Model Answers

Domain	Forestry > Non Commercial Forestry Skill				
Unit	6917	V9	Demonstrate basic chainsaw operation	Level 2	Credits 12

Entry information

There are no pre-requisite requirements for this unit.

Assessment instructions

You will need to be able to show you can:

- Demonstrate knowledge of the rules for chainsaw use.
- Disassemble and reassemble a chainsaw, and identify and explain the main function of components.
- Demonstrate knowledge of factors that influence the operation of a chainsaw.
- Prepare to operate a chainsaw.
- Start and test a chainsaw.
- Use a chainsaw to make cuts.

Important information

- Carefully read through the rest of this Assessment so you know exactly what is expected.
- All evidence you provide for this assessment must be your own work.
- Clearly name and label all attached evidence.

What you need to do

Question Set 1 – Chainsaw rules
Question Set 2 – Controlling risks
Question Set 3 – Safety features and components
Question Set 4 – Chain maintenance
Question Set 5 – Using your chainsaw
Observation Checklist Be observed operating a chainsaw. You will need to: • Disassemble and re-assemble a chainsaw. • Prepare to operate a chainsaw and do pre-start checks. • Start and test a chainsaw and make sure it is operating safely. • Plan and carry out up cuts and down cuts. Plan and carry out cuts with compression wood and tension wood.
Worksite Verification A worksite verifier must confirm your skills, knowledge and/or work.

You can also attach additional evidence which shows you have the required skills and knowledge, e.g. photos, worksite documents, checklists, work samples, videos.

Unit standard information

Explanatory notes

- This unit standard is intended for chainsaw users in industries other than commercial forestry. Chainsaw users within a commercial forestry operation should consider Unit 23411, *Operate a chainsaw and carry out basic chainsaw maintenance in a commercial forestry situation*.

Definitions

- *Accepted industry practice* – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.
- *PPE* – personal protective equipment as required for the task in accordance with accepted industry practice and worksite procedures. This may include but is not limited to high-viz, protective clothing, gloves, face and eye protection, safety helmet, approved footwear, chaps, hearing protection, and safety devices.
- *Worksite procedures* - refer to documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

References

- WorkSafe NZ, *A Guide to Safety with Chainsaws* (Wellington, 2011), and any subsequent amendments, available at https://worksafe.govt.nz/dmsdocument/203-a-guide-to-safety-with-chainsaws.

Unit standard evidence map

Unit 6917 v9	Demonstrate basic chainsaw operation	Level 2	Credits 12
Outcomes and Performance Criteria		**Evidence**	**No.**
Outcome 1:	Demonstrate knowledge of the rules of chainsaw use.		
1.1	The rules relating to chainsaw safety features are identified in accordance with accepted industry practice	Question Set 1	1,2
1.2	The rules for tensioning, sharpening, and setting of depth gauges of chainsaw chains are described in accordance with accepted industry practice.	Question Set 1	5,6
1.3	The rules relating to the transport and use of chainsaw fuel are described in accordance with accepted industry practice.	Question Set 1	13,14
1.4	The rules relating to starting chainsaws are described in accordance with accepted industry practice.	Question Set 1	4
1.5	The rules relating to the condition of a chainsaw, which would preclude its use, are described in accordance with accepted industry practice.	Question Set 1	3,8
1.6	The recommendation relating to testing the operation of the chain brake is described in accordance with accepted industry practice.	Question Set 1	7,8
1.7	The recommendation relating to the use of a chainsaw above shoulder height is described in accordance with accepted industry practice.	Question Set 1	9
1.8	The rules relating to the maintenance of a chainsaw with the motor running are described in accordance with accepted industry practice.	Question Set 1	10
1.9	The rules relating to the operation of a chainsaw on stockpiled, stacked, or heaped logs are described in accordance with accepted industry practice.	Question Set 1	11
1.10	The requirement to check the security and condition of anti-vibration mounts on a chainsaw are described in accordance with accepted industry practice.	Questions Set 1	12

