SM-02: Trimming Unmounted Study Models Checklist

Date: ___________________________    Name: ___________________________

Practice: ________________________    Position: ____________________________

1. Soak untrimmed models in water for 20 minutes.
2. Mark the palatal midline of the maxillary model with a sharp pencil.
3. Make another pencil line perpendicular to the midpalatal line and as far distal as possible to the terminal molars on each side.
4. Place the occlusal surfaces of the model teeth on the trimmer table and measure the 35 millimeters height for the model from the incisal edges and mark with a pencil line on the base in three areas.
5. Looking down on the occlusal surfaces, measure 4 millimeters out from the buccal surfaces of the teeth to indicate the depth of the buccal surfaces of the model base, mark with a pencil.
6. Trim the distal corners of the maxillary base slightly to reduce the size of the base.
7. Place the occlusal guide into the slot on the trimmer table.
8. While holding the occlusal surfaces of the maxillary teeth against the occlusal guide using the “lip” edges of the model, trim the “top” of the model base so it is parallel with the occlusal surfaces of the teeth and to the 35 millimeter pencil lines.
9. Trim the top of the model so that the whole top is parallel with the occlusal surfaces and so the base thickness is 13 millimeters from the depth of the vestibule to the top of the model. The total model height should be about 35 millimeters from the top of the model to the occlusal surfaces.
10. Remove the occlusal guide from the trimmer.
11. Trim the distal surface of the model base that was marked previously with a pencil so it is perpendicular to the midpalatal line. This surface will be trimmed more later.
12. Place the angle guide in the trimmer.
13. Trim the right buccal surface so it is 70° from the model distal surface and about 4 millimeters away from the teeth.
14. Trim the left buccal surface so it is 70° from the model distal surface and about 4 millimeters away from the teeth.
15. Trim the right front surface so it is 30° from the model distal surface and comes to a point where the center facial midline would be.
16. Trim the left front surface so it is 30° from the model distal surface and comes to a point where the center facial midline would be.
17. Trim the right distobuccal corner at 120° from the model distal surface so it is 13 millimeters in width.
18. Trim the left distobuccal corner at 120° from the model distal surface so it is 13 millimeters in width.
19. Pick off any big bubbles from the teeth that might interfere with the occlusion.
20. Trim any excess from the base of the lower model.
21. Insert the occlusal guide into the trimer.

22. Occlude the models together using the wax bite. Double check overjet with the notes on the lab slip.

23. Measure 70 millimeters for the total height of the occluded models and make three pencil marks on the base of the mandibular model at this height.

24. Holding the models in occlusion using the “lip” on lower model, hold the top of the upper model against the occlusal guide and trim the bottom of the lower model so it is parallel with the top of the upper model when they are in occlusion.

25. Trim the mandibular model base until it is one flat surface, until the thickness of the mandibular model base is 13 millimeters from the vestibule to the bottom surface; the overall height of the mandibular model is 35 millimeters in the front; and the height of both models occluded together is 70 millimeters.

26. Remove the occlusal guide.

27. Trim the distal surface of the mandibular model while the models are in occlusion and resting on the bottom surface of the mandibular model.

28. Use the distal surface of the maxillary model as the guide of how far to trim in toward the mandibular molars. Trim until both the maxillary and mandibular distal surfaces are being trimmed at the same time.

29. Insert the angle guide into the trimer.

30. Measure 4 millimeters out from the facial surfaces of the teeth of the mandibular model.

31. Trim the right buccal surface so it is 65° to the distal surface of the mandibular model and 4 millimeters from the facial tooth surfaces.

32. Trim the left buccal surface so it is 65° to the distal surface of the mandibular model and 4 millimeters from the facial tooth surfaces.

33. Trim the front of the model base rounding the curve from cuspid to cuspid keeping the surface 4 millimeters from the facial surfaces of the teeth.

34. Trim the right distobuccal surface at 120° to the distal surface so it is 13 millimeters wide.

35. Trim the left distobuccal surface at 120° to the distal surface so it is 13 millimeters wide.

36. Scrub the models with a toothbrush.

37. Rinse the trimer before the plaster dries.

38. Using a sharp lab knife trim all sharp edges but maintain the natural anatomy.

39. Pick bubbles and fill in minor voids.

40. Smooth all edges with fine sand paper.

41. Smooth the trimmed flat surfaces with a finishing stone.

42. Rinse and scrub both models with a toothbrush.

43. Dry for 24 hours.

44. Label.

45. Soak in soap solution.

46. Polish with a soft cloth.