

Beckman-Avanti Superspeed Centrifuge Quick-Start/Refresher Instructions

Before preparing samples:

1. Select the rotor based on sample volume and centrifugal force required. Available rotors:
 - JS13.1: 6 x 50 ml tubes, 26,500 x *g*
 - JA20: 8 x 50 ml tubes, 48,400 x *g*
 - JA17: 14 x 50 ml tubes, 39,800 x *g*
 - JA14: 6 x 250 ml bottles, 30,100 x *g*
 - JA10: 6 x 500 ml bottles, 17,700 x *g*
2. Make sure that you have appropriate bottles or tubes. Autoclavable polypropylene with lids:
 - JS13.1, JA20, JA17: Beckman 357001, Fisher/Nalgene 05-563-10G, 50,000 x *g* max
 - JA14: Beckman 356011, Fisher/Nalgene 05-564-1, 27,500 x *g* max
 - JA10: Beckman 355607, Fisher/Nalgene 05-564-3, 13,700 x *g* maxOther tube materials, i.e. polycarbonate and Teflon, can be used. Do not exceed the max *g*-force

Starting a run:

1. Prepare balanced tubes. When centrifuging multiple bottles of the same material, you can use equal volumes to balance tubes. If you are using water as a balance, you must balance tubes by mass, not volume. Tubes/bottles should be filled to 80% of their volume
2. Turn the centrifuge on and open the lid with the foot pedal.
3. Remove the rotor from the cold cabinet and inspect for wear, missing o-ring, or other damage.
4. Seat the rotor on the spindle. Each rotor has pins and the spindle has two teeth. Make sure the rotor pins are not sitting on the teeth.
5. Load the rotor with balanced tubes directly across from one another.
6. Screw the rotor lid onto the base and close the centrifuge lid.
7. Use the controls to set the rotor type, centrifugal force, time, temperature. Press Start.
8. **FILL OUT THE LOGBOOK WITH YOUR RUN DETAILS.**
9. Stay with the centrifuge until it reaches speed.

Finishing a run:

1. At the end of the run, the lid can only be opened after the rotor has stopped.
2. Use the foot pedal to open the lid, unscrew the rotor lid, gently unload your samples.
3. Inspect the rotor and centrifuge to see if there are any spills and clean as needed. Detergent and brushes are provided for the rotors. **DO NOT USE METAL BRUSHES.**
4. After drying, place the rotor back in the cold cabinet for the next user.
5. Close the lid on the centrifuge and turn off. When centrifuging at cold temperatures in the summer, there will be frost or condensate in the centrifuge. Turn the centrifuge off, leave the lid open and return in ~30' to wipe out the centrifuge. Then close the lid.

If you have problems with a run or questions about using this instrument, please contact:

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