Outcome 2:	Disassemble and reassemble a chainsaw, and identify and explain the main function of components.		
		Worksite verification	1, 2, 3, 4
2.1	Safety features are identified and their main function explained in accordance with accepted industry practice. Range: on/off switch, throttle lockout, chain brake, rear hand-guard, spark arrester/muffler, anti-vibration mounts, chain catcher, mitt.	Question Set 3 Observation Checklist	1 Part A Part B: 1
2.2	Chainsaw starter cover/assembly, top cover, air filter, side cover, bar and chain are removed in accordance with chainsaw manufacturer's recommendations.	Observation Checklist	Part A Part B: 2
2.3	Chainsaw components are identified and their main functions are explained in accordance with accepted industry practice. Range: starter mechanism, flywheel, top cover, air filter, carburettor, high tension lead, spark plug, cooling fins, choke, throttle control, side cover, drive sprocket, chain tension adjuster, clutch, guide bar, oil flow adjuster, depth gauge, cutter, decompression button.	Question Set 3 Observation Checklist	2 Part A Part B:3
2.4	Chainsaw is reassembled to safe working condition in accordance with chainsaw manufacturer's recommendations.	Observation Checklist	Part A Part B:4
Outcome 3:	Demonstrate knowledge of factors that influence the operation of a chainsaw.		
3.1	The risks specific to the operation of a chain saw are identified, and methods to control them are explained in accordance with accepted industry practice. Range: evidence of four risks and a control method for each is required	Question Set 2	1
3.2	Reactive forces of a chainsaw are described in accordance with accepted industry practice. Range: traction, recoil.	Question Set 5	1
3.3	Chain maintenance requirements that ensure chain operates at optimum effectiveness are identified in accordance with accepted industry practice. Range: evidence of three chain maintenance requirements is required.	Question Set 4	1

3.4	The importance of having a correctly sharpened chainsaw chain is explained in accordance with accepted industry practice. Range: cutter length, cutter angle, depth gauge height	Question Set 5	6
3.5	Cutter profiles are identified by name and compared in terms of use and cutting speed in accordance with accepted industry practice. Range: chisel, semi-chisel	Question Set 5	4
3.6	The consequences of operating a chainsaw with a poorly maintained chain are explained in terms of the main effect on cutting, maintenance, operator health and operator safety in accordance with accepted industry practice.	Question Set 4	2
3.7	Kickback and two causes of kickback while operating a chainsaw are explained in accordance with accepted industry practice.	Question Set 5	1,2
3.8	Ways to control kickback through correct chainsaw use are explained in accordance with accepted industry practice. Range: grip, left thumb, body position, bar nose location, re-entering cuts, reach.	Question Set 5	3
3.9	The terms tension wood and compression wood are defined in accordance with accepted industry practice.	Question Set 5	5
Outcome 4: Prepare to operate a chainsaw.			
		Worksite verification	1, 2, 3, 4
4.1	PPE prescribed by accepted industry practice is selected and adjusted for use. Range: leg, head, foot, hearing and eye protection; high-visibility clothing (as required).	Observation Checklist	Part A Part B:6,7
4.2	First aid requirements are in accordance with accepted industry practice. Range: availability of first aid kit, operator wound dressings.	Observation Checklist	Part A Part B:8
4.3	The chainsaw is refuelled in accordance with accepted industry practice.	Observation Checklist	Part A Part B:9

4.4	Pre-start checks are carried out to ensure effective and safe operation of the chainsaw in accordance with accepted industry practice. Range: fuel and oil, cutting unit, security of external fittings, condition of safety features.	Observation Checklist	Part A Part B:10
4.5	The motor size and bar length meet the requirements for the work to be undertaken in accordance with accepted industry practice.	Observation Checklist	Part A Part B:11
4.6	The safe method of carrying a chainsaw is demonstrated in accordance with accepted industry practice. Range: left side of body, bar pointing to rear, saw able to be thrown clear in a fall.	Observation Checklist	Part A Part B:12
4.7	Basic sharpening technique is demonstrated in accordance with accepted industry practice.	Observation Checklist	Part A Part B:13
Outcome 5:	Start and test a chainsaw.		
		Worksite verification	1, 2, 3, 4
5.1	Starting location is checked for safety in accordance with accepted industry practice.	Observation Checklist	Part A Part B:15
5.2	Approved starting methods are used in accordance with the manufacturer's recommendations and accepted industry practice.	Observation Checklist	Part A Part B:16
5.3	Chainsaw is held in accordance with accepted industry practice and reference text. Range: left hand on front handle, right hand on rear handle, fingers and thumbs encircling the handles.	Observation Checklist	Part A Part B:17
5.4	Chainsaw is checked for operating condition in accordance with accepted industry practice. Range: idles evenly, idles without chain movement, chain lubrication system is working, chain brake is tested.	Observation Checklist	Part A Part B:18

