




BPA121 » Scale Cleaning Instructions

METTLER TOLEDO

* This guide is applicable to both Lead-acid Battery version and Dry-cell version.

Follow the instructions below to disassemble and clean the scale.

1-a» Safety Instructions

-  Before connecting/disconnecting any internal electronic components or interconnecting wiring between electronic equipment always remove power and wait at least thirty (30) seconds before any connections or disconnections are made. Failure to observe these precautions could result in damage to or destruction of the equipment and/or bodily harm.
-  Observe precautions for handling electrostatic sensitive devices.
-  A legal-for-trade BPA121 scale is sealed. If the seal is broken for maintenance purpose, the scale must be evaluated and sealed by an authorized service representative.

1-b» Tools Needed

- | | |
|-------------------------------------|--------------------|
| 1. Flat-head screwdriver | 5. Lint-free cloth |
| 2. Cross-head screwdriver (#1 & #2) | 6. Clear water |
| 3. Food-grade cleaning agents | 7. Food-grade oil |
| 4. Wire cutter | |

4» Remove Metrology Switch Cover

- If the scale has been sealed, cut the wire seal. **The wire seal may be made from lead or plastic, depending on local metrology requirement.**



- Loosen and remove the M4x10 screw (1 pcs) that secures the metrology switch cover to the scale bottom, and then remove the metrology switch cover.



Tool: flat-head screwdriver

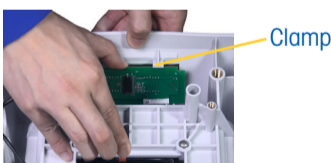
7» Remove Main PCB and Rear Display Board

- Loosen and remove the M3x6 screws (2 pcs) that secure the main PCB to the scale casing.



Tool: #1 cross-head screwdriver

- Remove the rear display board by slightly pressing the rear display from outside.



10» Clean Scale Casing, Bottom, Battery Compartment Cover and Platter

- Clean the scale casing, scale bottom, battery compartment cover and platter with food-grade cleaning agent and clear water. Rinse cleaning agent completely with running water.



- Dry off the scale casing, scale bottom, battery compartment cover and platter with a lint-free cloth.

Lead-acid Battery Version

Dry-cell version



Note: Dry-cell version does not require removing the battery cover for cleaning!

2» Remove Power Supply

- Press and hold the Zero button to power off the scale.



- Turn the scale upside down.



- If a power cord is connected, unplug the power cord.

5» Remove Scale Bottom

- Loosen and remove the M4x12 screws (3 pcs) that fix the scale bottom to the scale casing. Remove all the scale feet.



Tools: #2 cross-head screwdriver

- Lead-acid Battery Version: Separate the scale bottom from the scale casing. Pass the black and red battery wires through the scale bottom with care (Figure 1). Dry-cell Version: Unscrew the metal joint (Figure 2).

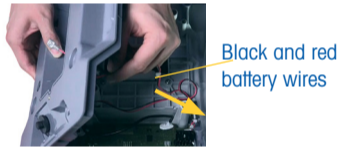


Figure 1

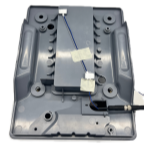


Figure 2

3» Remove Battery Compartment Cover and Battery (For Lead-acid Battery Version only)

- Loosen the hand screws (3 pcs) that secure the battery compartment cover to the scale bottom, and then remove the battery compartment cover.



Tool: flat-head screwdriver

- Disconnect the black and red wires from the battery, and then remove the battery. **Do not allow the battery to come in contact with moisture.**



Note: The dry-cell version does not require removing the battery cover for cleaning!

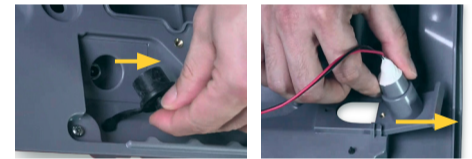
6» Remove Power Connector

- Loosen and remove the M3x6 screw (1 pcs) that holds the power connector to the scale bottom.



Tool: #1 cross-head screwdriver

- Unplug the protective rubber plug, and then remove the power connector from the scale bottom.



8» Uninstall Load Cell

- Loosen and remove the M4x25 screws (4 pcs) that secure the load cell to the scale casing.



Tool: #2 cross-head screwdriver

- Uninstall the load cell cable slot and then separate the rear display cable from the cable clamps.



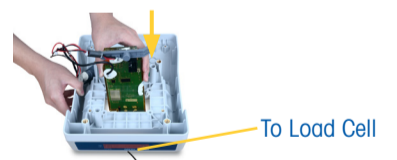
9» Uninstall Load Cell (continued)

- Loosen and remove the M4x14 screws (4 pcs) that secure the load cell to the platter.



Tool: #2 cross-head screwdriver

- Pass the main PCB, rear display board and the power connector through the scale casing.



11» Clean Load Cell, Main PCB, Rear Display Board, Power Connector

- Gently wipe the load cell, main PCB, rear display board and power connector with a clean, damp, soft cloth. Use water or food-grade cleaning agent, if necessary. **Do not spray water or cleaning agents directly on any components!** Remove cleaning agent completely.



12» Dry off Cleaned Parts

- Air dry all the parts. Avoid sunlight exposure.

Lead-acid Battery Version

Dry-cell version




- Treat the load cell brackets with food-grade oil, especially the fasteners.




* This guide is applicable to both Lead-acid Battery version and Dry-cell version.

