THE CONSORTIUM[1]

Overseas Registration Examination
Part 2

Dental Manikin Guidance

[1] THE CONSORTIUM is made up from the following organisations:

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Introduction

A candidate is expected to be able to show competence, knowledge and familiarity in the different aspects of dentistry which are outlined in the Learning Outcomes in the GDC's document '*Preparing for Practice'* (*PfP*)[2]. The standards of conduct, performance and ethics required are described in the GDC's publication '*Standards for the Dental Team'*[3] .

PfP divides the Learning Outcomes for UK undergraduate curriculum into four Domains which reflect the full range of knowledge, skills, attitudes and behaviours that a dentist must demonstrate at a level appropriate for registration. These Domains which are integral to the ORE Part 2 are:

- The Clinical Domain
- The Professionalism Domain
- The Communication Domain
- The Management and Leadership Domain

The full range of knowledge, skills, attitudes and behaviours that are contained within these Domains of the *PfP* are examined within the four component examination[4] of the ORE Part 2.

These guidance notes are provided as additional information for candidates attending the Dental Manikin examination and are complimentary to the oral presentation given at the start of each group sitting the examination.

Dental Manikin

Scope of the Examination

The Dental Manikin examination is quite literally a test of a candidate's clinical skills under simulated clinical conditions using a manikin representing a patient with plastic teeth held in jaws mounted in a phantom head.

The dental manikin should be treated at all times as if this were a real patient and needs to be treated with due deference.

In addition to using good clinical judgement and clinical skills in the completion of the exam exercises, each candidate must demonstrate that they can also use:

- an operating position achievable with a real patient; and
- all appropriate cross-infection control procedures

Information and Instructions

1. The Dental Manikin component is more than just a mechanistic test of clinical skills. It is a simulated clinical assessment and all aspects of care will form part of this process. It includes:

Clinical Skills:

- The ability to complete the exercise to a satisfactory level of competence.
- Good clinical judgement in the justification of the choice of materials, the design of the restoration, justification of the use and number of radiographs;

Safe Practice:

[2] http://gdc-uk.org/aboutus/education/documents/preparing%20for%20practice%20(revised%202015).pdf
[3] http://gdc-uk.org/Dentalprofessionals/Standards/Documents/Standards%20for%20the%20Dental%20Team.pdf
[4] http://www.orepart2.org.uk/guidance/

- Treating the manikin as if it were a real patient;
- Demonstrating appropriate health and safety and infection control (including the use of gloves, masks and eye protection);
- Adopting an operating position which would be similar to that which is achievable with a real patient.
- All candidates are observed by the examiners during the examination to ensure that they can practice safely. Where a candidate fails to do so, they will be warned. Repeated failures will be recorded and can result in a below standard grade being awarded, see below.

2. The examination requires candidates to complete three exercises in one three-hour session.

3. The exercises for a particular diet will be selected by the Lead Internal Examiner and confirmed by the GDC-appointed External Examiner.

4. Two of the exercises will be considered major exercises due to their complexity and the time needed to complete them, the third exercise will be considered a minor exercise and is less complex and will require less time.

5. A standard set of equipment / materials will be available for each candidate (see Appendix 1). Where required additional equipment/materials will be provided.

6. Artificial teeth will be used for all exercises and candidates will be allowed an opportunity for familiarisation with the teeth and equipment before the examination begins.

7. For the root canal test, candidates will be provided with a pre-operative radiograph. The Lead Examiner will explain the arrangements for taking additional radiographs.

8. All treatment procedures must be carried out with the model mounted in the phantom head except where otherwise directed by the Lead Examiner.

9. Before the examination starts
- Candidates will receive a briefing from the Lead Examiner on the details of the exercises to be undertaken and other instructions pertinent to the examination.
- A second briefing will be given by one of the Skills Lab staff on the manikin and equipment etc.
- This will be followed by a practice session for the candidates to familiarise themselves with the equipment etc and ensure that it is working properly before the examination commences.

10. During the examination:
- **a.** Candidates must complete each exercise and have it assessed before starting the next exercise.
- **b.** Exercises can only be started after it has been discussed with the examiners.
- **c.** The examiners will state the stage at which they next wish to see the work.
- **d.** The candidate should complete this stage to their satisfaction and request the nurses to inform the examiners that they are ready for their work to be assessed.
- **e.** The candidates will be seen in the order in which they request to see the examiners.
- **f.** Discussions with the examiners may include clinical aspects of the work, related clinical procedures and the nature and use of associated dental materials. These discussions will contribute to the overall assessment of each exercise and will contribute towards the assessment of Professionalism and Communications Skills, see below.

11. Any unexpected problems or difficulties which are encountered must be discussed with the examiners before proceeding further.

12. Candidates are not permitted to use their own instruments, equipment or materials. These will be supplied by the Consortium.

13. Candidates must wear gloves, masks and eye protection. These will be provided by the Consortium, but Candidates may provide their own eye protection or loupes.

14. White coats are optional, so if you do wish to wear one please bring your own as they will not be provided by the Consortium. However the Consortium will provide plastic aprons as protection for clothing.

15. For health and safety reasons, shoes should be worn which cover the whole foot and do not have excessive heels.

Equipment

Candidates are reminded that there are inevitable variations in the equipment, instruments, artefacts, materials and displays procured for the different diets of the Dental Manikin examination, and amongst the different laboratory set up within the same diet of the examination. These variations are deemed to be within the remit of acceptable simulated clinical practice which constitutes part of the ORE. A selection of this list of equipment/instrument will be available as appropriate for individual exercises.

The Frasaco Typodont Teeth

- With the exception of the teeth used for the endodontic exercises, all teeth are made from one solid piece of plastic. However the teeth may fracture or chip if excessive force is used with hand or rotary instruments. So care should be used at all times.
- New teeth are used to populate the phantom head models for each examination. They all have marks from the manufacturing process. All teeth should be checked during the practice session and the nursing staff will replace any damaged teeth. If the nurse is unsure if a blemish is damage or not, she will advise the candidate to show the tooth to the examiners when they come round to start the examination.
- Once the examination has started, damage to any teeth (other than the practice tooth) will be considered to have been made by the candidate and marked accordingly.

Burs

- The bur stand is full and contains a wide selection of burs for fast and slow hand piece. The burs provided are the same for everyone. The choice is not infinite but the Lead Examiner uses the same selection to prepare example preparations for demonstration to your examiners.
- If a bur is not present or is blunt, or is not running true during the practice session or the actual examination, then raise a hand and tell a nurse who will replace it.

