Cardiopulmonary Bypass Steps

**Step 1.**
Heparin

**Step 2.**
Expose the heart;  
Check BP/aorta

**Step 3.**
Aortic cannulation;  
Check cannula for pressure and flow

**Step 4.**
Atrial cannulation;  
Venous clamp off;  
On bypass;  
Lungs off

**Step 5.**
Inspect the heart;  
Place aortic and/or retrograde cardioplegia;  
Reduce pump flow/cross-clamp aorta/  
Return to normal flow/check line pressure;  
Begin cardioplegia;  
Set patient temperature

**Step 6.**
Release aortic cross-clamp after warm cardioplegia;  
Be certain six conditions reviewed before weaning CPB:  
Lungs inflating and deflating;  
Good contractility;  
Stable heart rhythm;  
No bleeding in inaccessible areas;  
Temperature at desired level;  
No retained air

**Step 7.**
Wean off bypass;  
Venous line clamped/remove when stable;  
Remove aortic vent;  
Protamine;  
Follow RAP, PAP, and BP;  
Be alert for hemodynamic reaction;  
Remove arterial cannula