Outcome 6: Use a chainsaw to make cuts.			
		Worksite verification	1, 2, 3, 4
6.1	Material to be cut is stabilised or likely movement anticipated and body position adjusted accordingly in accordance with accepted industry practice.	Observation Checklist	Part A Part B:20
6.2	Footing is stable and working position is balanced in accordance with accepted industry practice. Range: not overreaching, held close to the body, out of kickback zone, braced against reactive forces, standing in safe position.	Observation Checklist	Part A Part B:21
6.3	Basic cuts are planned and carried out in accordance with accepted industry practice. Range: cuts – five each of up cuts, down cuts.	Observation Checklist	Part A Part B:22
6.4	Compression wood and tension wood are identified and cuts are planned and carried out in accordance with accepted industry practice. Range: cuts – **two** cuts with compression wood and **two** cuts with tension wood.	Observation Checklist	Part A Part B:22
6.5	Chainsaw is stopped after cutting is completed and placed in a safe position to ensure it is not a hazard in accordance with accepted industry practice	Observation Checklist	Part A Part B:24
6.6	Chain is checked during operation for sharpness, tension and lubrication in accordance with accepted industry practice.	Observation Checklist	Part A Part B:23

Question Set 1 – Chainsaw rules

These questions are about rules relating to chainsaws.

Use your own words. Your assessor may ask you more questions to check your understanding.

Judgement statement

☐ Answers are in accordance with accepted industry practice.

1. What are the **nine** safety features every chainsaw must have fitted? ☑

Assessor

This question supports PC 1.1.

Judgement statement

☐ The candidate correctly describes the **nine** safety features that all chainsaws must have.

Example answers

Answers must include:

1. Safety mitt.
2. Chain brake.
3. On/off switch.
4. Chain catcher peg.
5. Rear hand guard.
6. Anti-vibration mounts.
7. Throttle lock.
8. Muffler.
9. Spark arrestor.

2. What is the main rule you must follow if any of the **nine** safety features are not working or are broken? ☑

Assessor

This question supports PC 1.1.

Judgement statement

☐ The candidate correctly identifies the rule that must be followed if any safety feature is not operating correctly.

☐ It is clear the candidate understands that the chainsaw must not be used.

Example answer

I must not use the chainsaw until the safety feature has been fixed.

3. What are **five** chainsaw faults that mean the chainsaw is unsafe to use? ☑

Assessor

This question supports PC 1.5.

Judgement statement

- ☐ The candidate correctly describes **five** chainsaw faults which mean the chainsaw must not be used.
- ☐ It is clear the candidate understands the rules relating to the condition of a chainsaw which would preclude its use.

Example answers

1. Any safety feature not working.
2. Saw chain moves when the motor is idling.
3. Saw will not idle properly.
4. The cutter bar, handles or controls are loose.
5. Any parts are damaged, missing, or not working.

4. Describe the **two** methods that may be used to safely start a chainsaw. ☑

Assessor

This question supports PC 1.4.

Judgement statement

- ☐ The candidate correctly describes the **two** approved starting methods.
- ☐ It is clear the candidate understands the rules relating to starting chainsaws.

Example answers

Answers must include:

1. Starting the saw on the ground, or 'cold' start (if not wearing spiked boots).
2. Step over method, or 'warm' start.

5. What is the main rule to follow when doing chain maintenance tasks such as sharpening and tensioning, or setting the depth gauges? ☑

Assessor

This question supports PC 1.2.

Judgement statement

- ☐ The candidate correctly describes the main rule for tensioning, sharpening, and setting of depth gauges of chainsaw chains.
- ☐ It is clear the candidate understands that manufacturer's instructions must be followed.

Example answer

Always follow the chainsaw manufacturer's instructions.

6. Why is it important to correctly carry out chain maintenance tasks (such as sharpening and tensioning, or setting the depth gauges)? ☑

Assessor

This question supports PC 1.2.

Judgement statement

- ☐ It is clear that the candidate understands the importance of the rules relating to chain maintenance.