Follow the instructions below to assemble the scale after cleaning.

1-a» Safety Instructions

 Before connecting/disconnecting any internal electronic components or interconnecting wiring between electronic equipment always remove power and wait at least thirty (30) seconds before any connections or disconnections are made. Failure to observe these precautions could result in damage to or destruction of the equipment and/or bodily harm.

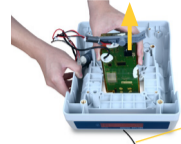
 Observe precautions for handling electrostatic sensitive devices.

1-b» Tools Needed

1. Flat-head screwdriver	3. Torque wrench
2. Cross-head screwdriver (#1 & #2)	4. User manual

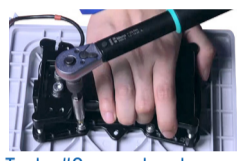
2» Install Load Cell

1. Pass the main PCB, the rear display board and the power connector through the scale casing.



To Load Cell


2. Fasten the load cell to the platter using the M4x14 screws (4 pcs, 2Nm). Each M4x14 screw is coupled with a spring washer and a flat washer.




Tools: #2 cross-head screwdriver and torque wrench

3» Install Load Cell (continued)

1. Fix the load cell cable slot into the scale casing.




2. Fasten the load cell to the scale casing using the M4x25 screws (4 pcs, 1.5Nm). Note that each M4x25 screw is coupled with a flat washer.



Tools: #2 cross-head screwdriver and torque wrench

4» Install Rear Display Board and Main PCB


1. Gently press the rear display inward and, at the same time, press the rear display board towards the rear display so that it can be locked by the clamps. A "pop" sound is made when the board is locked.



Clamp


2. Fasten the main PCB to the scale casing using the M3x6 screws (2 pcs).

Tool: #1 cross-head screwdriver




5» Install Power Connector

1. Fix the power connector to the scale bottom using an M3x6 screw (1 pcs). Replace the protection rubber plug.



Tool: #1 cross-head screwdriver

2. Lead-acid battery version: Pass the black and red battery wires through the scale bottom (Figure 1). Dry-cell version: Tighten the metal joint (Figure 2).



Black and red battery wires

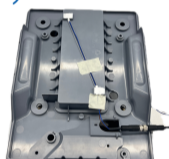
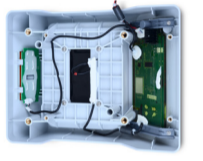



Figure 1 Figure 2

6» Install Scale Bottom

1. Route all the cables and wires and ensure none of them is pressed or pinched when installing the scale bottom. Place the scale bottom into the scale casing.

2. Attach the scale bottom using the M4x12 screws (3 pcs, 2Nm).


Tools: #2 cross-head screwdriver and torque wrench

Note: Inspect the sealing of the white adhesive at the perforation of the power cord on the underside of the casing. If it is damaged, you need to reapply the glue to ensure the battery compartment meets IP68 waterproof rating.


7» Install Metrology Switch Cover

1. Secure the metrology switch cover to the scale bottom using the M4x10 screw (1 pcs, 1.5Nm).

Tools: flat-head screwdriver and torque wrench




2. Install all scale feet (4 pcs).




8» Install Battery

1. Connect the black wire to the negative terminal of the battery and the red wire to the positive terminal.



2. Place the battery into the compartment (ensure that the warning instructions are facing up) and coil the wires into the compartment.




Note: Use the screw foot tool to tighten battery cover screws (torque: 1.1-1.6Nm) to safeguard battery seal and preserve product life. Exposure to water and moisture can cause electrical hazards and product failure.


9» Install Battery Compartment Cover

1. Secure the battery compartment cover to the scale bottom using the hand screws (3 pcs, 1.1 Nm).

Tools: flat-head screwdriver and torque wrench

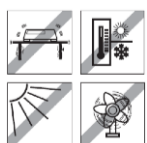


2. Flip the scale. Press and hold the Zero button to power on the scale, and then test the scale for proper operation.

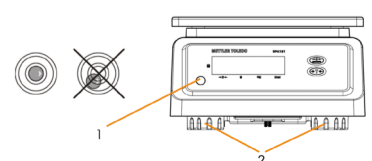


10» Level the Scale

1. Place the scale at an installation site that meets the following requirements:
 - The foundation at the installation site must be capable of safely supporting the total weight of the scale at its support points, when a maximum load is on the scale.
 - The installation site must be level, stable and vibration-free.
 - No direct sunlight; No strong drafts; No excessive temperature fluctuations.





2. Turn the scale feet (2) until the level bubble (1) is inside the inner circle.

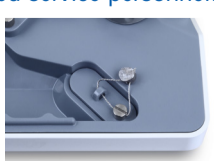


11» Calibrate the Scale

1. Power on the scale and calibrate the scale. Refer to the user manual for instructions on calibration.



 Note that if the scale is used for legal-for-trade purpose, the scale must be evaluated and sealed by an authorized service personnel.



Manuals Download

Visit the website ► www.mt.com/BPA121-downloads OR scan the QR-Code to download more manuals of BPA121.



Mettler-Toledo (Albstadt) GmbH
 Unter dem Malesfelsen 34
 D-72458 Albstadt, Germany
 Tel. +49 7431-14 0
 Fax +49 7431-14 232
 www.mt.com

Subject to technical changes.
 © Mettler-Toledo (Albstadt) GmbH 03/2024
 30634095 B



* 3 0 6 3 4 0 9 5 *