Instruments Tray

- The instrument tray is full, standardised, and contains equipment appropriate for all the exercises you are asked to perform as part of the examination. Additional instruments and materials you need for a particular exercise will be either on the work top or given out during the examination.
- If a material etc runs out please raise a hand and tell a nurse who will replace it.

On the Examination Day

Before the examination

- You will receive a briefing from the Lead Examiner about the three exercises for that day's examination together with information on any special materials which may be available or any special arrangements.
- You will also receive a briefing from one of the skills lab staff on the equipment and function of the equipment at each workstation.
- There will then be a practice session.
    - One tooth is identified with a black cross for you to practise cutting. During the practice session, please prepare this tooth **only**, as it is positioned away from any teeth that may be used during the examination.
    - The practice session is there for you to confirm: that the equipment is working properly; that water is coming from the handpieces; and that the burs are all present and running true.
    - You should also check the teeth of the phantom head to ensure that they are not damaged – they may show marks from the manufacturing process but these are readily identified as such. Once the examination has started any damage to the teeth, other than the practice tooth, will be considered as resulting from operating in an unsafe manner and marked accordingly.
    - If there are any problems please identify them to the skills lab staff who will address them before the examination starts.

At the start of the exam:

- One of the examiners who will be marking your work during the examination will come to each of you in turn to find out which exercise you wish to do first. They will then say which stage of that exercise they wish to see when it is completed. Once all candidates have been seen and checked by the examiners, the Lead Examiner will start the examination for all candidates at the same time.
- If you have any questions about the examination please be brief as the examiner needs to start the other candidates in the group.

During the examination:

- If you want to see an examiner please raise a hand and ask a nurse to add your number onto the examiners' list. They will come to in turn as quickly as they can. Please do not wave your hand at the examiners themselves, as they must visit candidates in sequence as identified by the nurse.
- When you want a material or to ask a question, again please raise a hand and ask the nurse**.**
- Please carefully check the tooth you are about to prepare for each exercise as there may not be obvious caries to be seen. If you prepare **the wrong tooth or wrong side of the tooth**, this will be noted in your Safe Practice, and will impact heavily upon your marks.

All the teeth are new and have been checked already – but please check again yourself before the examination starts.

- There are clocks in each room of the skills lab and the time will be called out every hour or so. The computer monitor at your work station also shows a digital clock which displays the time elapsed from the start of the examination.

- There are no breaks during the examination. If you want to get up and stretch please do so, but avoid disrupting your colleagues who will be working.
- A water fountain is in the skills lab should you become thirsty.

Talking with the Examiners

- The time you are with the examiners is part of the examination and is part of their assessment of you and your work.
- The examiners *will* ask you for your opinion on the quality of the work you are presenting, this is to test your understanding of what you have achieved.

Examiners remarks:

- The examiners may say such words as: *Fine, OK,* or *GOOD…* it is I hoped that your work is Fine, Good and OK. However the examiner will be merely indicating that they have completed a particular stage in their observation. Examiners will **not** be giving you feedback about the quality of your work and we regret any confusion if a comment seems misleading.

At the end of the examination

- If you complete the examination before the three hours is up you may leave. Please do collect one of our feedback forms, complete it, and the leave it in the box on the second floor.
- When The Lead Examiner calls the end of the examination please
    - Stop immediately what you are doing and put your handpiece down and put away any instruments. (Failure to stop immediately when instructed to do so will affect your result for the Professionalism domain of the examination.)
    - Please put the burs back in the bur stand
    - Then you may leave the room as quickly and quietly as possible
- The examiners will then complete their marking of any outstanding work once the room is cleared.

Time Management

All three exercises **MUST** be completed in the three hours of the examination. So do your best work but don't take excessive time on any one exercise as this may compromise the quality of the remaining exercises.

Pre-existing conditions[5] or Feeling unwell during the examination

- If you are pregnant or have special medication etc, please let the nurses know during the practice session before the exam starts.
- If you feel unwell during the examination let the nurses know immediately and they will look after you.
- You will not be given extra time at the end of the examination to compensate for time taken out of the examination for example going to the toilet, being unwell, etc

[5] See the Mitigating Circumstances document on the Consortium's website (http://www.orepart2.org.uk/policy-docs)

Possible exercises[6]

a. Amalgam:

- Prepare a Class I cavity in a molar or premolar involving the occlusal pit(s) and occlusal fissure. This cavity will be lined as necessary. This tooth or an alternate tooth may be packed with amalgam on request.
- Prepare a Class I cavity in an upper molar involving the occluso-palatal fissure. This cavity will be lined as necessary. This tooth or an alternate tooth may be packed with amalgam on request.
- Prepare a Class II cavity in an upper molar or premolar tooth involving the occlusal and either one or both proximal surfaces. This cavity will be lined as necessary. This tooth or an alternate tooth may be packed with amalgam on request.

b. Composite:

- Prepare a Class III cavity in the proximal surface of an upper anterior tooth. This cavity will be lined as necessary. Pack the indicated cavity with composite and finish it to restore the tooth's shape and contour.
- Restore a Class IV fractured incisal edge for an upper anterior tooth. Prepare the fractured tooth as required. Place a lining as necessary. Restore the tooth's shape and contour with composite. A sheet of questions to ask the patient may also need to be completed.
- Prepare a Class V cavity in the labial or palatal surface of an upper tooth. This cavity will be lined as necessary and filled with composite and finished as required.
- Restore a fractured cusp and cavity in an upper premolar or molar tooth. Prepare the tooth as necessary, place a lining where appropriate and restore and finish the contour of the tooth in composite.

c. Root Canal Therapy:

- Prepare an access cavity in the tooth provided. The tooth may be an anterior tooth, a premolar or molar tooth. Direct access to the canal(s) needs to be demonstrated with an endodontic instrument. This exercise may be combined with the placement of a rubber dam.
- Prepare an access cavity. Identify the canal to be prepared which may be in a single rooted tooth or a single canal in a multi rooted tooth. Complete the debridement of the root canal and finalise its preparation. Obturate the canal, and record a post-operative radiograph. The use and number of radiographs recorded will form part of the assessment of good clinical judgement. The access cavity may already be completed in the tooth provided.

d. Crown Preparation:

- Prepare a molar tooth to receive a full gold veneer crown. A written prescription/instructions for the laboratory technician may also need to be completed.
- Prepare either an anterior or posterior tooth to receive a metal ceramic crown. A written prescription/instructions for the laboratory technician may also need to be completed.

e. Labial Veneer:

- Prepare an upper anterior tooth to receive labial veneer. A written prescription / instructions may also need to be completed.

f. Temporary Crown:

[6] See Appendix 2 for details of the desirable and undesirable features of these exercises

- Fabricate a temporary crown for an already prepared anterior or posterior tooth.

g. Impression taking:

- Record a working impression of a tooth already prepared to receive a crown. Appropriate written instructions for the laboratory may also need to be completed.
- Record an impression of a whole arch for a study model. Appropriate written instructions for the laboratory may also need to be completed.

h. Rubber Dam:

- The rubber dam is to be applied to isolate the tooth or teeth indicated in the Instruction Sheet for the Examination. The rubber dam needs to be secure and applied atraumatically, anchoring the dam in a way that facilitates access and isolation of the tooth to be prepared. Note: This may also be included as a component in another exercise.

i. Partial Denture:

- Prepare rest seats on a phantom head model.
- Take a working impression for a removable partial denture. Appropriate written instructions for the laboratory may also need to be completed.
- Design a partial denture for the study cast or phantom head model provided and draw this on the study cast or on the odontogram to enable a technician to fabricate the required design.
- Note that these exercises may be used separately or in combination.

Operating Position

- The candidate is expected to sit upright, supported by the back rest and with the bottom pressed towards the back of the operator's stool. The height of the stool should be adjusted so that the thighs are parallel to the floor with the feet firmly placed on the floor. The neck can be flexed slightly forward to see into the mouth of the manikin.
- The manikin torso should be flat and parallel to the floor with the head similarly positioned and the occlusal plane of the upper arch lying vertical. This is to ensure that exercises in the upper arch are completed using indirect vision. The head may be turned slightly to the left or right to give better access and sight of the operating area.
- Depending upon the handedness of the candidate, the chair and operating position should be between ten-thirty and one-thirty relative to the patient so as to gain better access to the opposite side of the arch.
- For health and safety reasons, shoes should be worn which cover the whole foot and do not have excessive heels.

Hand Mirror

- Most of the exercises will be carried out on teeth in the upper arch so that the candidate can demonstrate their ability to use a mirror to aid indirect vision when completing the exercise.

Finger Rest

- It is anticipated that except under exceptional circumstances, the air rotor and slow handpiece will be held in a pencil grip close to the head of the handpiece.

- While using the air turbine, slow handpiece or sharp instruments such as chisels etc, it is expected that a finger rest will be used and that it will be in the same arch and on the same side of the arch as the tooth being prepared. A finger rest on the opposite side of the arch is not generally advised due to the lack of control over the handpiece and incorrect orientation of the bur in relation to the tooth being prepared.

- Some chisels etc may be used with a palm grip but then a finger rest must always be used. Care should be taken not to use excessive force as this may cause the plastic tooth to fracture unpredictably.

Infection Control

- It is anticipated that a candidate will use all normal infection control procedures when carrying out the tests of the manikin exercise.
- During the examination there are two occasions when normal infection control procedures may be breached. These are:

    - the lowering of the protective mask to be heard when talking to the examiners;
    - and the picking up a dropped instrument or handpiece which must be done **only with** the explicit agreement of a nurse or examiner.

Assessment

EXERCISES

Level of competence

The competencies expected of a candidate to pass the ORE has been set by the GDC to be no better and no worse than that of a UK undergraduate passing their BDS exams.

The Grading System

The grades awarded by the Examiners for each exercise will be use a four level grading system which describes the level of competence achieved by the candidate. These levels are:

- Exceeds Standard
- Meets Standard
- Below Standard
- Well Below Standard / Not Done

Definitions

Exceeds Standard

Clinical Work: fulfils all of the desirable criteria specified for that stage of the test.

Meets Standard

Clinical Work: fulfils most of the desirable criteria specified for that stage of the test. The work is imperfect but not sufficiently so to be detrimental to the health of the tooth or the patient.

Below Standard

Clinical Work: fulfils some of the desirable criteria specified for that stage of the test. The work is imperfect and sufficiently so to be detrimental to the health of the tooth or the patient. While sub-standard, the work presented might be redeemed by further intervention.

***Knowledge*:** is limited, and insufficient to be able to discuss the clinical procedures and the selection and use of some materials only in general terms.

Well Below Standard

Clinical Work: fulfils very few of the desirable criteria specified for that stage of the test. The work is so imperfect that it would be detrimental to the health of the tooth or the patient. The candidate is unaware of the poor performance and may perceive that the work is of an acceptable or a good standard.

SAFE PRACTICE

All candidates are observed by the examiners during the examination to ensure that they can practise safely. Candidates will be warned by the examiners where there are breaches of health and safety and infection control procedures or persistent use of an inappropriate operating position or where their actions would be dangerous to the patient or staff. Where these breaches of Safe Practice are repeated and persistent they will be recorded accordingly. Safe Practice will be graded using the same grades described below (Exceeds the Standard/ Meets the Standard / Below the Standard / Well Below the Standard or Not Done) as described below for the standard achieved in the individual exercises.

Definitions

Exceeds Standard

Adopts an appropriate operating position; uses a correct finger rest; and uses all appropriate infection control techniques.

Meets Standard

Occasionally adopts a poor operating position; occasionally uses an inappropriate finger rest; and an occasional lapse in the use of cross-infection control techniques.

Below Standard / Well Below Standard

Frequently adopts an inappropriate operating position; frequently uses an inappropriate finger rest and frequently uses an appropriate cross-infection control technique: such that there is a significant risk of danger to the patient and/or other members of the team. These actions continue despite repeated warnings by the examiners.

PROFESSIONALISM, COMMUNICATION SKILLS, AND MANAGEMENT AND LEADERSHIP

The full range of knowledge, skills, attitudes and behaviours that are contained within these Domains will assessed where appropriate in the DM.

Dental Manikin Overall Pass Fail

The two major exercises carry twice the weight of the minor exercise. The overall result for the three exercises is determined by aggregating the marks from each, with this weighting incorporated.

To pass the DM component of the examination a candidate must pass the Exercises **AND** Safe Practice sections of the assessments.

