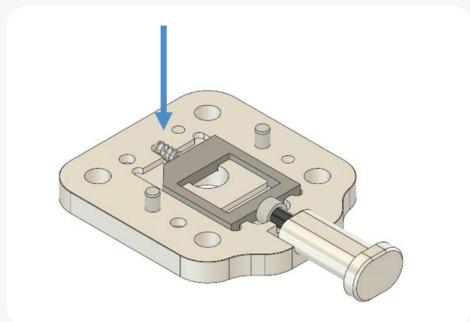


4. Insert the **button sub-assembly** into the slot.

Check: All internal parts must slide freely with minimal friction.

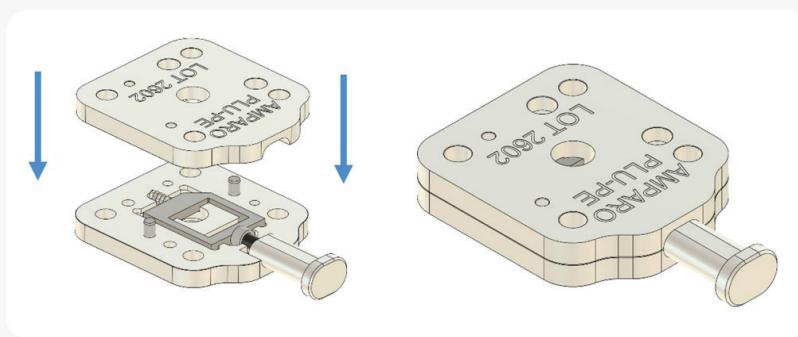


5. Insert the **spring** behind the locking tab sitting straight in the slot.

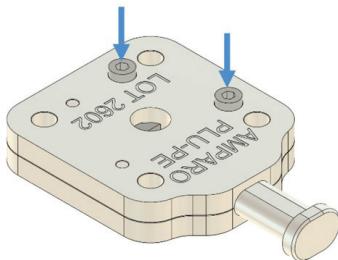


Step 6.2 – Housing Closure

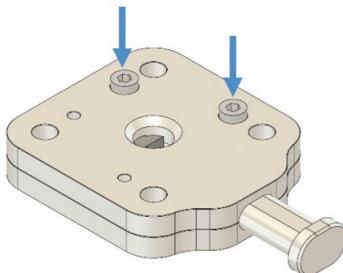
1. Align the **PLU-PE housing with writing** over the first housing.
2. Fit it carefully over the dowel pins and press down to seat both halves.



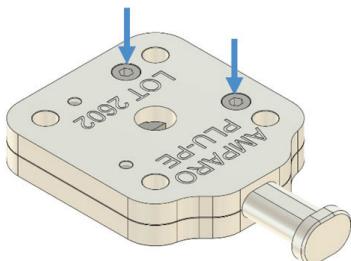
3. Insert **two M3×6 bolts** in the corresponding holes and tighten each by approximately three turns.



4. Flip the assembly and repeat on the opposite side with the remaining two bolts.



5. Once aligned, **hand-tighten all M3×6 bolts** until heads are flush.



Caution: Do not overtighten. Excess torque can deform the aluminum housing and jam the button.

Check: Verify both housings meet evenly with no visible gaps.

Step 6.3 – Functional Check and Cleaning

1. Press the button **10 times**. It must move smoothly.
2. Confirm the **locking tab** moves fully and resets each time.
3. Insert the **shuttle pin** from the **chamfered side**.
4. Verify correct locking and unlocking function by pulling the pin gently.
5. Clean the exterior with a paper towel

Assembly is complete when the button actuates smoothly, the shuttle pin locks securely, and both housings sit flush.

Additional Notes

- Recommended maintenance interval: every 6 months, or sooner if exposed to dust, sand, or moisture.
- Only trained prosthetic technicians should perform disassembly.
- For full technical specifications, refer to the **PLU-PE IFU** available at: <https://amparo-prosthetics.com/downloads>

Contact & Support

For replacement parts, service inquiries, or technical support:

support@amparo.world / www.amparo-prosthetics.com