Multi-unit abutment open tray technique using the direct pick-up coping
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Use this technique to make an impression of Multi-unit abutments utilizing an open tray, direct pick-up method* for fabrication of a working model at the dental laboratory. This procedure creates a model that represents the exact position of the Multi-unit abutments and the soft tissue profile.

* The direct pick-up impression may be made with a modified stock impression tray or a custom impression tray. Modify a stock impression tray by making holes in the occlusal surface of the tray in the same positions as the implants.

Please see custom impression tray fabrication module for further instruction.

Component options

- Multi-unit direct pick-up copings
- .050" (1.25mm) hex driver
- Multi-unit hex adapter
- torque wrench
- Multi-unit abutment replicas
- Multi-unit protection analogs

1 Remove the cover caps or healing abutments

Option A - The patient presents with a provisional restoration in place.
Remove the provisional restoration with an .050" (1.25mm) hex driver. Confirm that the abutment prosthetic platform is free of any debris or soft tissue.

Option B - The patient presents with Multi-unit abutments and cover caps.
Remove the Multi-unit abutment cover caps with an .050" (1.25mm) hex driver. Confirm that the abutment prosthetic platform is free of any debris or soft tissue.

Option C - The patient presents with healing abutments.
Refer to Multi-unit abutment hybrid or fixed-detachable screw-retained restoration or Multi-unit abutment bar overdenture modules. After the abutments are seated, proceed with the steps in this technique.

Helpful Hint:
When making impressions of multiple units, remove the cover caps and place the impression copings working from the posterior to the anterior.

2 Tighten the Multi-unit abutments

Tighten the Multi-unit abutments or abutment screws (for angled Multi-unit abutments) to 30 Ncm using a calibrated torque wrench and the 4mm square Multi-unit hex adapter (straight Multi-unit abutments) or an .050" (1.25mm) hex driver (angled Multi-unit abutments).
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3 Seat the direct pick-up copings
Place the Multi-unit direct pick-up copings onto the Multi-unit abutments using the long pick-up coping screw. Hand tighten.

4 Make a full-arch impression
Try in the custom impression tray or modified stock tray to verify the coping screws protrude through without interference.
Syringe a medium or heavy body elastomeric impression material around the coping bodies, leaving the screws exposed. Load the tray with impression material and make the impression.
Before the material sets, use your finger to wipe the impression material from the top of the screws so they are exposed for access.

5 Remove the coping screw & impression
After the impression material has set, remove the coping screws by hand or with an .050” (1.25mm) hex driver, and remove the tray from the mouth. Verify the impression material is completely adapted around the pick-up copings. Replace the cover caps on the Multi-unit abutments.

send to lab
• impression with copings inside
• coping screws
• Multi-unit abutment replicas
• opposing model or impression
• bite registration
• prescription with lab instructions
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6 Lab step - Attach the replicas to the copings

Attach the Multi-unit abutment replicas to the direct impression copings in the impression and insert the long, Multi-unit prosthetic screws through the access holes in the impression tray. Hand tighten the screws.

Use a soft tissue model material around the abutment replicas.

Verify proper replica seating and apply lubricant around the replicas where soft tissue needs to be added.

7 Lab step - Fabricate the stone model

Fabricate a working model in minimal expansion, high hardness die stone. Articulate using normal laboratory procedures.