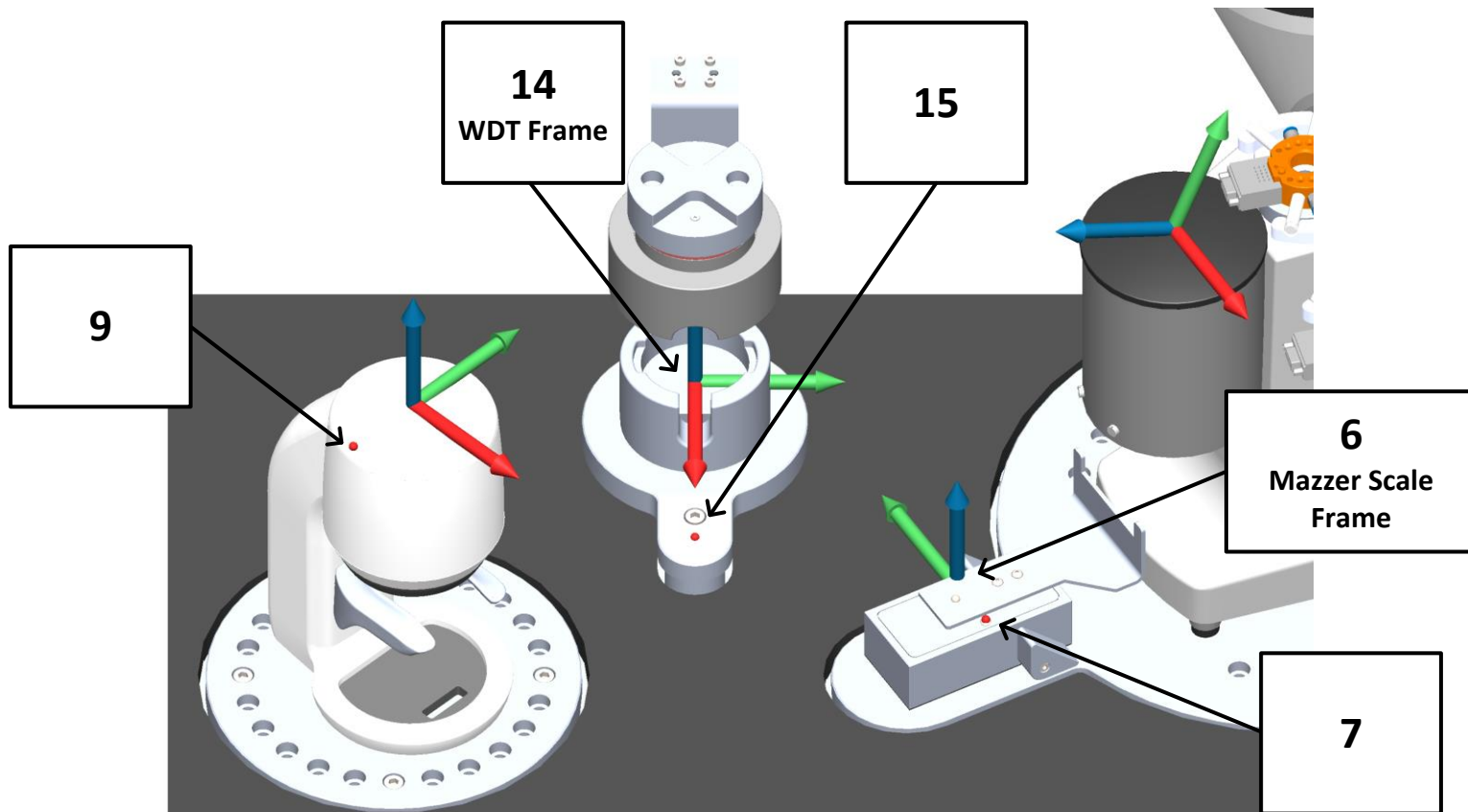
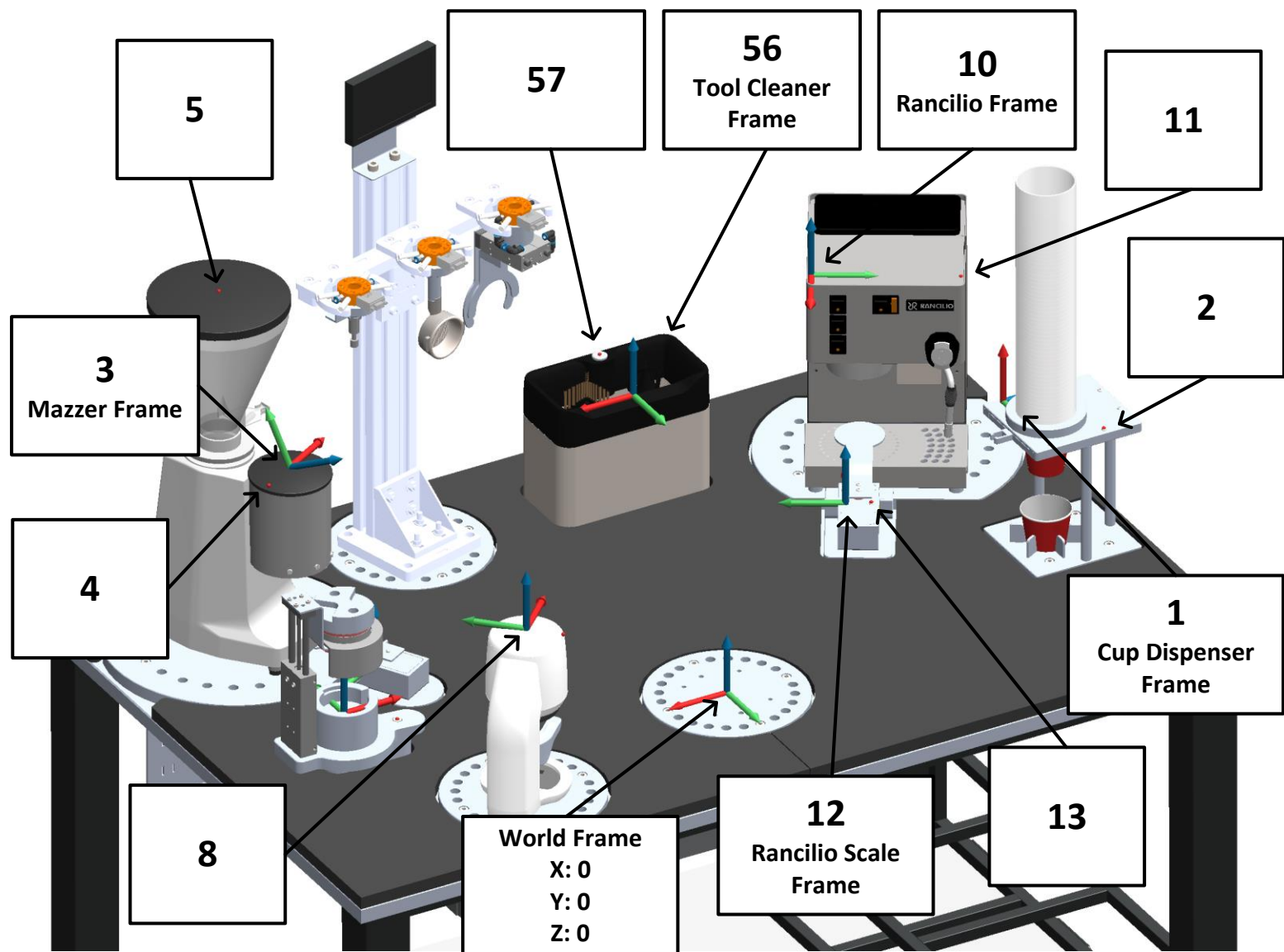