Example answers

Answer may include, but is not limited to:

- It reduces the chance of kickback.
- It makes sure that the saw cuts efficiently.
- Using the chainsaw will put less physical strain on the operator.

7. When should the chain brake be tested? ☑

Assessor

This question supports PC 1.6.

Judgement statement

- ☐ It is clear that the candidate understands the rule relating to the recommendation relating to testing the operation of the chain brake.

Example answer

At least once every work period.

8. If the chain brake is not working what action should be taken? ☑

Assessor

This question supports PC 1.5 and 1.6.

Judgement statement

☐ It is clear that the candidate understands the rules relating to chainsaw conditions which would preclude its use and the recommendation relating to testing the operation of the chain brake.

Example answer

The chainsaw should not be used until the chain brake is repaired.

9. The chainsaw should not be raised above which part of your body? (unless you are doing pruning in a forestry operation) ☑

Assessor

This question supports PC 1.7.

Judgement statement

☐ It is clear that the candidate understands the rule relating to the use of a chainsaw above shoulder height.

Example answer

The shoulder.

10. What maintenance can be done on a chainsaw when the motor is running? ☑

Assessor

This question supports PC 1.8.

Judgement statement

☐ It is clear that the candidate understands the rule relating to the maintenance of a chainsaw with the motor running.

Example answer

Answer must include:

None, unless adjusting the carburettor.

11. Why must you not operate a chainsaw while standing on stacked, stockpiled or heaped logs? ☑

Assessor

This question supports PC 1.9.

Judgement statement

☐ It is clear that the candidate understands the rule relating to the operation of a chainsaw on stockpiled, stacked or heaped logs.

Example answer

Because you need stable footing to maintain control of the chainsaw.

12. Why is it important to check and maintain anti-vibration mounts every week? ☑

Assessor

This question supports PC 1.10.

Judgement statement

☐ It is clear that the candidate understands the rule relating to the requirement to check the security and condition of anti-vibration mounts.

Example answer

To stop vibrations going up the hand and arm of the user, causing white finger.

13. What are the **three** rules relating to the compartment that holds the fuel containers in a passenger vehicle? ☑

Assessor

This question supports PC 1.3.

Judgement statement

☐ The candidate correctly describes **three** rules relating to the compartment transporting chainsaw fuel in a passenger vehicle.

☐ It is clear the candidate understands the rules relating to the transportation of flammable liquids in a passenger vehicle.

Example answers

Answers must include:

1. It must be separate from the passenger compartment.
2. It must be accessible only from the exterior.
3. It must be vented to the exterior.

14. What is **one** more rule that should be followed when transporting fuel in any vehicle? ☑

Assessor

This question supports PC 1.3.

Judgement statement

☐ The candidate correctly describes **one** additional rule relating to the transport of flammable liquids in vehicles.

Example answers

- Fuel containers should be clearly labelled.
- The vehicle must carry a fire extinguisher.

Assessor – record key points from candidate's verbal answers as accurately and fully as possible.		
These answers were written by:	☐ Candidate	☐ Assessor

Question Set 2 – Controlling risks

These questions are about the risks associated with chainsaw operation..

Use your own words. Your assessor may ask you more questions to check your understanding.

Judgement statement

☐ Answers are in accordance with accepted industry practice.

1. Listed below are **five** chainsaw hazards. ☑

   For each:

   - What is the risk associated with each hazard?
   - What do you do to control the risk?

Assessor

This question supports PC 3.1.

Judgement statement

☐ The candidate correctly identifies risks specific to chainsaw operation, and explains effective control methods for each.

Example answers

Hazard	Risk	How it's controlled
Moving chain	It can cause serious cuts to the feet and legs.	Make sure all covers and guards are in place. Correct PPE worn.
Exhaust heat	It can cause burns to the hands and arms.	Keep bar skin away from exhaust and muffler.
Exhaust fumes	The carbon monoxide can cause drowsiness and loss of concentration. Ignition of fumes can cause burns.	Only use chainsaws in well ventilated areas.
Noise	Exposure to loud or prolonged noise from a chainsaw can cause irreversible hearing loss.	Wear class 5 ear muffs.

Working alone	If you have an accident no one is around to help you.	Always work with other people close by or within radio communication.

