

3. Technical part Contents

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1. Vehicle identification Requirements

1.1 Vehicle identification

What the LTSA expects of you	How the LTSA will assess your performance
1.1.1 Correct technical decisions	
You thoroughly inspect the vehicle identification so that you can correctly determine that the identification complies with all legal requirements.	The LTSA may: <ul style="list-style-type: none">• talk to you• observe you at work• inspect the vehicle identification of vehicles which you have certified• inspect inspection and certification documents you use and complete
1.1.2 Technical competence	
You are competent in all technical aspects relating to vehicle identification. This means you are competent in: <ul style="list-style-type: none">• the assessment of vehicle identification• legal requirements (including LTSA requirements) relating to vehicle identification• LTSA guidelines relating to vehicle classes.	The LTSA may: <ul style="list-style-type: none">• talk to you• ask questions to check your competence relating to vehicle identification• observe you at work• inspect your Training record. The LTSA may administer a short test on vehicle identification.
1.1.3 Technical equipment	
You have: <ul style="list-style-type: none">• a hand-held inspection lamp The equipment is in good condition and working order.	The LTSA may inspect your technical equipment.

1. Vehicle identification Scores

1.1 Vehicle identification

Score:	0	1
1.1.1 Correct technical decisions	<p>You do not thoroughly inspect the vehicle identification or correctly determine if the vehicle identification complies with all legal requirements.</p> <p>The area of non-compliance is significant or likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a VIN has been altered you make a wrong determination of the vehicle class. 	<p>You do not thoroughly inspect the vehicle identification or correctly determine if the vehicle identification complies with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a VIN is partially obscured or defaced a VIN has been attached or re-attached by a person other than an approved VIN agent.
1.1.2 Technical competence	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to vehicle identification, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of vehicle identification, or the legal requirements (including LTSA requirements) relating to vehicle identification. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to vehicle identification, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of vehicle identification, or the legal requirements (including LTSA requirements) relating to vehicle identification.
1.1.3 Technical equipment	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect the vehicle identification or correctly determine if the vehicle identification complies with all legal requirements.

The area of non-compliance is **minor** or **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- the chassis number is recorded instead of the 17 character VIN when fitted

You thoroughly inspect the vehicle identification and correctly determine if the vehicle identification complies with all legal requirements.

You demonstrate:

- **adequate competence** in the technical aspects relating to vehicle identification, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of vehicle s vehicle identification, or
- the legal requirements (including LTSA requirements) relating to vehicle identification.

You can demonstrate **comprehensive competence** in the technical aspects relating to vehicle identification, including their compliance with approved vehicle standards.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of vehicle identification, and
- the legal requirements (including LTSA requirements) relating to vehicle identification.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

2. External projections Requirements

2.1 External projections

What the LTSA expects of you	How the LTSA will assess your performance
2.1.1 Correct technical decisions	
<p>You thoroughly inspect all components and correctly determine if the external projections comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • observe you at work • inspect the structure of vehicles which you have certified • inspect inspection and certification documents you use and complete
2.1.2 Technical competence	
<p>You are competent in all technical aspects relating to external projections, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none"> • the assessment of external projections • legal requirements (including LTSA requirements) relating to external projections and the assessment of external projections • LTSA guidelines relating to external projections • the operation of the equipment used for inspecting external projections. 	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • ask questions to check your competence relating to external projections and the assessment of external projections • observe you at work • inspect your <i>Training record</i>. <p>The LTSA may administer a short test on external projections and the assessment of external projections</p>
2.1.3 Technical equipment	
<p>You have, or have access to:</p> <ul style="list-style-type: none"> • a hand-held inspection lamp • a tape measure <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment</p>