Change log

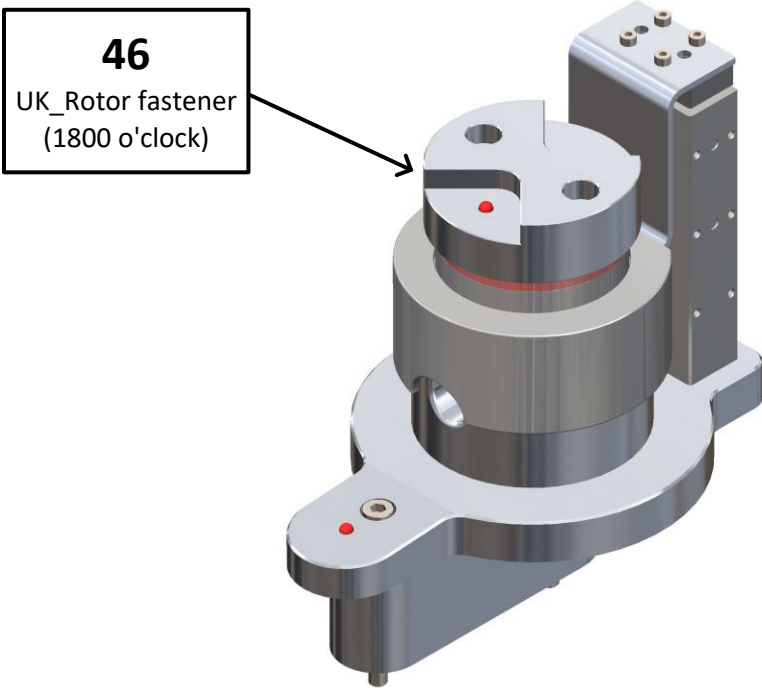
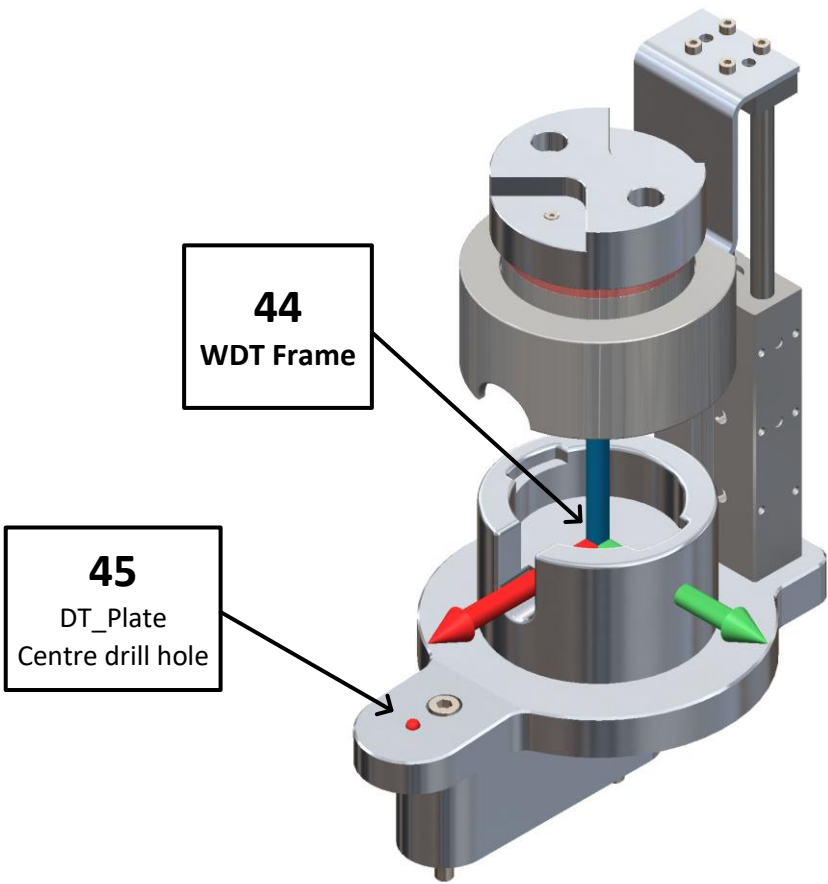
V1 () – Initial release

