

Avanti J-E Instructions

Read all instructions carefully as improper use can damage the instrument and cause serious injury.

When using PBCF centrifuges, genuine Beckman Coulter products must be used.

Install Rotor

1. Press **DOOR** button to unlock door (door will only open when power is on and rotor is at rest)
2. When the door is locked, the door LED will come on.
3. Lift the door up to open and install rotor carefully on drive shaft. Add samples/cannisters.
4. Securely attach rotor lid and tighten the knob, failure to do so can result in o-ring detachment and sample loss.
 - a. If the knob turns loosely and you don't feel the threads engaging, the rotor drive hole pins may not be properly seated on the shaft. Lift the rotor, rotate it slightly, and lower on the shaft again.
 - b. If you press control panel buttons during the rotor installation and "L1 Diagnostics" appears, press **CE** to clear the message.

Operation

1. Rotor Selection (be sure to sign the rotor sheet in the cold room)
 - a. Press **ROTOR**
 - b. Using keypad enter code (or press **ROTOR** until the rotor is displayed), then press **ENTER**

Rotor	Code
JLA 17	17
JLA 10.500	10.5

2. Run Speed
 - a. Press **RPM/RCF**
 - b. Using keypad, enter targeted speed, then press **ENTER**

Rotor	Max Speed (RPM)
JLA 17	17,000
JLA 10.500	10,000 (might change with selected bottle)

3. Run Time
 - a. Press **TIME**
 - b. Using keypad, enter run time (or press **TIME** again for a hold run for continuous run), then press **ENTER**
4. Run Temperature
 - a. Press **TEMP**
 - b. Using keypad, enter target temperature (range: -10 to 40°C), then press **ENTER**
5. Starting Run
 - a. Close door. Press **ENTER** and **START** simultaneously, the green light next to **START** will begin to flash.
6. Finish Run
 - a. Centrifuge will beep when the rotor comes to a complete stop, press **DOOR** to unlock and open door
 - b. Remove rotor, inspect rotor chamber interior and door gasket, clean with 70% ethanol to decontaminate after every use, close door. Rotors must be cleaned with 70% EtOH and placed back in the cold room once finished.
 - c. Sign out on rotor sheet.



Questions can be directed to Martin (ma4160) or Jerry (cc5007)

JLA-10.500 Rotor Instructions

When using PBCF centrifuges, genuine Beckman Coulter products must be used.

ALL 6 CANNISTERS (LOADED OR EMPTY) MUST BE USED WHILE CENTRIFUGING

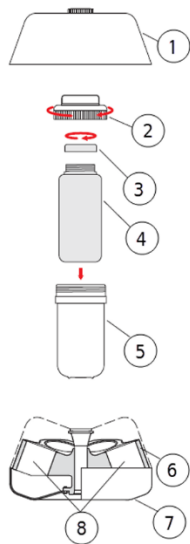
ASSURE CANNISTER O-RINGS ARE IN CANNISTER CAP BEFORE SEALING TO PREVENT SAMPLE LOSS

NEVER PLACE SAMPLES DIRECTLY INTO A CANNISTER

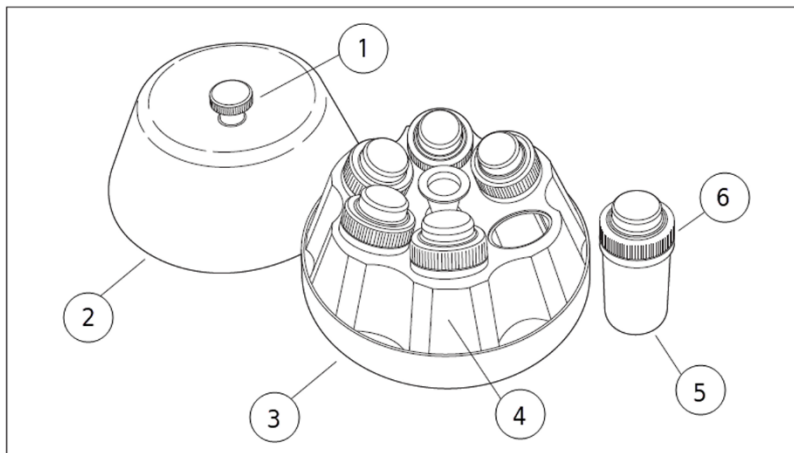
NEVER PLACE BOTTLES DIRECTLY INTO THE ROTOR CAVITIES

Install Rotor and Cannisters

1. Press **DOOR** button to unlock door (door will only open when power is on and rotor is at rest)
2. When the door is locked, the door LED will come on.
3. Lift the door up to open and install rotor carefully on drive shaft.
4. Place pre-filled bottles inside cannisters
 - a. Refer to the JLA-10.500 table for max speed, volume, and accessories for your bottles.
5. Securely attach a cannister closure to each cannister.
6. Place 6 cannisters, loaded or empty, in the cavities of the rotor body.
7. Place the rotor lid on top of the rotor and fasten knob securely.
8. Before each run, check: the rotor is seated on the drive hub properly, all 6 cannister closures, and lid knob are tight.