2. External projections Scores

2.1 External projections

Score:	0	1
2.1.1 Correct technical decisions	<p>You do not thoroughly inspect all components or correctly determine if the external projections comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:, a functional item of equipment has sharp edges or corners, so that it</p> <ul style="list-style-type: none"> • is likely to injure a person, or • may hook a person, or • may affect the driver's vision. 	<p>You do not thoroughly inspect all components or correctly determine if the external projections comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> • some attempt has been made to minimise risk to vehicle occupants and other road users, but it is inadequate or incomplete.
2.1.2 Technical competence	<p>You demonstrate:</p> <ul style="list-style-type: none"> • little or no competence in the technical aspects relating to external projections, or • a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> • the assessment of external projections, or • the legal requirements (including LTSA requirements) relating to external projections, or • LTSA guidelines relating to external projections or • the operation of the equipment you use for inspecting external projections. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> • some competence in the technical aspects relating to external projections, or • a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> • the assessment of external projections, or • the legal requirements (including LTSA requirements) relating to external projections, or • LTSA guidelines relating to external projections, or • the operation of the equipment you use for inspecting external projections.
2.1.3 Technical equipment	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all components or correctly determine if the external projections comply with all legal requirements, including Land Transport Rules.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- an external projection has an unnecessarily wide gap between it and the vehicle.

You thoroughly inspect all components and correctly determine if the vehicle structure complies with all legal requirements, including Land Transport Rules.

You demonstrate:

- **adequate competence** in the technical aspects relating to external projections, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of external projections, or
- the legal requirements (including LTSA requirements) relating to external projections, or
- LTSA guidelines relating to external projections, or
- the operation of the equipment used for inspecting external projections

You can demonstrate **comprehensive competence** in the technical aspects relating to external projections, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of external projections, and
- the legal requirements (including LTSA requirements) relating to external projections, and
- LTSA guidelines relating to external projections, and
- the operation of the equipment used for inspecting external projections.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

3. Dimensions Requirements

3.1 Dimensions

What the LTSA expects of you	How the LTSA will assess your performance
3.1.1 Correct technical decisions	
<p>You thoroughly inspect all components and correctly determine if the dimensions comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none">• talk to you• observe you at work• inspect the vehicles which you have certified• inspect inspection and certification documents you use and complete
3.1.2 Technical competence	
<p>You are competent in all technical aspects relating to dimensions, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none">• the assessment of dimensions• legal requirements (including LTSA requirements) relating to dimensions• LTSA guidelines relating to dimensions• the operation of the equipment used for inspecting dimensions.	<p>The LTSA may:</p> <ul style="list-style-type: none">• talk to you• ask questions to check your competence relating to dimensions• observe you at work• inspect your <i>Training record</i>. <p>The LTSA may administer a short test on dimensions</p>
3.1.3 Technical equipment	
<p>You have, or have access to:</p> <ul style="list-style-type: none">• a hand-held inspection lamp• a tape measure• a plumb bob• a spirit level• a builder's square• a chalk line <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment</p>

3. Dimensions Scores

3.1 Dimensions

Score:	0	1
3.1.1	Correct technical decisions	
	<p>You do not thoroughly inspect all components or correctly determine if the dimensions comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a vehicle is not in accordance with legal dimension requirements when you certify it. 	<p>You do not thoroughly inspect all components or correctly determine if the dimensions comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> not all relevant dimensions have been measured, or a measurement has been taken from the wrong points, or the vehicle has not been measured on a level surface.
3.1.2	Technical competence	
	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to dimensions, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of dimensions, or the legal requirements (including LTSA requirements) relating to dimensions, or LTSA guidelines relating to dimensions or the operation of the equipment you use for inspecting dimensions. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to dimensions, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of dimensions, or the legal requirements (including LTSA requirements) relating to dimensions, or LTSA guidelines relating to dimensions, or the operation of the equipment you use for inspecting dimensions.
3.1.3	Technical equipment	
	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all components or correctly determine if the dimensions comply with all legal requirements, including Land Transport Rules.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- permitted tolerances have not been taken into account and the vehicle has been rejected incorrectly.

You thoroughly inspect all components and correctly determine if the vehicle structure complies with all legal requirements, including Land Transport Rules.