***Note: all dimensions in mm**

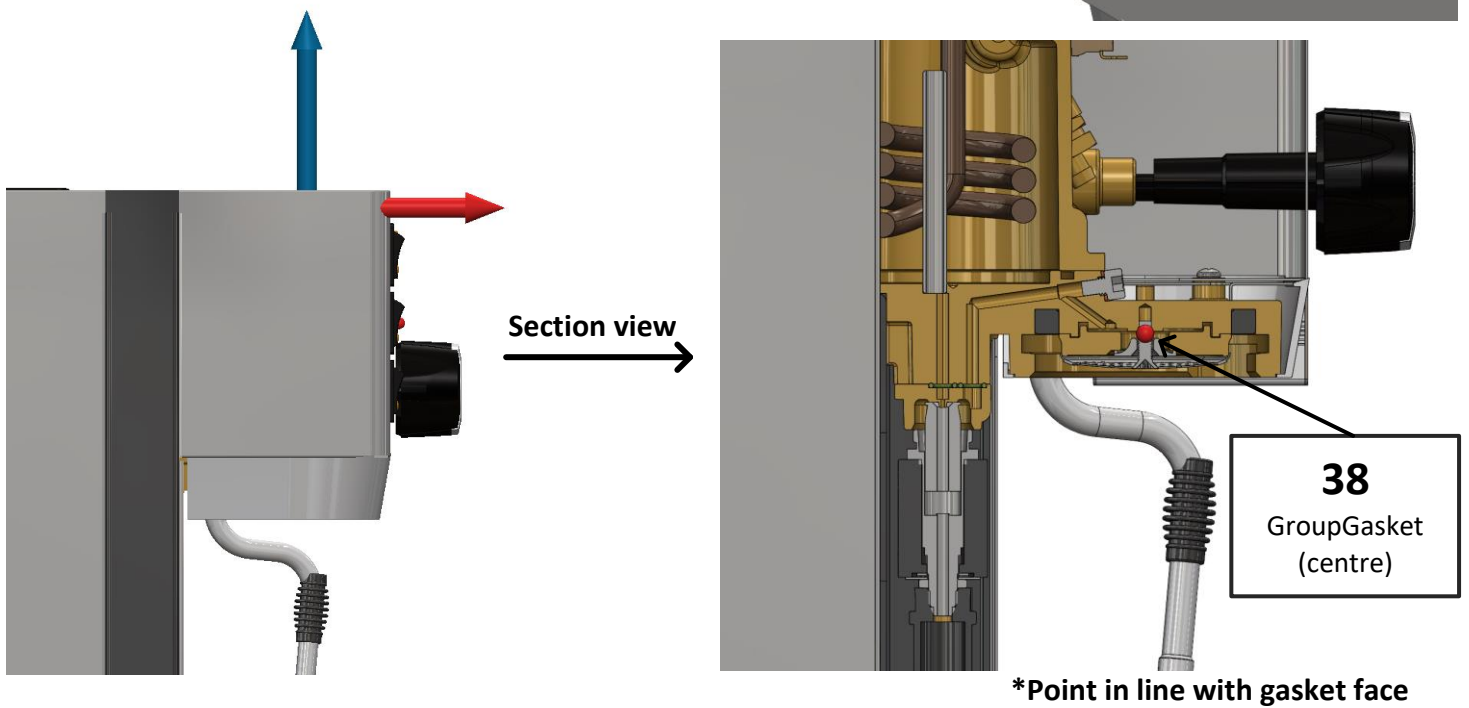
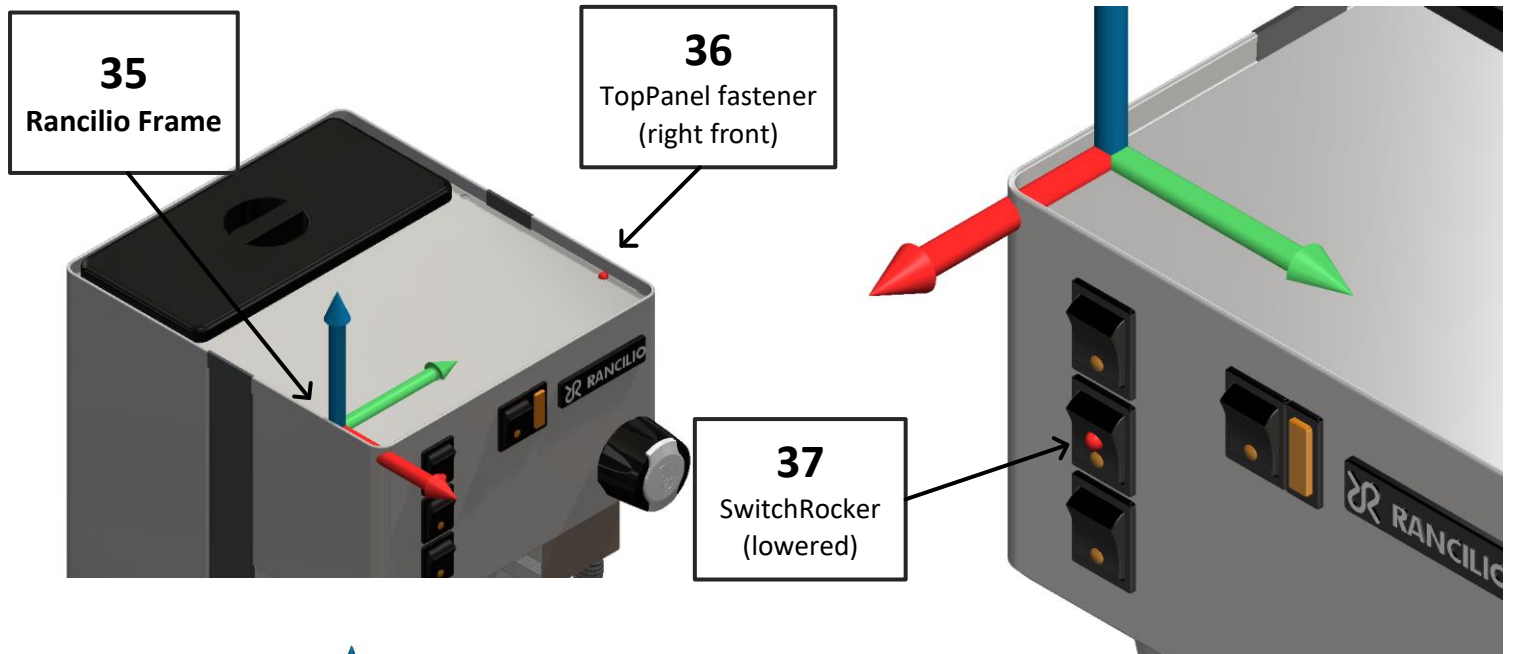
World Frame Coordinates



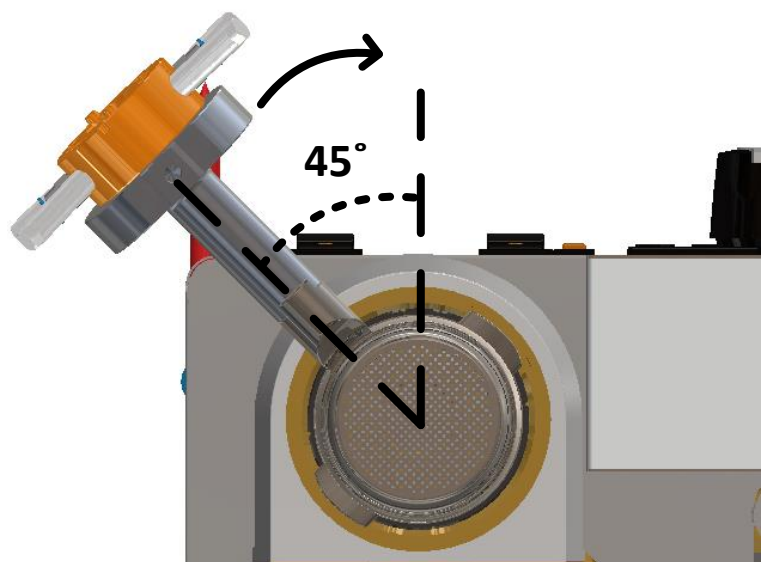
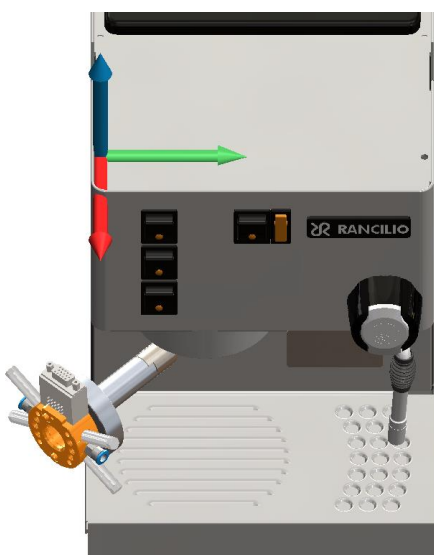
WDT local frame coordinates