Assessor – record key points from candidate's verbal answers as accurately and fully as possible.		
These answers were written by:	☐ Candidate	☐ Assessor

Question Set 3 – Safety features and components

These questions are about safety features and important parts of a chainsaw.

Use your own words. Your assessor may ask you more questions to check your understanding.

Judgement statement

☐ Answers are in accordance with accepted industry practice.

1. Briefly explain how each of the **nine** required safety features of a chainsaw helps to keep you safe. ☑

Assessor

This question supports PC 2.1.

Judgement statement

☐ The candidate correctly explains how each of the **nine** safety features helps to keep the operator safe from harm.

☐ It is clear the candidate understands the main function of each of the safety features.

Example answers

Safety feature	How it keeps me safe
Mitt	Secures left hand on front handle in case of kick back.
Chain brake	Stops the chain in case of kickback and can be used to stop chain turning as required by the operator.
On/off switch	Allows saw to be quickly shut off in an emergency.
Chain catcher	Catches the chain if it breaks or comes off the bar and minimises damage to the saw.
Rear hand-guard	Protects right hand if the chain comes off the bar or breaks.
Anti-vibration mounts	Reduces vibrations reaching the handles and causing white finger.
Throttle lockout	Prevents accidental operation of the throttle.
Muffler	Reduces noise of the motor and directs fumes away from operator.

Spark arrestor	Disperses sparks emitted by the motor.

2. Listed below are **19** important parts of a chainsaw and cutting unit. ☑

Briefly explain what each part does.

Assessor

This question supports PC 2.3.

Judgement statement

☐ The candidate correctly explains the main function of each of the **19** chainsaw components.

Example answers

Component	What it does
Starter mechanism	Starts the chainsaw.
Flywheel	Generates electricity for spark plug. Circulates air for cooling. Balances the saw during operations.
Top cover	Protects the top of the motor and directs air flow for cooling.
Air filter	Filters the air used in the carburettor.
Carburettor	Mixes fuel and air.
High-tension lead	Carries electricity to the spark plug.
Spark plug	Provides a spark to ignite fuel.
Cooling fins	Helps keep the engine cool.
Choke	Adjusts fuel mixture for easier cold starting.
Throttle control	Controls the speed of the saw.
Side cover	Covers and protects the drive sprocket, clutch, chain brake, oiler and chain tension adjustor.
Drive/rim sprocket	Drives the chain around the bar.
Chain tension adjuster	Adjusts chain looseness or tightness.

Clutch	Clutch engages to connect engine power to the cutting unit.
Guide bar	Supports the chain as it rotates.
Oil flow adjuster	Controls the amount of oil supplied to the chain.
Depth gauge	Controls the cutting depth of the cutter.
Cutters	Part of the chain that does the cutting as they rotate around the bar.
Decompression button	Releases some of the compression from the combustion chamber when starting the chainsaw.

Assessor – record key points from candidate's verbal answers as accurately and fully as possible.		
These answers were written by:	☐ Candidate	☐ Assessor

Question Set 4 – Chain maintenance

These questions are about chain maintenance.

Use your own words. Your assessor may ask you more questions to check your understanding.

Judgement statement

☐ Answers are in accordance with accepted industry practice.

1. What are **three** chain maintenance tasks that must be done regularly? ☑

Assessor

This question supports PC 3.3.

Judgement statement

- The candidate correctly identifies **three** chain maintenance requirements that must be met.
- Requirements identified ensure the chain operates at optimum effectiveness.

Example answers

Ma include but not limited to:

- Check the chain is properly lubricated.
- Sharpening the chain.
- Checking the angles and lengths of the cutters.
- Tensioning the chain.
- Adjusting depth gauges.
- Check the chain for cracked rivets or side links.

2. What could be the consequences of operating a chainsaw with a poorly maintained chain for each of the following?

Assessor ☑

This question supports PC 3.6.

Judgement statement

☐ The candidate correctly explains the consequences of operating a poorly maintained chain in terms of the main effects on cutting, maintenance, and operator health and safety.

Example answers

Answers may include but are not limited to:

Cutting

- Ineffective cutting.
- Excessive fuel use.

Maintenance

- Increased risk of damage to the chain, cutter bar, motor, vibration mounts and/or clutch.
- Higher maintenance costs to replace or repair damaged or excessively worn parts.

Operator health

- Increased effort and fatigue for the operator.
- More likely to strain muscles.