You demonstrate:

- adequate competence** in the technical aspects relating to dimensions, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of dimensions, or
- the legal requirements (including LTSA requirements) relating to dimensions, or
- LTSA guidelines relating to dimensions, or
- the operation of the equipment used for inspecting dimensions

You can demonstrate comprehensive competence in the technical aspects relating to dimensions, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of dimensions, and
- the legal requirements (including LTSA requirements) relating to dimensions, and
- LTSA guidelines relating to dimensions, and
- the operation of the equipment used for inspecting dimensions.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

4. Structure Requirements

4.1 Chassis frame

What the LTSA expects of you	How the LTSA will assess your performance
4.1.1 Correct technical decisions	
You thoroughly inspect all components and correctly determine if the chassis frame complies with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.	The LTSA may: <ul style="list-style-type: none">• talk to you• observe you at work• inspect the structure of vehicles which you have certified• inspect inspection and certification documents you use and complete.
4.1.2 Technical competence	
You are competent in all technical aspects relating to chassis frames, including their compliance with Land Transport Rules. This means you are competent in: <ul style="list-style-type: none">• the assessment of chassis frames• legal requirements (including LTSA requirements) relating to chassis frames and the assessment of chassis frames• LTSA guidelines relating to chassis frames• the operation of the equipment used for inspecting chassis frames.	The LTSA may: <ul style="list-style-type: none">• talk to you• ask questions to check your competence relating to chassis frames and the assessment of chassis frames• observe you at work• inspect your <i>Training record</i>. The LTSA may administer a short test on chassis frames and the assessment of chassis frames
4.1.3 Technical equipment	
You have, or have access to: <ul style="list-style-type: none">• a hand-held inspection lamp• wheel alignment measuring equipment• assorted hand tools• a tape measure• a plumb bob• a spirit level• a builder's square• a string line• vernier callipers The equipment is in good condition and working order.	The LTSA may inspect your technical equipment

4. Structure Scores

4.1 Chassis frame

Score:	0	1
4.1.1 Correct technical decisions	<p>You do not thoroughly inspect all components or correctly determine if the chassis frame complies with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a high-tensile steel chassis frame has been heated or welded and the correct procedures have not been followed a chassis has been weakened by corrosion. 	<p>You do not thoroughly inspect all components or correctly determine if the chassis frame complies with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> the worst-case loading of the vehicle has not been taken into account.
4.1.2 Technical competence	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to repairs or modifications to chassis frames, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of chassis frames, or the legal requirements (including LTSA requirements) relating to repairs or modifications to chassis frames, or LTSA guidelines relating to repairs or modifications to chassis frames or the operation of the equipment you use for inspecting chassis frames. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to repairs or modifications to chassis frames, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of chassis frames, or the legal requirements (including LTSA requirements) relating to chassis frames, or LTSA guidelines relating to repairs or modifications to chassis frames, or the operation of the equipment you use for inspecting chassis frames.
4.1.3 Technical equipment	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all components or correctly determine if the chassis frame complies with all legal requirements, including Land Transport Rules.

The area of non-compliance is unlikely to compromise the safety of vehicle occupants or other road users.

For example:

- welding appears sound but you do not know the qualifications of the welder

You thoroughly inspect all components and correctly determine if the vehicle structure complies with all legal requirements, including Land Transport Rules.

You demonstrate:

- adequate competence in the technical aspects relating to chassis frames, or
- a level of competence that is unlikely to compromise the safety of vehicle occupants or other road users.

This means there are minor gaps in your knowledge of, or skills in:

- the assessment of chassis frames, or
- the legal requirements (including LTSA requirements) relating to chassis frames, or
- LTSA guidelines relating to chassis frames, or
- the operation of the equipment used for inspecting chassis frames

You can demonstrate comprehensive competence in the technical aspects relating to chassis frames, including their compliance with Land Transport Rules.

This means you can demonstrate comprehensive knowledge of, or skills in:

- the assessment of chassis frames, and
- the legal requirements (including LTSA requirements) relating to chassis frames, and
- LTSA guidelines relating to chassis frames, and
- the operation of the equipment used for inspecting chassis frames.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

4. Structure Requirements

4.2 Cab structure

What the LTSA expects of you	How the LTSA will assess your performance
4.2.1 Correct technical decisions	
<p>You thoroughly inspect all repairs or modifications to cab structure and correctly determine that the repairs or modifications comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • observe you at work • inspect the repairs or modifications to the vehicles which you have certified • inspect inspection and certification documents you use and complete
4.2.2 Technical competence	
<p>You are competent in all technical aspects relating to repairs or modifications to cab structure, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none"> • the assessment of repairs or modifications to cab structure • legal requirements (including LTSA requirements) relating to repairs or modifications to cab structure and the assessment of repairs or modifications to cab structure • LTSA guidelines relating to repairs or modifications to cab structure • the operation of the equipment used for inspecting repairs or modifications to cab structure. 	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • ask questions to check your competence relating to repairs or modifications to cab structure and the assessment of repairs or modifications to cab structure • observe you at work • inspect your <i>Training record</i>. <p>The LTSA may administer a short test on the assessment of repairs or modifications to cab structure</p>
4.2.3 Technical equipment	
<p>You have, or have access to:</p> <ul style="list-style-type: none"> • a hand-held inspection lamp • assorted hand tools • a tape measure • a spirit level • a string line <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment</p>