Rancilio (Espresso machine) local frame coordinates

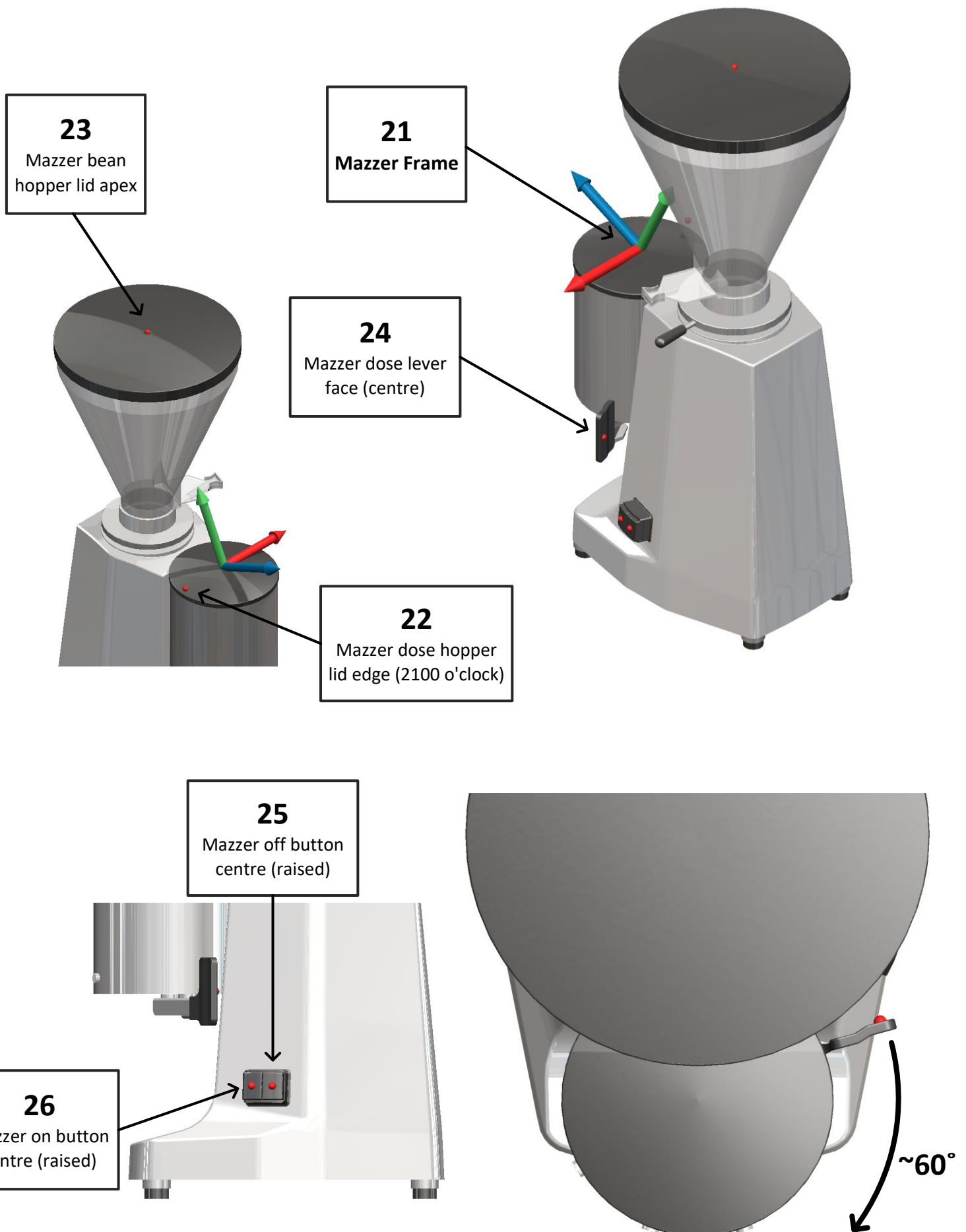


Rancilio Tool insertion



*Insert as shown and rotate ~30° clockwise (viewed from below). NB: this angle will likely need to be increased to ensure a proper seal in achieved.

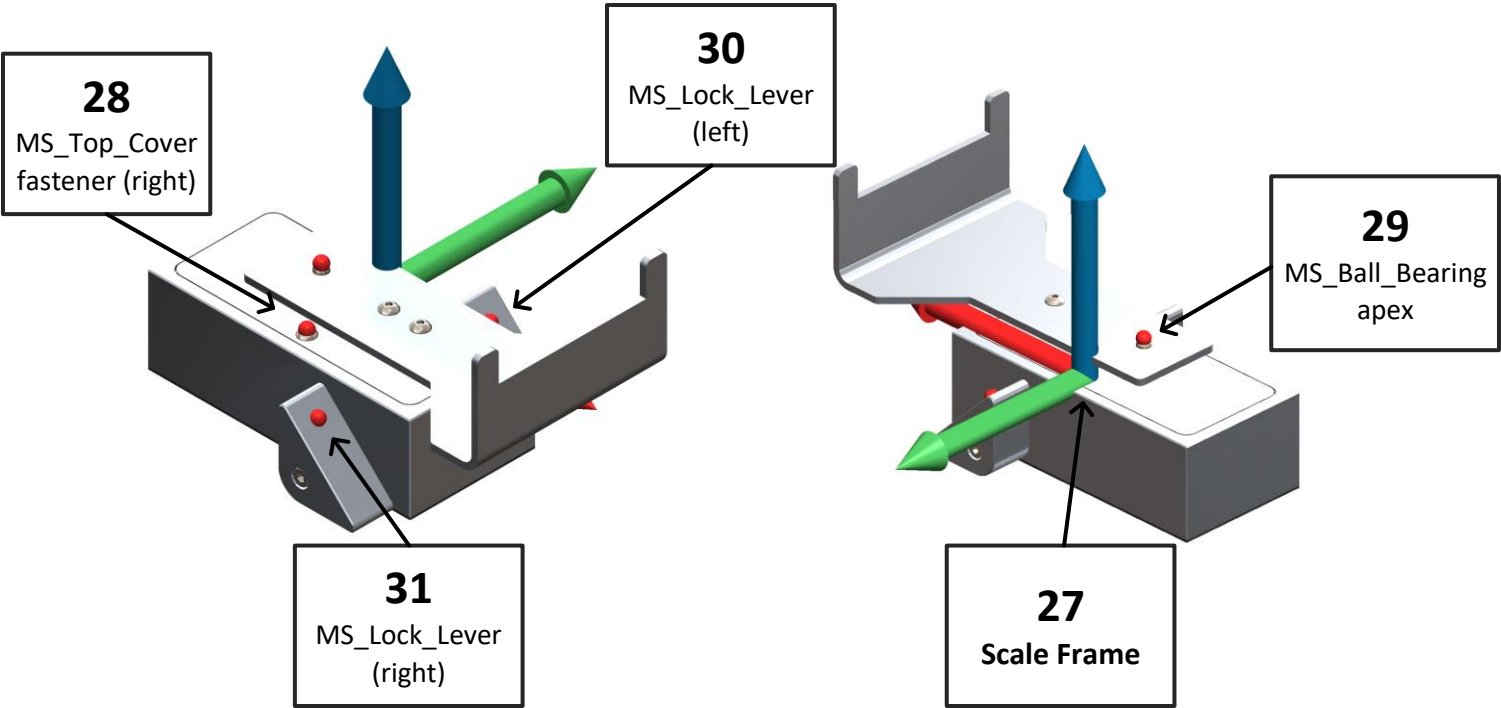
Mazzer (Grinder) local frame coordinates