Operator safety

- Increased risk of kickback.

Assessor – record key points from candidate's verbal answers as accurately and fully as possible.		
These answers were written by:	☐ Candidate	☐ Assessor

Question Set 5 – Using your chainsaw

These questions are about basic chainsaw operations.

Use your own words. Your assessor may ask you more questions to check your understanding.

Judgement statement

☐ Answers are in accordance with accepted industry practice.

Example answers

1. Describe the following **three** types of reactive force that can happen when cutting with a chainsaw: ☑

Assessor

This question supports PC 3.2 and 3.7.

Judgement statement

☐ The candidate correctly describes **three** types of reactive forces that can occur during chainsaw operation.

Example answers

Traction
This is when the chain pulls the saw towards the cut and away from the operator when doing a down cut.
Recoil
This is when the saw is pushed back away from the cut and towards the operator when doing an up cut.
Kickback
Kickback is when the bar of the chainsaw swings up in an uncontrolled arc towards the operator.

2. What are **two** causes of kickback? ☑

Assessor

This question supports PC 3.7.

Judgement statement

☐ The candidate correctly explains **two** causes of kickback.

Example answers

- The upper part of the bar nose makes contact with a solid object.
- The bar nose is pinched.

3. For each of the following **six** factors, explain what you should do to control kickback and handle your saw correctly and safely. ☑

Assessor

This question supports PC 3.8.

Judgement statement

☐ The candidate correctly explains **six** ways to control kickback through correct chainsaw use.

Example answers

Grip
Hold the saw firmly with both hands demonstrating hard grip with thumbs under.
Left thumb position
Make sure the left thumb is wrapped firmly under the front handle.
Body position
Stand to the left side when cutting, not directly behind the bar.
Bar nose location
Be aware of the location of the bar nose to avoid contact with solid objects.
Re-entering a cut
Be extremely careful, use a low speed and take care to avoid contact with the saw tip.
Reach
Do not over-reach or cut above shoulder height.

4. For each cutter profile: ☑

- Give an example of when it would be used
- Give an appropriate cutting speed.

Assessor

This question supports PC 3.5.

Judgement statement

☐ For each cutter profile an appropriate example of its use and cutting speed is provided.

☐ It is clear the candidate understands the difference between the two profiles.

Example answers

Cutter profile	When it is used	Cutting speed
Chisel	When cutting softwoods.	High speed or high performance cutting.
Semi-chisel	Landing work or cutting dirty wood.	Slower cutting.

5. What is tension wood and compression wood? ☑

Assessor

This question supports PC 3.9.

Judgement statement

☐ The candidate correctly defines the terms tension wood and compression wood.

Example answers

	What is it?
Tension wood	This is where a log or stem bends outwards stretching the fibres
Compression wood	This is where a log or stem bends inwards, bunching the fibres.

6. Why is it important to correctly sharpen the chainsaw chain? ☑

Give **two** reasons for each of the following:

Assessor

This question supports PC 3.4.

Judgement statement

☐ The candidate gives **two** correct reasons why it is important to correctly sharpen the chainsaw chain for each item.

Example answers

	Reasons
Cutter length	• Even cutter lengths • Reduces vibration
Cutter angle	• Easier to use • Lower chain wear
Depth gauge height	• Reduces risk of kickback • Lowers chainsaw stress • Reduces vibration

Assessor – record key points from candidate's verbal answers as accurately and fully as possible.		
These answers were written by:	☐ Candidate	☐ Assessor

Observation Checklist

You must be observed operating a chainsaw.

You will need to:

- Complete Part A of the checklist. Your assessor will complete the rest.
- Disassemble and re-assemble a chainsaw.
- Prepare to operate a chainsaw and do pre-start checks.
- Start and test a chainsaw and make sure it is operating safely.
- Plan and carry out a minimum of **five** of each the following cuts:
    - Up cuts
    - Down cuts
- Plan and carry out a minimum of **two** of each the following cuts:
    - Cuts with compression wood.
    - Cuts with tension wood.
- You are encouraged to attach any other evidence that shows you can do the above tasks, such as photos or relevant worksite documents you prepared or completed.

You may be asked additional questions to check your knowledge and may need to demonstrate skills and/or carry out tasks more than once.