1. Lid
2. Closure
3. Bottle Lid
4. Bottle
5. Cannister
6. Rotor Body
7. Windshield
8. Rotor Cavities



1. Lid Knob
2. Lid
3. Windshield
4. Rotor Body
5. Cannister
6. Closure

JLA-10.500 Tubes and Accessories

When using PBCF centrifuges, genuine Beckman Coulter products must be used.

J-Lite JLA-10.500 Fixed-Angle Rotor Assembly
Preparation and Use

Table 3 Available Tubes and Bottles for the JLA-10.500 Fixed Angle Rotor Assembly
Use only the items listed here and observe fill volumes and maximum run speeds.

Tube			Max Fill Volume ^a (mL)	Required Accessory		Max Speed ^b / RCF
Dimensions and Volume	Description	Part Number		Description	Part Number	
69 × 160 mm 500 mL	polycarbonate bottle w/cap assy	361690	325	none	—	10,000 rpm 18,600 × g
69 × 160 mm 500 mL	polypropylene bottle w/cap assy	361691	325	none	—	8,000 rpm 11,900 × g
62 × 120 mm 250 mL	polypropylene wide mouth bottle w/cap assy	356011	250	adapter ^c	362750	10,000 rpm 17,700 × g
62 × 120 mm 250 mL	polycarbonate wide mouth bottle w/cap assy	356013	250	adapter ^c	362750	10,000 rpm 17,700 × g
29 × 104 mm 50 mL	polycarbonate open-top tube	363647	40	adapter ^d	356996	10,000 rpm 12,000 × g
29 × 104 mm 50 mL	polycarbonate tube w/snap-on cap	363664	40	adapter ^d	356996	10,000 rpm 12,000 × g
29 × 104 mm 50 mL	polycarbonate bottle w/liquid-tight cap assy	357000	42	adapter ^d	356996	10,000 rpm 12,000 × g
29 × 104 mm 50 mL	polypropylene bottle w/liquid-tight cap assy	357001	42	adapter ^d	356996	10,000 rpm 12,000 × g
29 × 104 mm 50 mL	polycarbonate bottle w/screw cap	357002	34	adapter ^d	356996	10,000 rpm 12,000 × g
29 × 104 mm 50 mL	polypropylene bottle w/screw cap	357003	34	adapter ^d	356996	10,000 rpm 12,000 × g
29 × 104 mm 50 mL	polypropylene thickwall tube w/snap-on cap	357005	31	adapter ^d	356996	10,000 rpm 12,000 × g
				natural 29-mm cap red 29-mm cap green 29-mm cap yellow 29-mm cap blue 29-mm cap	356264 ^e 357359 ^e 357360 ^e 357361 ^e 357362 ^e	

JLA-10.500 Tubes and Accessories

When using PBCF centrifuges, genuine Beckman Coulter products must be used.

J-Lite JLA-10.500 Fixed-Angle Rotor Assembly Preparation and Use

Table 3 Available Tubes and Bottles for the JLA-10.500 Fixed Angle Rotor Assembly
Use only the items listed here and observe fill volumes and maximum run speeds.

Tube			Max Fill Volume ^a (mL)	Required Accessory		Max Speed ^b / RCF
Dimensions and Volume	Description	Part Number		Description	Part Number	
29 × 104 mm 50 mL	polypropylene thickwall tube, no cap	357007	31	adapter ^d	356996	10,000 rpm 12,000 × g
Bio-Vials 14 × 55 mm 4 mL	polypropylene, capped	566353	4	adapter ^f	342098 ^g and 362750 ^d	10,000 rpm

- Above 20°C fill polypropylene tubes at least half full.
- Maximum speeds listed are guidelines only. These speeds have been achieved in reliability tests at Beckman Coulter, but, because of manufacturing variances, no guarantee of performance or fit is expressed or implied.
- Polyethylene terephthalate (PET); package of 2.
- Polypropylene; package of 1.
- Polypropylene; package of 25.
- Two adapters (342098) can be double-stacked inside of one adapter (362750) per cannister if greater capacity is required.
- Delrin. Delrin is a registered trademark of E. I. Du Pont de Nemours & Company.