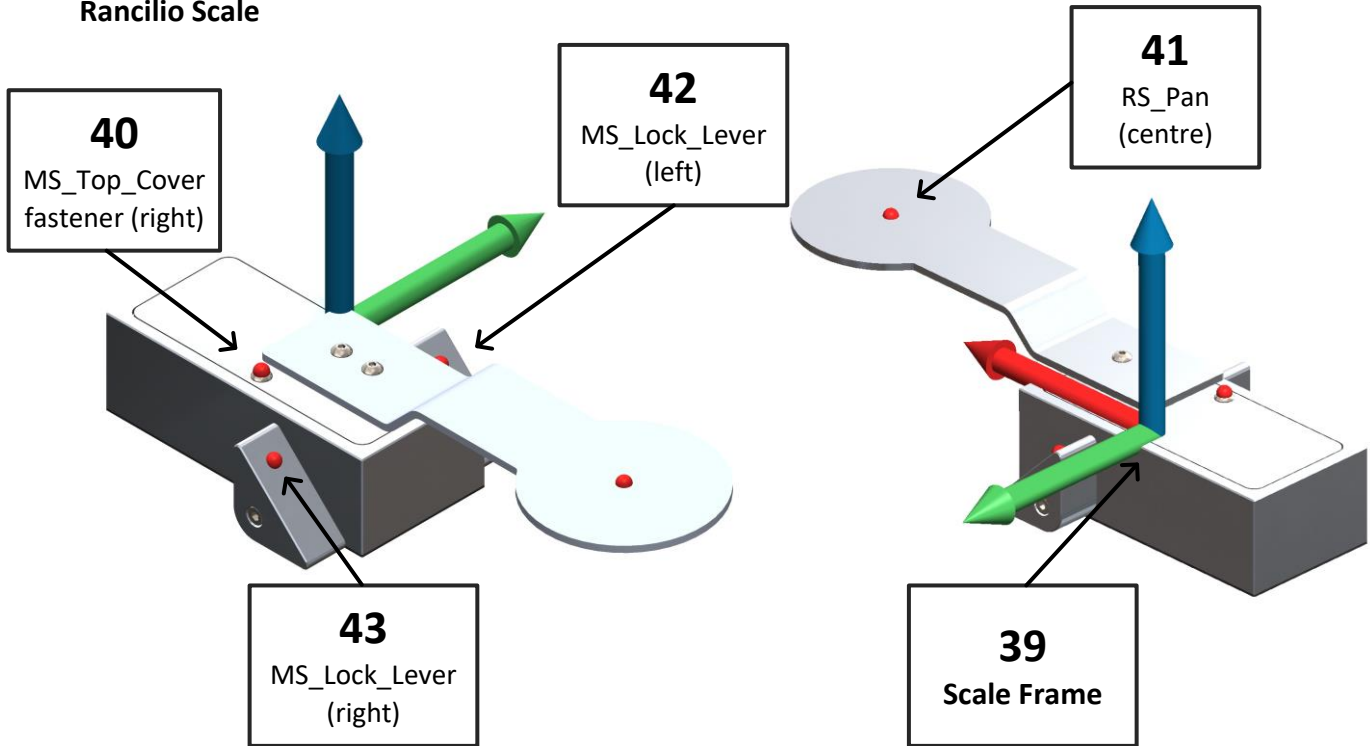
*Approximate rotation for a full dose.
This will likely need to be adjusted

Scale local frame coordinates

Mazzer Scale



Rancilio Scale

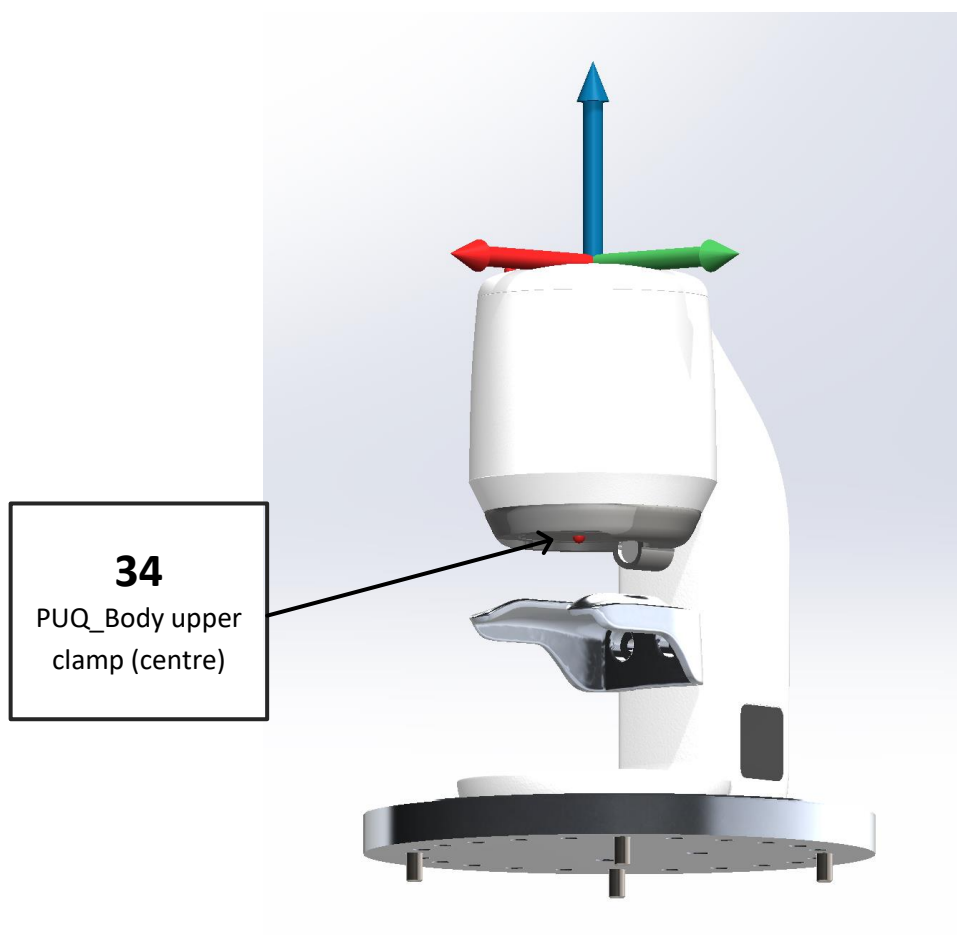
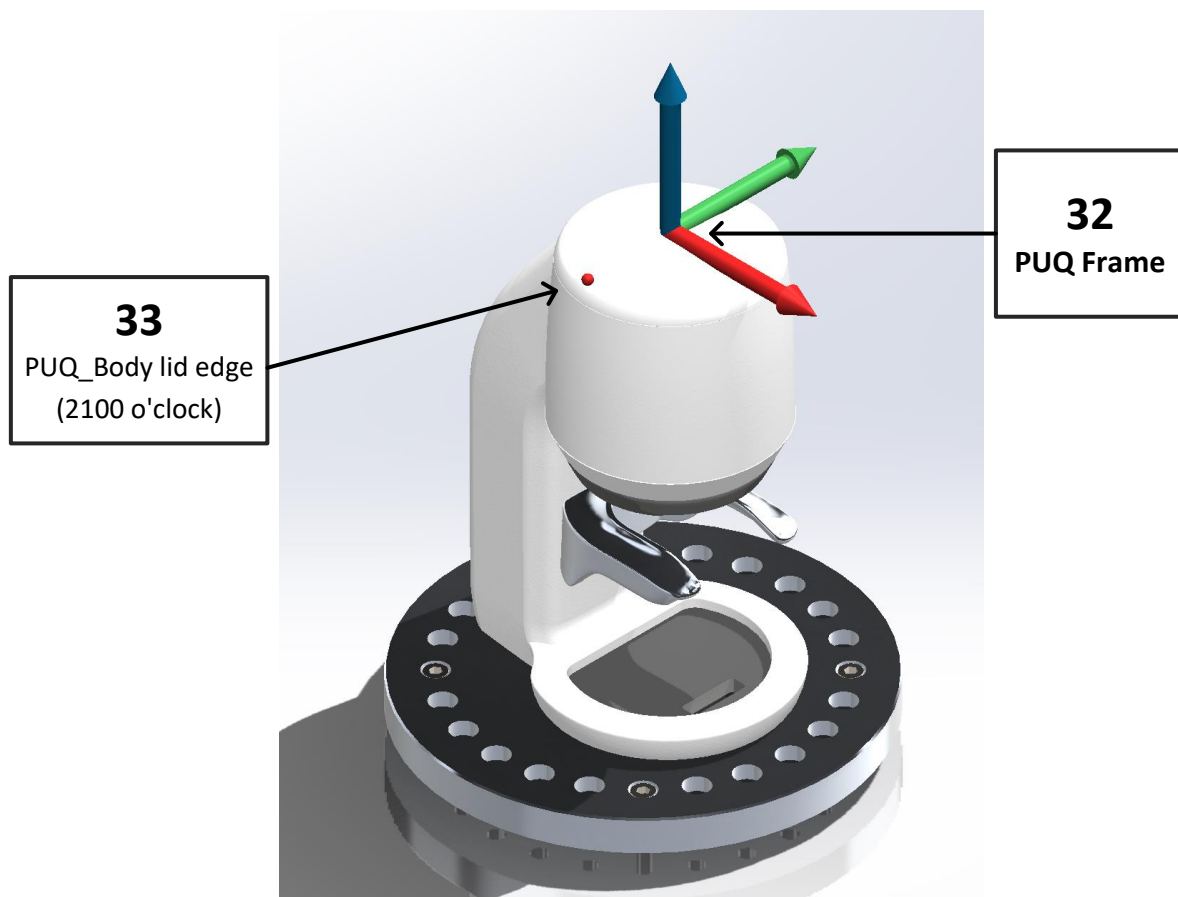