Appendix 1

Equipment and Materials

Candidates are reminded that there are inevitable variations in the equipment, instruments, artefacts, materials and displays procured for the different diets of the Dental Manikin examination, and amongst the different laboratory set up within the same diet of the examination. These variations are deemed to be within the remit of acceptable simulated clinical practice which constitutes part of the ORE.

Introduction

The following are the equipment and materials provided for the Dental Manikin component of the ORE Part 2. Candidates are not permitted to bring along their own instruments or burs. Where additional materials are required for a specific exercise they will be provided.

KaVo Dental Simulation Unit

KaVo Handpieces: Turbine, Contra-angle, Straight handpiece (when required)
Phantom Head Models: Frasaco AG3
Replacement Teeth: AG3- ZE

Burs Stand

High Speed
- Tungsten Carbide Burs
  - 170, 330, 331, 331L, 56, 557
- Diamonds Double Striper
  - L767C, L767VF, 170L, 260.8F, 120C, 285.5VF

Slow Handpiece / Latchgrip
- Steel Burs
  - Rose head burs size: ½, 1, 3, 5, 8
  - Flat Fissure: 1, 4
- White Stone
- Shofu Round
- Shofu Flame: FL2
- Brownie
- Flame
- Mandril for Soflex Discs

Endodontic Exercise

Gates Gliddens sizes 1 - 6
K-Flex files sizes 10 – 60 Length 30mm
Finger Spreaders sizes XF, FF, MF, F, FM, M
Gutta Percha Points sizes 15 – 40
Accessory Points Sizes XF, FF, MF, F, FM, M
Plastic Tray
Plastic Cup
Endo Locking syringe
Endo Ring
Sybron Endo Tubi Seal Extended working time
Wax pads

Instrument Tray

- Mirror Surface No 5
- Straight Probe No 6
- Thymoxin probe
- Williams Probe
- American Patterned Probe No 3
- College Tweezers
- Excavator 129/30
- Flat Plastic 156
- Enamel Hatchet No. 53 + 54
- Gingival Margin Trimmer U1/U2 + U3/U4
- Amalgam Plugger G
- Mortensons Plugger
- Hollenbach Carver
- Ball Burnisher
- Pencil
- Scalpel No 11
- Spatula
- Ruler
- Suture scissors

Equipment / materials on the bench top

- Floss
- Amalgam Carrier
- Matrix Retainers: Siqveland
- Matrix Band: Cut strips of wide Stainless steel strip; Directa Clear Matrix Strip
- Curing Light (1 between 2 candidates)
- Spectrum B3 Composite capsule
- Composite Gun
- Composite bonding agent
- Plastic Dappens pot
- Microbrush application brush
- Lab putty + Activator (1 between 2 candidates)
- Cotton Rolls
- Cotton pledgets
- Wooden wedges

Other Materials available from nursing staff

- Amalgam Disperalloy No 2 Normal set
- Dentsply Dycal Base / Catalyst
- Softlex Discs
- 3M ESPE Softlex Finishing Strips
- 3M ESPE Softlex Polishing Strips
- Rubber dam
- Toffelmire No 1
- Tofflelmire bands

Others Materials / equipment available for specific exercises

- Rubber Dam
    - Rubber dam holder
    - Rubber dam clamps, assorted

Rubber dam forceps
Wedjets Stabilising Cord

Impressions
Impression material
Plastic stock tray
Adhesive

Temporary Crown
Putty Index
Temporary crown and bridge acrylic
Acrylic finishing burs and discs

Rest Seat Preparation
Appropriate burs

A selection of this list of equipment/instrument will be available as appropriate for individual exercises.

Appendix 2.

Dental Manikin Exercise Descriptions

Introduction
The following notes are given as general indicators of the Desirable and Undesirable Features of exercises which may be used in the Dental Manikin Test. These features are deliberately written in general terms so that they can relate to any tooth where the exercise is to be completed. The exact tooth which is to be prepared or filled during any diet of the examination will be shown on the instruction sheet given out at the start of the examination. For example, a class II cavity could be an MO or a DO or an MOD and be placed in a premolar or molar tooth.

A. AMALGAM EXERCISES

CLASS I – OCCLUSAL CAVITY IN AN UPPER POSTERIOR TOOTH

Prepare a Class I cavity in an upper molar or premolar involving the occlusal fissure and mesial and distal pits. This cavity would be lined as necessary. This tooth or an alternate tooth may be packed with amalgam on request.

Desirable Features

1. Cavity Design	An occlusal cavity.
2. Approach	Occlusally using a mirror to aid vision.
3. Outline Form Position:	Smooth with well delineated cavity margin Follows the central fissure pattern and includes mesial and distal pits
4. Occlusal Cavity Depth: Width: Retention form:	 Sufficient to clear occlusal caries (~ 2mm) Sufficient to clear fissure and caries in mesial and distal pits Parallel or slightly convergent walls. Flared mesially and distally to avoid undermining marginal ridges.
5. Lining	Thin layer applied to the pulpal floor (if applied) (While a lining may not be required clinically, it may be included here to ensure that the candidate can adequately carry out the procedure.)
6. Completed Restoration	Well condensed Carved to give some occlusal anatomy

Undesirable Features

1. Outline Form	Rough and irregular
2. Occlusal cavity	
Position:	Not extending along fissure pattern and/or doesn't include the mesial or distal pits
Size:	Too large / too small for size of carious lesion shown on radiograph provided
Depth:	Too shallow so caries not reached and amalgam likely to fracture Too deep so risk of pulpal exposure
Width:	Too narrow so difficult access and difficulty in packing amalgam Too wide so undermining buccal or palatal cusp
Retention Form:	Severely overcut weakening tooth, undermining marginal ridge(s)
3. Lining	Messy: uneven thickness of material Wrong place: Lining on enamel and/or extending to the cavity margin Over extension into space for amalgam
4. Completed Restoration	Under-condensed Over-packed/under-carved Under-packed/over-carved No occlusal anatomy Fractured

CLASS I – OCCLUSO-PALATAL CAVITY IN AN UPPER MOLAR

Prepare a Class I cavity in an upper molar involving the occluso-palatal fissure and distal pit. This cavity would be lined as necessary. This tooth or an alternate tooth may be packed with amalgam on request.