Note to the assessor

- Only tick off each task when satisfied the candidate can do it safely and consistently.
- All tasks must be carried out following accepted industry practice.
- Where prompted, please record details of what you observed, e.g. comments about the candidate's performance, what the candidate did or said, and specific questions and responses.
- Attach any other evidence that shows what you observed and/or that supports your decision for the candidate's competency in the tasks, e.g. photos or relevant worksite documents.
- Relevant worksite documents will depend on the unit but examples could include – tailgate meeting notes, daily work plans, hazard or risk registers, risk assessments, production records, quality control records, maintenance records, job prescription / maps, training notes / records.
- Check the candidate has completed Part A and has attached any required evidence.
- Copies or photos of documents are acceptable as evidence.

Assessor

This Observation Checklist supports Outcomes 2, 4, 5 and 6.

Judgement statement

☐ The completed Observation Checklist and attached evidence support the candidate's ability to operate a chainsaw.

☐ Recorded chainsaw specifications are appropriate for the tasks performed.

Part A: Candidate to complete			
Your name	Record name.		
Worksite / company	Worksite / company identified.		
Chainsaw make and model	Chainsaw make and model identified.		
Bar length	Length of bar identified.	**Motor size**	Motor size identified.
Material being cut	Identifies material being cut.		

Part B: Assessor to complete

For each statement below, tick if you agree.

When disassembling and reassembling a chainsaw, the candidate: ☑

1. Identifies all of the following **nine** safety features: ☑

   - ☑ On/off switch
   - ☑ Chain brake
   - ☑ Spark arrester
   - ☑ Anti-vibration mounts
   - ☑ Mitt
   - ☑ Throttle lockout
   - ☑ Rear hand-guard
   - ☑ Muffler
   - ☑ Chain catcher

2. Identifies and removes all of the following **six** parts: ☑

   - ☑ Starter cover/assembly
   - ☑ Air filter
   - ☑ Bar
   - ☑ Top cover
   - ☑ Side cover
   - ☑ Chain

3. Identifies each of the following **16** components: ☑

   - ☑ Starter mechanism
   - ☑ Carburettor
   - ☑ Spark plug
   - ☑ Choke
   - ☑ Drive sprocket
   - ☑ Clutch
   - ☑ Flywheel
   - ☑ High-tension lead
   - ☑ Cooling fins
   - ☑ Throttle control
   - ☑ Chain tension adjuster
   - ☑ Guide bar

	☑ Oil flow adjuster ☑ Cutter **Assessor** – Each box must be ticked.	☑ Depth gauge ☑ Decompression button
4.	Reassembles the chainsaw correctly and to a safe working condition.	☑
5.	Please comment on the candidate's ability to disassemble and reassemble a chainsaw. Comments support the candidate's ability to disassemble and reassemble a chainsaw.	
When preparing to operate a chainsaw, the candidate:		☑
6.	Selects correct personal protective equipment (PPE) for use, including: ☑ Leg protection ☑ Hearing protection ☑ Eye protection ☑ Head protection ☑ Foot protection, including spiked safety boots as required. ☑ High-visibility clothing, as required **Assessor** – Each box must be ticked.	☑
7.	Adjusts PPE for use, as required.	☑
8.	Makes sure first aid requirements are met, including: ☑ First aid kit available and on hand. ☑ Operator wound dressings available. **Assessor** – Each box must be ticked.	☑
9.	Refuels the chainsaw correctly and safely.	☑

10. Checks the following before starting the saw to ensure safe and effective operation: ☑

- ☑ Oil and fuel levels
- ☑ Cutting unit
- ☑ External fittings are secure
- ☑ Condition of the **nine** safety features.

Assessor – Each box must be ticked.

11. Uses a chainsaw that meets the requirements of the work to be undertaken, including: ☑

- ☑ Correct motor size
- ☑ Appropriate bar length.

Assessor – Each box must be ticked.

12. Demonstrates the safe method of carrying a chainsaw, including: ☑

- ☑ Carried on the left side of the body
- ☑ Bar pointing to the rear
- ☑ Saw able to be thrown clear in a fall.

Assessor – Each box must be ticked.

13. Sharpens the chain correctly, on the saw. ☑

When sharpening, the candidate:

- ☑ Tensions the chain correctly.
- ☑ Uses the correct file size.
  File size used: File size is recorded.
- ☑ Uses filing aids correctly, as required.
- ☑ Ensures uniform cutter length.
- ☑ Ensures file angles are correct.
- ☑ Uses correct depth gauge setting
  Depth gauge setting used: Depth gauge setting used is recorded.