Table 4 Beckman Coulter Adapters for Commercially Available Tubes

Adapter Part Number	Tube Description	Nominal Volume (mL)	Max. Fill Volume (mL) (approx.)	Maximum Speed (rpm)	Dimensions (mm)	Maximum Number per Rotor
359398 (Delrin)	round bottom, glass	30	a	a	25 × 105	6
356994 (polypropylene)	round bottom, glass	15	a	a	17 × 100	30
356994 (polypropylene)	round bottom, glass	15	a	a	17 × 120	30
356967 (Delrin)	round bottom, glass	4	a	a	12 × 75	72
356965 (polypropylene)	conical	50	a	a	29 × 115	6
356960 (polypropylene)	conical	15	a	a	17 × 120	30

- Observe manufacturer's speed guidelines and maximum fill volumes.

JA-17 Tubes and Accessories

When using PBCF centrifuges, genuine Beckman Coulter products must be used.

*Table 1. Available Tubes and Bottles for the JA-17 Fixed Angle Rotor.
Use only the items listed here and observe fill volumes and maximum run speeds.*

Tube			Max Fill Vol (mL)	Required Accessory		Max Speed ^a / RCF/ k Factor
Dimensions and Volume	Description	Part Number		Description	Part Number	
29 × 104 mm 50 mL	polycarbonate bottle assy, liquid-tight cap assy	357000 ^b	34	none	—	17 000 rpm 39 800 × g 690
29 × 104 mm 50 mL	polypropylene bottle assy, liquid-tight cap assy	357001 ^b	34	none	—	17 000 rpm 39 800 × g 690
29 × 104 mm 50 mL	polycarbonate bottle, screw-cap	357002	34	none	—	17 000 rpm 39 800 × g 690
29 × 104 mm 50 mL	polypropylene bottle, screw-cap	357003	40	none	—	17 000 rpm 39 800 × g 690
29 × 104 mm 50 mL	polypropylene thickwall tube, snap-on cap	357005	34 ^d	white 29-mm cap red 29-mm cap green 29-mm cap yellow 29-mm cap blue 29-mm cap	356264 ^c 357359 ^c 357360 ^c 357361 ^c 357362 ^c	17 000 rpm 39 800 × g 690
29 × 104 mm 50 mL	polypropylene thickwall tube, no cap ^c	357007	34 ^d	none	—	17 000 rpm 39 800 × g 690
29 × 104 mm 50 mL	polycarbonate bottle assy, liquid-tight cap assy	361693	34	none	—	17 000 rpm 39 800 × g 690
29 × 104 mm 50 mL	polypropylene bottle assy, liquid-tight cap assy	361694	34	none	—	17 000 rpm 39 800 × g 690
29 × 104 mm 50 mL	polycarbonate thick-wall tube, no cap ^c	363647	34	none	—	17 000 rpm 39 800 × g 690
16 × 80 mm 10 mL	polycarbonate bottle, screw-cap	355672	10	adapter, polyethylene ^f	342327	17 000 rpm 32 000 × g 500
				adapter, rubber	870329	

^a Maximum speeds listed are guidelines only. These speeds have been achieved in reliability tests at Beckman Coulter, but, because of manufacturing variances, no guarantee of performance or fit is expressed or implied.

^b The following replacement parts can be ordered for tube assemblies 357000 and 357001: caps 356284, cap assembly O-rings 961582, and cap assembly inserts 358627.

^c Polypropylene, package of 25.

^d Above 20°C fill polypropylene tubes at least half full.

^e Cap 356274 can be used with these tubes.

^f Adapter 342327 holds one 10-mL tube.

RPM and RCF Equivalents on JA Rotors

JA-10.500 Rotor	
RPM	RCF
0	0
1,000	177
2,000	708
3,000	1,593
4,000	2,831
5,000	4,424
6,000	6,371
7,000	8,671
8,000	11,325
9,000	14,334
10,000	17,696

JA-17 Rotor	
RPM	RCF
0	0
1,000	138
2,000	551
3,000	1,240
4,000	2,204
5,000	3,444
6,000	4,959
7,000	6,750
8,000	8,817
9,000	11,159
10,000	13,776
11,000	16,669
12,000	19,837
13,000	23,281
14,000	27,001
15,000	30,996
16,000	35,267
17,000	39,813