Desirable Features

1. Cavity Design	An occlusal-palatal cavity.
2. Approach	Occlusally using a mirror to aid vision.
3. Outline Form	Smooth with well delineated cavity margin
4. Occluso-Palatal Cavity Position: Depth: Width: Retention form:	Follows the length of occluso-palatal fissure and includes the distal pit. Sufficient to clear caries in fissure and occlusal pit (~ 2mm) Sufficient to clear caries in fissure and occlusal pit (~1.5 mm) Parallel walls with rounded internal line angles.
5. Lining	Thin layer applied to the pulpal floor (if applied) (While a lining may not be required clinically, it may be included here to ensure that the candidate can adequately carry out the procedure.)
6. Completed Restoration	Well condensed Carved to give some occlusal anatomy

Undesirable Features

1. Outline Form	Rough and irregular
2. Occluso-Palatal cavity Position: Depth: Width: Retention Form:	Not follow the fissure pattern and/or doesn't include the occlusal pit Too shallow so caries not reached and amalgam likely to fracture Too deep so risk of pulpal exposure Too narrow so difficult access and difficulty in packing amalgam Too wide so undermining transverse ridge or cusp Overcut, weakening tooth
3. Lining	Messy: uneven thickness of material Wrong place: Lining on enamel and/or extending to the cavity margin Over extension into space for amalgam
4. Completed Restoration	Under-condensed Over-packed/under-carved Under-packed/over-carved No occlusal anatomy Fractured

CLASS II – IN AN UPPER POSTERIOR TOOTH

Prepare a Class II cavity in the tooth indicated to correspond to the caries shown on the accompanying radiograph. Place a lining as required. This tooth or an alternate tooth may be packed with amalgam on request.

Desirable Features

1. Cavity Design	A proximal box and occlusal lock.
2. Approach	Occlusally using a mirror to aid vision.
3. Outline Form	Smooth with well delineated cavity margin
4. Box Depth: Width: Size: Retention Form	Gingivally clear the contact point with the adjacent tooth by ~0.5mm. Bucco and palatally clear contact with adjacent tooth by ~0.5mm. Mesio-distally sufficient to be in dentine and remove caries Appropriate to have removed the caries indicated by radiograph Occlusally convergent walls
5. Occlusal Lock Depth: Width: Retention form:	 Sufficient to clear occlusal caries (~ 2mm) Sufficient to clear fissure and caries Parallel or slightly convergent walls Dovetail extension slight dilation only
6. Lining	Thin layer applied to the axio-pulpal wall of box (While a lining may not be required clinically, it is included here to ensure that the candidate can adequately carry out the procedure.)
7. Matrix Band	Applied tightly around the circumference of the tooth Tightly wedged in place Holder correct way up
8. Completed Restoration	Well condensed Carved to give a marginal ridge and some occlusal anatomy Tight proximal contact point - as far as models allow

Undesirable Features

1. Outline Form	Rough and irregular
2. Box	
Position:	Incorrectly positioned
	Too far to buccal / too far to palatal
Depth:	Too shallow / too deep
BL Width:	Too narrow so contacts not appropriately cleared buccally or palatally.
	Too wide so buccal and/or palatal contacts widely cleared.
	Unsupported enamel left on margin walls
MD Width	Too narrow mesio-distally so caries not removed
	Too wide with risk of pulpal exposure
Retention Form:	Divergent walls
	Excessive / Undermined cusp
3. Occlusal Lock	
Position:	Not extending along fissure pattern
Size:	Too large / too small for size of carious lesion shown on radiograph provided
Depth:	Too shallow so caries not reached and amalgam likely to fracture
	Too deep so risk of pulpal exposure
Width:	Too narrow so difficult access and difficulty in packing amalgam
	Too wide so undermining buccal or palatal cusp
Dovetail:	No retentive dovetail
	Overcut, weakening tooth, undermining marginal ridge
4. Lining	Messy: uneven thickness of material Wrong place: Lining on enamel and/or extending to the cavity margin Over extension into space for amalgam
5. Matrix Band	Loosely applied Not wedged, or incorrectly wedged Upside down / latch upside down Positioned inappropriately
6. Completed Restoration	Under-condensed Over-packed/under-carved Under-packed/over-carved No occlusal anatomy No marginal ridge Ineffective proximal contact point Fractured
7. Other	Damage to the adjacent tooth, other than minor grazing

B. COMPOSITE EXERCISES

CLASS III – IN AN UPPER ANTERIOR TOOTH

Prepare a Class III cavity in the tooth indicated to correspond to the caries shown on the accompanying radiograph or photograph. Place a lining as required. Pack the indicated cavity with composite and finish it to restore the tooth's shape and contour as requested.

Desirable Features

1. Approach	Palatal approach using a mirror to assist vision
2. Outline form	Rectangular with well rounded corners Smooth with well delineated 90° cavo-surface angle No or light chamfer
3. Cavity Size: Position: Depth B – P: Width I – G:	Appropriate to size of caries indicated in the radiograph provided At level of contact point Sufficient to clear contact point by width of probe tip (~0.5mm) Sufficient to remove dentinal caries and carious enamel indicated in the radiograph provided
4. Lining	A thin layer applied to pulpal wall (if applied)
5. Completed Restoration	Smooth surface finish Contour smooth and continuous with the enamel.

Undesirable Features

1. Outline form	Rough Excessive bevel
2. Cavity Position: Depth B – P: Width I – G:	'Carious dentine' left or too close to pulp Too far to the incisal or towards the gingiva Too shallow / too deep Too wide / not wide enough
3. Lining	Messy: uneven thickness of material Wrong place: Lining on enamel and/or extending to the cavity margin
4. Completed Restoration	Rough Does not restore tooth contours or contact point Voids /defects at margin Flash of excess - over-packed and inadequately finished. Improperly cured (soft)
5. Other	Damage to the adjacent tooth other than minor grazing

CLASS IV – FOR AN UPPER ANTERIOR TOOTH

Restore a Class IV fractured incisal edge of an upper anterior tooth. Prepare the fractured tooth as required. Place a lining as necessary. Restore the tooth's shape and contour with composite. A sheet of questions to ask the patient may also need to be completed.

