Procedure for removing and reinstalling the MALT front beam (drum side beam).

1. Open machine to be able to work on the load table: front skins, UT panels, LT rails, rear hood front hood.
2. rotate backbone to lowest position.
3. move LT loader bar (traveler) to operator side.
4. power down
5. remove laser safety panels: removable ones only.
6. unfasten the LT motor bracket from MAB. (2 screws)
7. disconnect the sensor cable to the front beam.
8. unfasten the left side carriage guide from front beam (3 screws)
9. unfasten the energy chain trough from front beam (5 screws)
10. unfasten the drive shaft bearings from front beam (10 screws) prevent the screws from falling into the head area.
11. unfasten the laser safety shield brackets from front beam (~10 screws), prevent the brackets from falling into the head area.
12. unfasten the front beam (4 screws). Support the beam during this process to prevent it from damaging the drum surface.
13. remove the front beam.
14. install the new front beam is the opposite of removal.
15. Table rails adjustment on the new design of front beam assembly:
    i. Tighten the cones at the bottom of the adjustment for the left and right end cones only.
    ii. Pull a string tight over the top of these two fastened cones. A straight edge could also be used but needs to be straighter than +-0.2mm over 2.2m.
    iii. Adjust the other cones up to touch but not move the string line. Tighten the fasteners holding the cone. Total adjustment planned -0.5, +1.5mm for the rail cones relative to the beam.
    iv. Tighten the screws for the rail placement brackets.
    v. Install all the rail sets.
    vi. Check that the rails create a horizontal surface at the front beam. If a particular rail set is offending then loosen the nut holding the spring to get access to the cone fastener.
    vii. Ensure all fasteners are tightened appropriately.
16. The top surface of the beam can be adjusted also to be more flat by removing the screws that fasten it down adding shims and re fastening.