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| Eppendorf Centrifuge 5430 and 5424 Maintenance | | | | |
| **Purpose** | This procedure provides instructions for maintenance tasks performed on the Eppendorf Centrifuge 5430 and 5424. | | | |
| **Policy Statements** | This procedure applies to technical staff performing testing on the Eppendorf Centrifuge 5430 and 5424. | | | |
| **Special Safety Precautions** | Microbiologists/virologists are subject to occupational risks associated with specimen handling. Refer to the safety policies located in the safety section of the *Microbiology*and *Virology Policy Manual***:**   1. *Biohazard Containment* 2. *Safety in the Microbiology/Virology Laboratory*  * *Biohazardous Spills* | | | |
| **Materials** | |  |  |  | | --- | --- | --- | | Reagents | Supplies | Equipment | | * Household bleach (diluted 1:10 with water) or Bleach wipes * 70% isopropyl alcohol * Distilled water * Glycerine | * Absorbent Cloths * Cotton Swabs | * Bottle brush * Fuses | | | | |
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| **Procedure** | **Daily / With Use**   1. Open the lid, switch off the device, and disconnect the power plug. 2. Loosen the rotor nut by turning the rotor key counterclockwise and then remove the rotor. 3. Clean and disinfect all surfaces including the power cord, rotor bucket, and lid with a lint free absorbent cloth dampened with 1:10 bleach dilution or bleach wipes, followed with distilled water and 70% alcohol. 4. Leave the centrifuge lid open when the device is not being used. 5. Reconnect the power supply only if it is fully dry inside and out.   **Weekly**  Clean all surfaces and accessories at least weekly and when contaminated.   1. Open the lid, switch off the device, and disconnect the power plug. 2. Loosen the rotor nut by turning the rotor key counterclockwise and then remove the rotor. 3. Clean and disinfect all surfaces including the power cord with a lint free absorbent cloth dampened with 1:10 bleach dilution or bleach wipes, followed with distilled water and 70% alcohol. 4. Thoroughly clean the rubber seals of the rotor chamber with distilled water. 5. Using your finger tip with a clean glove on, rub the dry rubber seal with a thin layer of glycerine to prevent it from becoming brittle. Do not lubricate the lid latch, lid springs, motor shaft and rotor cone. 6. Clean the motor shaft with a cloth. Do not lubricate the motor shaft. Check the motor shaft for damage. 7. Inspect the device for corrosion or damage. 8. Leave the centrifuge lid open when the device is not being used. 9. Reconnect the power supply only if it is fully dry inside and out.   **Monthly Maintenance**  **Cleaning and Disinfecting the Rotor**   1. Inspect the rotor for damage or corrosion. 2. Clean and disinfect the rotor and rotor lids with 1:10 bleach dilution or bleach wipes followed with distilled water and 70% alcohol. Remove the sealing ring so that the groove below can be thoroughly cleaned. Clean and disinfect the rotor bores using a bottle brush. 3. Rinse the rotors and rotor bores thoroughly with distilled water. Do not immerse the rotor in liquid. 4. Place rotors and accessories on dry cloth to dry with rotor bores facing downwards. 5. Reinsert the rotor lid sealing ring in the clean dry groove. 6. Clean the rotor cone with a dry cloth and inspect for damage. 7. Place the dry rotor onto the motor shaft and tighten the rotor nut by firmly turning clockwise with the rotor key. 8. Load the rotor. 9. Leave the rotor lid open when the rotor is not being used.   **6 Month Maintenance**   1. Power off the device and remove the power plug first. 2. Remove dust deposits from the ventilation slits of the centrifuge with a cotton swab.   **As Needed:**  **Cleaning up Glass Breakage**  Perform as needed.   1. Remove all splinters and glass powder. 2. Thoroughly clean the rotor and rotor chamber, particularly the rotor bores. 3. Replace rubber mats and adapters if required. 4. Regularly check the rotor bores for deposits and damage.   **Replace Fuses**  Perform as needed.   1. Switch off the device and pull out the power plug. 2. Remove the fuse holder towards the rear. Replace fuses as needed.   **Full Decontamination For Shipment**  Perform before shipping parts for service.   1. Decontaminate all parts to be shipped with a 1:10 bleach dilution or bleach wipes followed by distilled water and 70% alcohol. 2. Include the fully completed decontamination certificate in the package as available at www.eppenedorf.com/decontamination. | | | |
| **Result Reporting** | Record completion of maintenance tasks on the Maintenance Log. | | | |
| **References** | 1. Eppendorf Centrifuge 5430/5430 R Operating Manual. 2017 Eppendorf AG, Germany. 2. Eppendorf Centrifuge 5424 R Operating Manual. 2018 Eppendorf AG, Germany. | | | |
| **Historical Record** |  |  |  |  |
|  | **Version** | **Written/Revised by:** | **Effective Date:** | **Summary of Revisions** |
| 1 | Michelle Merryman / Julie Laramie | 07/13/2020 | Initial Version |
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