Desirable Features

1. Action Form	Consent accurately obtained Medical history checked Accident details noted
2. Tooth Preparation	Smoothed the rough fractured enamel margins The contour of the margin should be smooth and curved. 0.5 – 1 mm chamfer or bevel (and not a shoulder) around fracture site
3. Lining	A thin layer applied to pulpal horn (if applied)
4. Completed Restoration	Smooth surface finish Contour smooth and continuous with the enamel. Accurately restores the shape and contour of the tooth

Undesirable Features

1. Action form	Consent not or incorrectly obtained Medical history not checked Accident details not elicited
2. Tooth preparation	No tooth preparation or tooth still left rough and irregular Tooth margin stepped Margin has excessive bevel or is a shoulder
3. Lining	Messy: uneven thickness of material Wrong place: Lining on enamel and/or extending to the cavity margin
4. Completed Restoration	Rough Does not restore tooth contours or contact point Voids /defects at margin Flash of excess - over-packed and inadequately finished. Improperly cured (soft)

CLASS V – BUCCAL OR PALATAL IN AN UPPER TOOTH

Prepare a Class V cavity in the tooth indicated to correspond to the caries shown on the buccal/lingual surface of the tooth. Place a lining as required. You may be asked to pack this or another tooth with composite and finish appropriately. Note: The dimensions given below relate to the preparation of a buccal class V cavity in a upper canine to ensure the complete removal of the caries around the cervical margin while not damaging the 'gingiva' of the phantom head model.

Desirable Features

1. Approach	Buccal or palatal approach using a mirror to assist vision.
2. Outline form	Smile shaped with well rounded corners following the gingival contour Smooth with well delineated 90° cavo-surface angle No or light chamfer
3. Cavity Size: Position: Width M – D: Height I – G: Depth:	Appropriate to size of caries indicated by accompanying radiograph Gingival margin ~1mm above gingiva Sufficient to clear caries ~2.5 – 3.0mm Sufficient to remove dentinal caries ~ 1.5mm Sufficient to remove dentinal caries: 0.75mm gingivally, 1.25mm incisally
4. Lining	A thin layer applied to pulpal wall (if applied)
5. Completed Restoration	Smooth surface finish Contour smooth and continuous with the enamel.

Undesirable Features

1. Outline form	Rough and irregular Excessive bevel
2. Cavity Position: Width M – D: Height I – G:	'Carious dentine' left or too close to pulp Too far to the incisal or towards the gingiva Too shallow / too deep Too wide / not wide enough
3. Lining	Messy: uneven thickness of material Wrong place: Lining on enamel and/or extending to the cavity margin
4. Completed Restoration	Rough Voids /defects at margin Flash of excess - over-packed and inadequately finished. Improperly cured (soft)
5. Other	Damage to the gingiva

COMPOSITE BUILD – UP OF A FRACTURED CUSP ON A POSTERIOR TOOTH

Restore a fractured cusp and cavity in a upper premolar or molar. Prepare the tooth as necessary, place a lining where appropriate and restore and finish the contour of the tooth in composite.

Desirable Features

1. Tooth Preparation	Smoothed the rough fractured enamel margins A bevel on the enamel margin Remove unsupported tooth enamel
2. Lining	A thin layer applied to pulpal floor if appropriate
3. Completed Restoration	Incremental build up of bulk of tooth. Smooth surface finish Contour smooth and continuous with the enamel. Accurately restores the shape and contour of the tooth Provides a tight contact point with adjacent tooth

Undesirable Features

1. Tooth preparation	No tooth preparation or tooth still left rough and irregular Tooth margin stepped Tooth has been over prepared Margin has excessive bevel or shoulder
2. Lining	Messy: uneven thickness of material Wrong place: Lining on enamel and/or extending to the cavity margin
3. Completed Restoration	Rough Does not restore tooth contours or contact point Voids /defects at margin Flash of excess - over-packed and inadequately finished. Improperly cured (soft)

C. ROOT CANAL THERAPY

ACCESS CAVITY PREPARATION

Prepare an access cavity in the tooth provided. The tooth may be an anterior tooth, a premolar or molar. Direct access to the canal(s) needs to be demonstrated with an endodontic instrument. This exercise may be combined with another exercise e.g. the placement of a rubber dam.

Desirable Features

1. Access Cavity	Adequate size, appropriate shape and position of access cavity which will depend on the tooth selected for the exercise. Direct line access to canal(s) Outline of the pulp chamber appropriately shaped / removed

Undesirable Features

1. Access Cavity	Too small for adequate access Too large and destructive of tooth tissue Wrong position on tooth surface Wrong shape for canal/pulp chamber position Pulp chamber roof not completely removed

RCT – On a Single Rooted Tooth Or a Single Canal In a Multi-Rooted Tooth.

Prepare an access cavity. Identify the canal to be prepared which may be in a single rooted tooth or a single canal in a multi rooted tooth. Complete the debridement of the root canal and finalise its preparation. Obturate the canal, and record a post operative radiograph. The use and number of radiographs recorded will for part of the assessment of good clinical judgement. Note: the access cavity may already be completed in the tooth provided

Desirable Features

1. Access Cavity	Adequate size, appropriate shape, appropriate position which will depend on the tooth selected for the exercise. To gain direct line access to canal and remove roof of pulp chamber
2. Canal Filling	
Apical Position:	Canal to be filled to 0.5 – 1.0mm of the radiographic apex
MAF Size:	Consistent with canal size (i.e. three sizes larger than the first file that binds).
Canal Shape:	Smooth conical preparation tapering towards the apex Follows the curvature of the tooth. Adequate coronal flare to remove infected dentine and facilitate obturation
Condensation:	Radiograph showing dense gutta-percha filling against the canal walls over the length of the root Without voids

Undesirable Features

1. Access Cavity	Too small for adequate access Too large and destructive of tooth tissue Wrong position on tooth surface Wrong shape for canal/pulp chamber position Pulp chamber roof not completely removed
2. Canal Filling	
Apical Position	GP or sealant beyond the apex GP well short of the apex
MAP:	Inappropriate size of GP used
Canal Shape:	Insufficient or too great an apical taper Insufficient or too great a coronal flare Step or marked junction at join between coronal flare and apical taper
Condensation:	Too few GP points used Inadequately condensed with voids present Mismatch in size of spreader and or accessory sized GP points
3. Other	Too many / unjustified radiographs taken Inaccurate interpretation of radiographs Inadequate use of irrigants and recapitulation

D. CROWN PREPARATION EXERCISES

FULL GOLD CROWN PREPARATION

Prepare the tooth indicated to receive a gold veneer crown. The laboratory instructions may also need to be completed.