Assessor – Each box must be ticked.

14. Please comment on the candidate's ability to prepare to operate a chainsaw.

Comments support the candidate's ability to prepare operate a chainsaw.

When starting and testing a chainsaw, the candidate:	☑
15. Checks the starting location for safety.	☑
16. Uses approved starting methods only.	☑
17. Holds the chainsaw correctly, including: ☑ Left hand on front handle ☑ Right hand on rear handle ☑ Fingers and thumbs encircling the handles. **Assessor** – Each box must be ticked.	☑
18. Checks the chainsaw once started to make sure it is operating safely, including: ☑ Saw idles evenly ☑ Saw idles without chain movement ☑ Chain lubrication system is working ☑ Test chain brake ☑ Test stop switch and adjust tension as required. **Assessor** – Each box must be ticked.	☑
19. Please comment on the candidate's ability to start and test a chainsaw. Comments support the candidate's ability to start and test a chainsaw.	
When using a chainsaw to make cuts, the candidate:	☑
20. Checks and stabilises material to be cut or anticipates likely movement and adjusts body position accordingly.	☑
21. Maintains stable footing and a safe, balanced working position, including: ☑ Not overreaching ☑ Saw held close to the body ☑ Out of kickback zone ☑ Braced against reactive forces ☑ Standing in safe position. **Assessor** – Each box must be ticked.	☑

22.	Plans and carries out a minimum of the following cuts: ☑ **Five** up cuts ☑ **Five** down cuts ☑ **Two** cuts with compression wood ☑ **Two** cuts with tension wood. **Assessor** – Each box must be ticked.	☑
23.	Checks the chain during operation for the following: ☑ Sharpness ☑ Tension ☑ Lubrication. **Assessor** – Each box must be ticked.	☑
24.	After cutting is complete the chainsaw is: ☑ Stopped ☑ Placed in a safe position. **Assessor – Each** box must be ticked.	☑
25.	Please comment on the candidate's ability to use a chainsaw to make cuts. Comments support the candidate's ability to property use a chainsaw to make cuts.	
Throughout the observation, the candidate:		☑
26.	Completes all the above tasks in accordance with: ☑ Chainsaw manufacturer's requirements ☑ Accepted industry practice.	☑
Please provide specific comments on the candidate's ability to operate a chainsaw.		
Any comments support the candidate's competency.		

I confirm that: • I have observed the candidate carry out all the above tasks to the standard required. • The candidate has demonstrated competency in operating a chainsaw.				☑ Yes ☐ No	
Assessor name	Assessor identified	**Signature**	Signed by assessor	**Date**	Date recorded

Worksite Verification

Assessor

This Worksite Verification supports Outcomes 2, 4, 5 and 6.

Judgement statement

☐ The form has been completed by someone who meets the criteria below.

☐ The completed form provides evidence of the candidate's ability to perform the required tasks / skills to worksite or operational standards.

Note to the worksite verifier

- The assessor **takes this form into account** when making their decision about the candidate's competency. It helps provide further evidence of the candidate's skills and knowledge beyond what the assessor can directly observe or where worksite requirements may vary.
- This form must be completed by someone who:
  - Has been approved by the assessor
  - Has expertise in the assessed tasks (see Observation Checklist or Task Sheet for details)
  - Regularly supervises or manages the candidate in their worksite or operation.
- In-house assessors are not required to complete this form but may ask another suitable verifier to complete it if further evidence of competency is required.

Worksite verifier to complete

I confirm that _____: ☑

1. Has operated a chainsaw, including: ☑
   - ☑ Disassembling and reassembling a chainsaw, and identifying and explaining the main function of components.
   - ☑ Preparing to operate a chainsaw.
   - ☑ Starting and testing a chainsaw.
   - ☑ Using a chainsaw to make cuts.
2. Can consistently and safely do the above to the standard of this operation. ☑
3. Met worksite and operational requirements. ☑
4. Completed any attached documentation to worksite / operational requirements. ☑

Please comment on the candidate's ability to operate a chainsaw.

Verifier name and title		**Signature**	
Phone / email		**Date**	