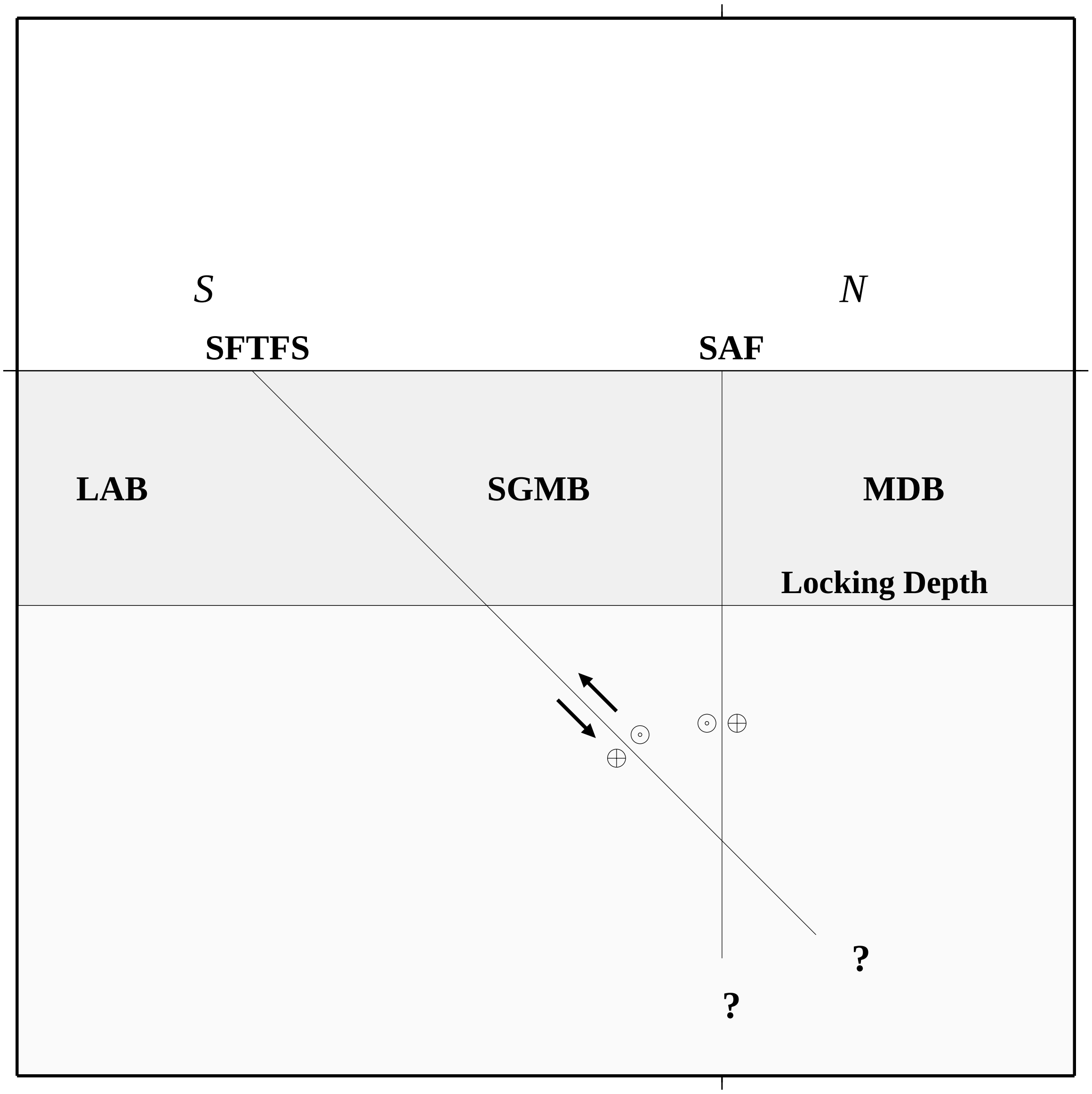

Figure 10. Cartoon of kinematic model proposed. The southern frontal thrust fault system (SFTFS) of the SGM subducts beneath the SGM, and intersects with the SAF at depth. Arrow and circle pairs indicate the relative motion direction at fault-plane surfaces; $\oplus$ indicates relative motion toward the reader, and $\odot$ indicates motion away from the reader. The compression along the Cucamonga fault causes excessive WNW motion of the San Gabriel Mountains block, producing left-lateral shear on the thrust ramp at depth. The extent and direction of the thrust faults beyond the SAF and the location of the SAF below its intersection with the thrust faults are not resolved in this study.