Desirable Features

1. Index Preparation	Sectioned once in the middle of the tooth
2. Occlusal Reduction	1mm even reduction over whole of occlusal surface 1.5mm functional cusp bevel
3. Axial Reduction	6° - 20° taper
4. Margin	0.5 – 0.75 mm chamfer Continuous even reduction around the tooth ~ 1mm above gingival margin Contact cleared with adjacent teeth by ~ 0.5mm
5. Surface Finish	Smooth with no sharp angles
6. Path of Insertion	Perpendicular to the occlusal plane

Undesirable Features

1. Index Preparation	Not used Reveals inappropriate reduction
2. Occlusal Reduction	Too great / too little reduction occlusally No functional cusp bevel
3. Axial Reduction	Too great / too little axial reduction Too great / too little taper Undercut regions present
4. Margin	Too wide or shoulder or inverted Too narrow or absent so not continuous Too far above / below gingival margin Not cleared contact with adjacent tooth
5. Surface Finish	Rough and pitted
6. Path of Insertion	In conflict with tooth structure of adjacent teeth Seating groove incorrectly placed / angled
7. Other	Damage to adjacent teeth other than minor grazing

METAL CERAMIC CROWN PREPARATION

Prepare the tooth indicated to receive a metal ceramic crown. The tooth should be prepared for:

- a metal margin all round the tooth;
- for a molar tooth for the porcelain to cover the buccal surface, and extend over the buccal cusp to just short of the central fossa;
- for an anterior tooth for the porcelain to cover the labial, incisal, and proximal surfaces of the tooth up to contact points.

The laboratory instructions may also need to be completed.

Desirable Features

1. Index Preparation	Sectioned once in the middle of the tooth
2. Occlusal Reduction	2.0 mm over occlusal surface / incisally for metal and porcelain Otherwise 0.75 – 1 mm
3. Axial Reduction	Sufficient to give 6° - 20° taper 1.2 mm labially and 0.5 – 1.0 mm lingually
4. Margin	Continuous around the tooth 0.5 – 0.75 mm chamfer palatally and extending to just buccal to the contact point ~1.2 mm labial shoulder 1mm above gingival margin Contact cleared with adjacent teeth by ~ 0.5mm
5. Surface Finish	Smooth with no sharp angles
6. Path of Insertion	Perpendicular to the occlusal plane Does not conflict with adjacent teeth

Undesirable Features

1. Index Preparation	Not used Reveals inappropriate reduction
2. Occlusal Reduction	Too great / too little reduction occlusally No functional cusp bevel
3. Axial Reduction	Too great / too little axial reduction Too great / too little taper Undercut regions present
4. Margin	Too wide or shoulder or inverted Too narrow or absent so not continuous Too far above / below gingival margin Not cleared contact with adjacent tooth
5. Surface Finish	Rough and pitted
6. Path of Insertion	In conflict with tooth structure of adjacent teeth Seating groove incorrectly placed / angled
7. Other	Damage to adjacent teeth other than minor grazing

E. LABIAL VENEER

LABIAL VENEER PREPARATION – UPPER ANTERIOR TOOTH

Prepare the tooth indicated to receive indirect veneer in ceramic or composite. The tooth and the material will be shown in the accompanying instructions during the examination. The laboratory instructions may also need to be completed.

Desirable Features

1. Index Preparation	Sectioned once in the middle of the tooth
2. Incisal Reduction	1.5 mm incisally
3. Axial Reduction	0.5 – 0.7 mm labially
4. Margin	0.5 mm labial shoulder / chamfer At or 0.5mm below gingival margin – but for the examination ~ 1mm above the gingival margin Contact with adjacent teeth NOT to be cleared
5. Surface Finish	Smooth with no sharp angles

Undesirable Features

1. Index Preparation	Not used Reveals inappropriate reduction
2. Incisal Reduction	Too great / too little reduction incisally
3. Labial Reduction	Too great / too little axial reduction
4. Margin	Too wide or inverted Too narrow or absent so not continuous Too far above / below gingival margin Contact excessively cleared with adjacent teeth
5. Surface Finish	Rough and pitted
6. Path of Insertion	In conflict with tooth structure of adjacent teeth
7. Other	Damage to adjacent teeth other than minor grazing

F. Temporary Crown Exercise

TEMPORARY CROWN PREPARATION ON A PREPARED TOOTH

Using the impression provided prepare a temporary crown for the pre-prepared tooth shown on the Instruction Sheet for the Examination.

Desirable Features:

Fitting surface	Fit accurately to the prepared tooth
Occlusal Surface	Follow the contours of the existing tooth Match the opposing tooth's contacts
Marginal Fit	Fit accurately to the prepared crown margin without a gap.
Surface finish	Smooth contoured Smooth even surface finish

Undesirable Features

Fitting surface	Not seating fully home. Adaptation Loose and poorly adapted to the tooth structure Too tight to fit to the prepared tooth
Occlusal Surface	Doesn't match to contours of existing tooth High spots / increase OVD No occlusal contact / in infra-occlusion
Marginal Fit	Poorly adapted to crown margin – voids around periphery Excess material causing temporary crown not to seat accurately Excessive width/ depth overlapping margin onto gingiva
Surface finish	Rough and pitted

G. IMPRESSION EXERCISES

IMPRESSION TAKING - FULL ARCH

A stone cast or phantom head model will be provided. Record an impression of this model for 1) a study cast or 2) a working cast for an RPD as indicated. Trays and the materials will be provided. The laboratory instructions may also need to be completed.

Desirable Features

1. Tray Selection	Appropriate size - covers of all teeth Adequate extension into buccal sulcus and lingual sulcus
2. Impression	
Amount of material	Fills tray appropriately
Adhesive	Adherent to tray
Mixing	Completely mixed without streaks or large air bubbles
Thickness	3-5 mm thick
3. Extension	
Buccal sulcus	Full depth of sulcus recorded with only minor air blows
Lingual sulcus	Full depth of sulcus recorded with only minor air blows
Distal Extension	Last standing tooth in arch adequately supported
4. Teeth	
Buccal surfaces	All teeth recorded with only minor air blows
Lingual surfaces	All teeth recorded with only minor air blows
Occlusal surfaces	All teeth recorded with only minor air blows
Proximal to saddle	All teeth recorded with only minor air blows
5. Gingival Sulcus	Completely recorded without tears or significant air blows.
6. Edentulous saddles	
Extension	Buccal and lingual completely recorded
Mucosa	Adequate surface detail