Locked

Unlocked



PUQ (Tamper) local frame coordinates



Cup Dispenser local frame coordinates

Closed

Open

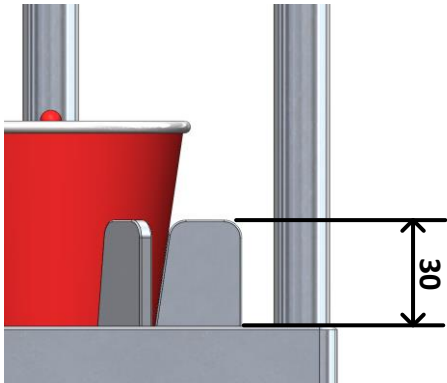
16
Cup Dispenser
Frame

17
CD_Top_Cover
fastener (1345 o'clock)

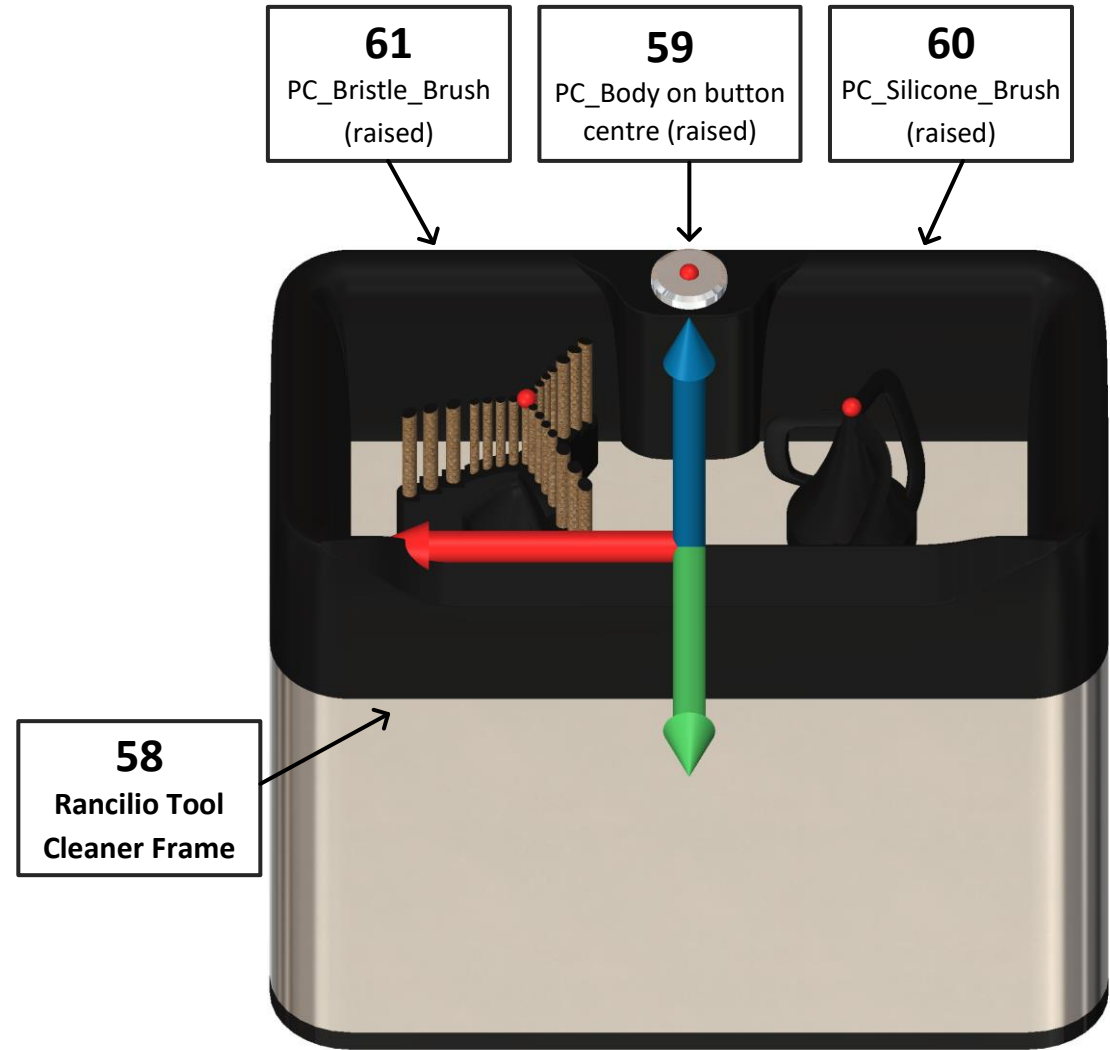
19
CD_Front_Index_Pull
(shut)