Undesirable Features

1. Tray Selection	Too large / too small a tray selected Under / over extension into buccal sulcus Under / over extension into lingual sulcus
2. Impression	
Amount of material	Tray overloaded / Insufficiently loaded
Adhesive	Impression material not adherent to tray
Mixing	Incompletely mixed - with streaks Numerous small bubbles of air in impression
Thickness	Thickness Too thick / too thin – tray showing through
3. Extension	
Buccal sulcus	Under / overextension of impression into sulcus

Lingual sulcus Distal Extension	Large air blow on sulcus border Under / overextension of impression into sulcus Large air blow on sulcus border Last standing tooth only partially recorded Last standing tooth unsupported
4. Teeth Buccal surfaces Lingual surfaces Occlusal surfaces Proximal to saddle	 Partially recorded with major air blows Partially recorded with major air blows Partially recorded with major air blows Partially recorded with major air blows
5. Gingival Sulcus	Partially recorded with major air blows or significant drag(s)
6. Edentulous saddles Extension Mucosa	 Gross Under / over extension of impression material into sulci No surface detail

IMPRESSION TAKING – DEFINITIVE CROWN

Record a working impression of a tooth already prepared to receive a crown. A sectional tray and materials will be provided. The laboratory instructions may also need to be completed.

Desirable Features

Impression	
Amount of material	Fills tray appropriately
Adhesive	Adherent to tray
Mixing	Completely mixed without streaks or large air bubbles
Thickness	3-5 mm thick
Wash	Complete mixing of wash and rest of impression
Crown	
Tooth Surfaces	Recorded with only minor air blows
Margin	Recorded with no air blows
Gingival Crevice	Recorded with only minor tear or air blows
Adjacent Teeth	
Tooth Surfaces	Recorded with only minor air blows

Undesirable Features

Impression	
Amount of material	Too much / too little material
Adhesive	No adhesive used / Not adherent to tray
Mixing	Inadequately mixed with streaks / Numerous air bubbles
Thickness	Too thick / Too thin with tray showing through
Wash	Wash not confluent with rest of impression / Join stepped
Crown	
Tooth Surfaces	Partly recorded with air blows, drags, folds or tears
Margin	Partly recorded / Air blows on margin
Gingival Crevice	Recorded with major tear or air blows
Adjacent Teeth	
Tooth Surfaces	Mostly/partly recorded Recorded with major air blows or tears or folds

H. RUBBER DAM EXERCISE

RUBBER DAM PLACEMENT

The rubber dam is to be applied to isolate the tooth or teeth indicated in the Instruction Sheet for the Examination. The rubber dam needs to be secure and applied atraumatically anchoring the dam in a way that facilitates access and isolation of the tooth to be prepared. Note: This may also be included as a component in another exercise.

Desirable Features:

Teeth Isolated	At least one tooth each side of the tooth to be prepared
Isolation	No gaps or tears at gingival margin Margin inverted around all teeth
Frame	Correctly orientated Evenly vertically positioned over mouth Evenly laterally positioned
Anchorage:	Appropriate teeth should be identified for secure anchorage of the rubber dam. Wedges, floss ligatures, Wedjet or clamps should be applied ensuring an atraumatic and appropriately orientated clamp or ancillary device.

Undesirable Features:

Teeth Isolated:	Only isolated tooth to be prepared Insufficient teeth isolated to get adequate access Whole arch / excessive number of teeth isolated.
Isolation:	Gaps or tears at gingival margin Margin not inverted around even around tooth to be prepared
Frame:	Frame upside down Too high covering nose or eyes / too low not covering upper lip Too far to right or left leaving gap for ‘mouth’
Anchorage:	The dam has no anchorage or clamp(s) have been applied in such a manner as to traumatize the gingival tissues. An inappropriate amount of anchorage has been used that hinders access to the tooth for restoration

I. PARTIAL DENTURE EXERCISES

REST SEAT PREPARATION

Prepare rests seats necessary for the construction of a chrome cobalt partial denture in the teeth described in the Instruction Sheet. Note this exercise may be included as part of another exercise.

Desirable Features

1. Outline shape	Triangular / Spoon-shaped Smooth outline
2. Position	On the marginal ridge Mid-way between buccal and lingual
3. Size	~ 1/3 mesio-distal width of the tooth ~ 1/3 bucco-lingual width of the tooth
4. Depth	0.75 – 1.0 mm
5. Finish	Smooth with no sharp angles

Undesirable Features

1. Outline shape	Rough and irregular Square
2. Size M – D B – L	Too large / too small Too wide / too narrow Too wide / too narrow
3. Position	Too far to the buccal / lingual
4. Depth	Too deep > 1.2mm / too shallow <0.75mm
5. Finish	Rough / sharp internal line angles

PARTIAL DENTURE DESIGN DRAWING

The design for a partial denture is provided in writing for the study cast provided. Draw this design for the cast chrome framework on the study cast or on the odontogram as required for a technician to fabricate.

Desirable Features

General	Only those components noted in the instruction sheet should be included in the design All components joined together to represent a single unit for casting A smooth continuous outline should be used to draw each component showing its shape and position.
Saddles:	Drawn to show which missing teeth are to be replaced. A mesh is preferred to retain the acrylic of saddle and should be located on the crest of the ridge. A tissue stop is required with a free end saddle.
Support: Rests Position	Correct number, size and shape Correctly drawn on tooth or odontogram
Retention: Type Clasp Position Clasp Tip Reciprocation	Correct type of clasp drawn Correctly drawn on tooth or odontogram Positioned where there is appropriate undercut for that type of undercut Correctly drawn and positioned on tooth.
Connectors: Major: Minor:	Drawn to join the saddle areas together. It should be positioned appropriately and have an appropriate correct width and shape to ensure sufficient strength for its role. Drawn to connect the other components of the RPD to the major connector. They should be positioned appropriately and have an appropriate correct width and shape to ensure sufficient strength for its role.

Undesirable Features

General	Some components omitted or extra ones included Components not joined to rest of the design Incomplete outline / inaccurate draw of shape and or position.
Saddles:	Omitted or inaccurately placed.
Support: Rests Position	No or incorrect number, size and or shape Incorrectly positioned on tooth or odontogram
Retention: Type Clasp Position Clasp Tip Reciprocation	No or incorrect type of clasp drawn Incorrect position drawn on tooth or odontogram Incorrectly positioned for undercut No or incorrect level of reciprocation.

Connectors:	Major:	Omitted or incorrect size, shape or position.
	Minor:	Omitted or incorrect size, shape or position.

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