18
CD_Front_Index_Pull
(open)

20
Supreme_Cup rim
(centre)



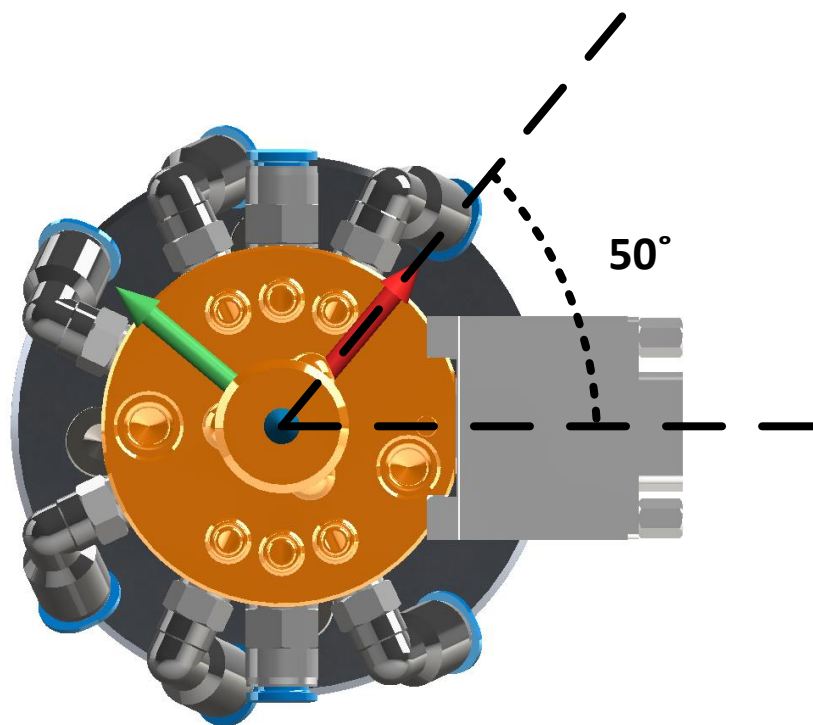
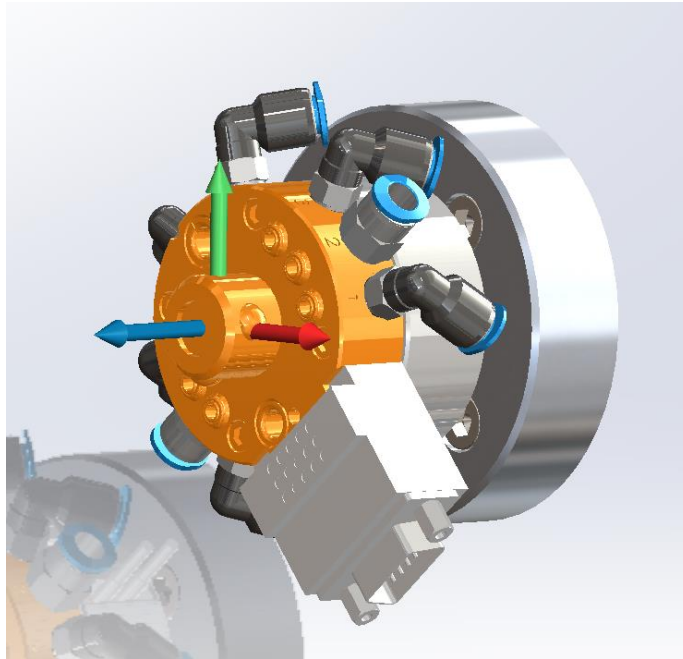
Rancilio Tool Cleaner local frame coordinates



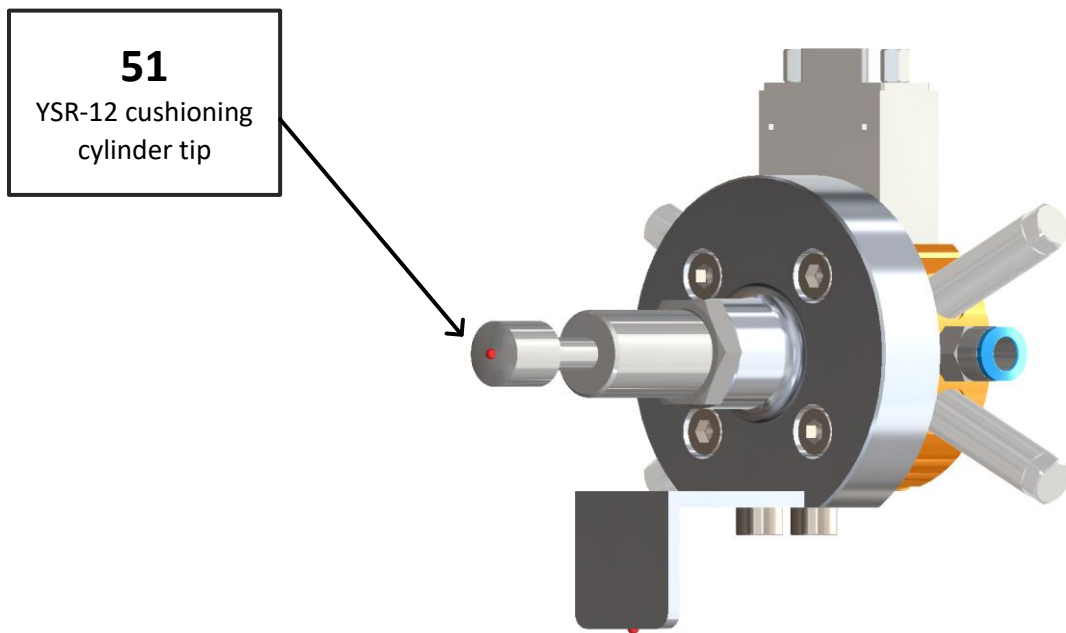
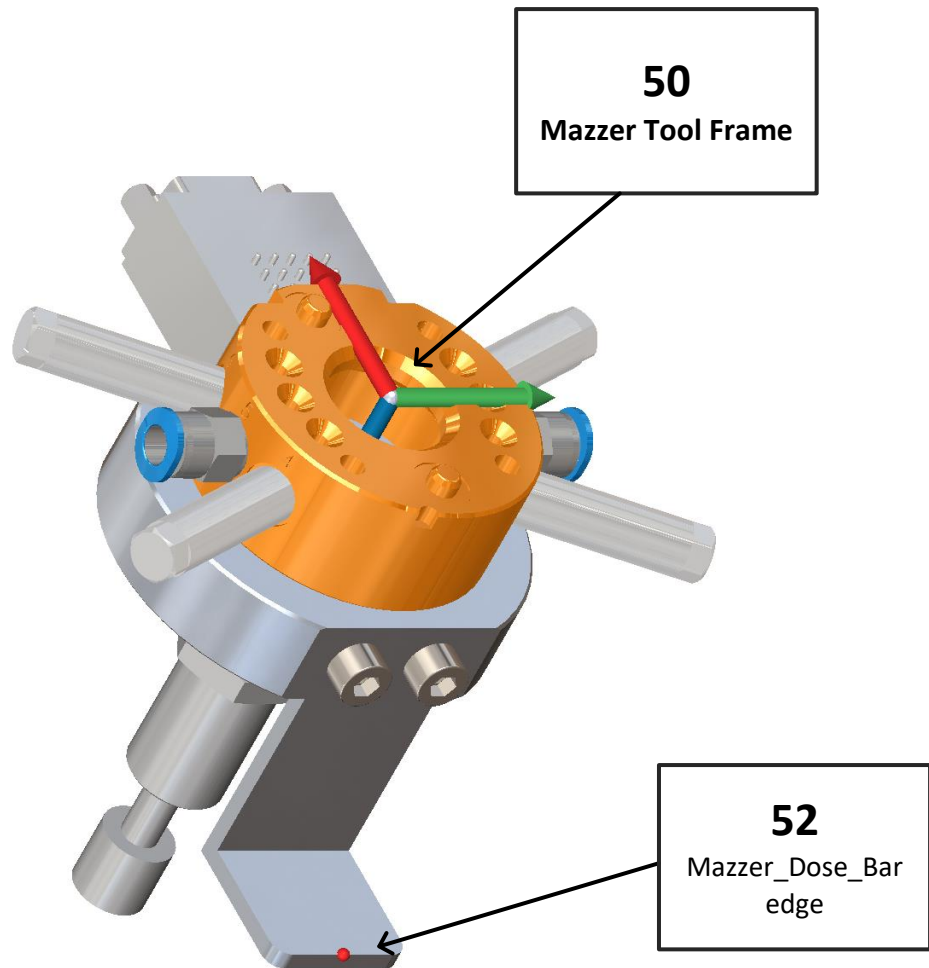
*Note that each brush must be depressed 3mm to activate

Tool Adapter for UR5 – permanently attached

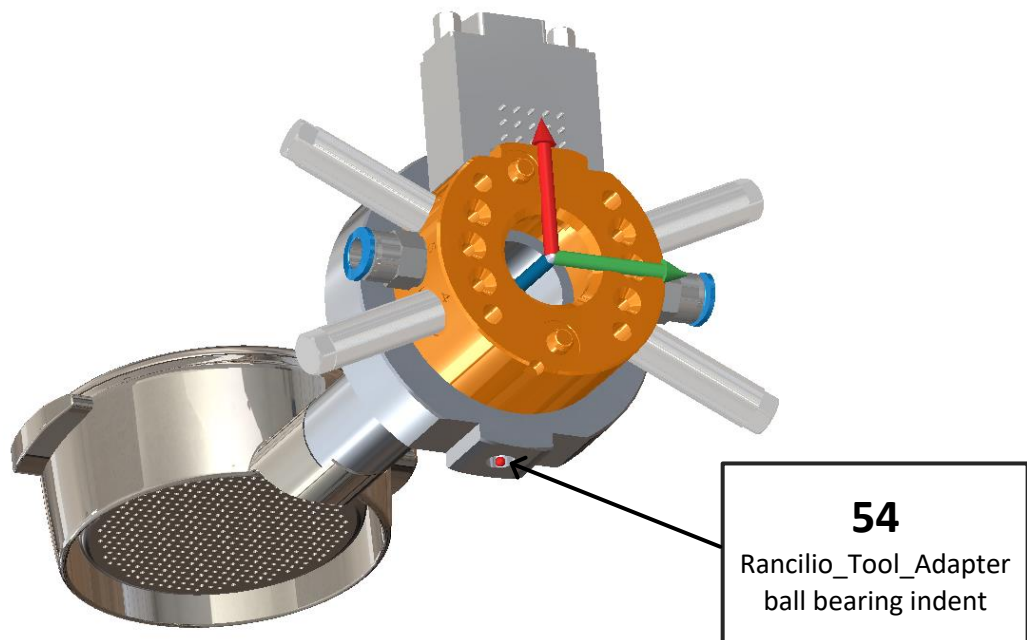
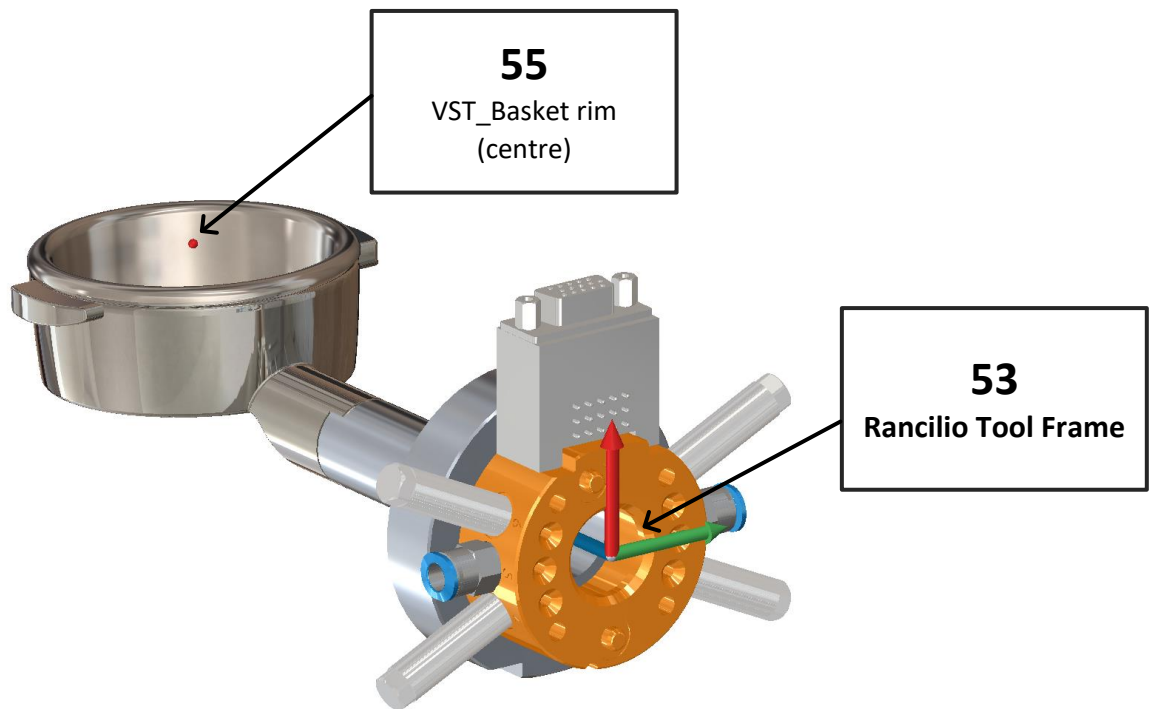
*This frame is aligned with the UR5 TCP frame – this is what you control



Mazzer Tool local frame coordinates



Rancilio Tool local frame coordinates



*Refer to Keypoints 63 and 64 for the angle (θ) and depth (d) of the VST basket

Cup Tool local frame coordinates