4. Cab structure Scores

4.2 Cab structure

Score:	0	1
4.2.1 Correct technical decisions	<p>You do not thoroughly inspect all repairs or modifications to cab structure or correctly determine if the repairs or modifications to cab structure comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a repair to the cab structure has not returned the vehicle to within safe tolerance of the manufacturer's specifications. 	<p>You do not thoroughly inspect all repairs or modifications to cab structure or correctly determine if the repairs or modifications to cab structure comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> redundant openings in the firewall have not been blanked off after a left to right hand drive conversion.
4.2.2 Technical competence	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to repairs or modifications to cab structure, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of repairs or modifications to cab structure, or the legal requirements (including LTSA requirements) relating to repairs or modifications to cab structure, or LTSA guidelines relating to repairs or modifications to cab structure or the operation of the equipment you use for inspecting repairs or modifications to cab structure. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to repairs or modifications to cab structure, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of repairs or modifications to cab structure, or the legal requirements (including LTSA requirements) relating to repairs or modifications to cab structure, or LTSA guidelines relating to repairs or modifications to cab structure or the operation of the equipment you use for inspecting repairs or modifications to cab structure.
4.2.3 Technical equipment	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all repairs or modifications to cab structure or correctly determine if the repairs or modifications to cab structure comply with all legal requirements.

The area of non-compliance is unlikely to compromise the safety of vehicle occupants or other road users.

For example:

- the left hand side position has not been replicated to provide the same ergonomic dimensions as that provided by the manufacturer.

You thoroughly inspect all repairs or modifications to cab structure and correctly determine if the repairs or modifications to cab structure comply with all legal requirements.

You demonstrate:

- **adequate competence** in the technical aspects relating to repairs or modifications to cab structure, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of repairs or modifications to cab structure, or
- the legal requirements (including LTSA requirements) relating to repairs or modifications to cab structure, or
- LTSA guidelines relating to repairs or modifications to cab structure or
- the operation of the equipment you use for inspecting repairs or modifications to cab structure

You can demonstrate **comprehensive competence** in the technical aspects relating to repairs or modifications to cab structure, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive knowledge** of, or skills in:

- the assessment of repairs or modifications to cab structure, or
- the legal requirements (including LTSA requirements) relating to repairs or modifications to cab structure, or
- LTSA guidelines relating to repairs or modifications to cab structure or
- the operation of the equipment you use for inspecting repairs or modifications to cab structure

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

4. Structure Requirements

4.3 Steering, suspension and axles

What the LTSA expects of you	How the LTSA will assess your performance
4.3.1 Correct technical decisions	
<p>You thoroughly inspect all repairs or modifications to steering, suspension and axles and correctly determine that the repairs or modifications comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none">• talk to you• observe you at work• inspect the repairs or modifications to the vehicles which you have certified• inspect inspection and certification documents you use and complete
4.3.2 Technical competence	
<p>You are competent in all technical aspects relating to repairs or modifications to steering, suspension and axles, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none">• the assessment of repairs or modifications to steering, suspension and axles• legal requirements (including LTSA requirements) relating to repairs or modifications to steering, suspension and axles and the assessment of repairs or modifications to steering, suspension and axles• LTSA guidelines relating to repairs or modifications to steering, suspension and axles• the operation of the equipment used for inspecting repairs or modifications to steering, suspension and axles.	<p>The LTSA may:</p> <ul style="list-style-type: none">• talk to you• ask questions to check your competence relating to repairs or modifications to steering, suspension and axles and the assessment of repairs or modifications to steering, suspension and axles• observe you at work• inspect your <i>Training record</i>. <p>The LTSA may administer a short test on the assessment of repairs or modifications to steering, suspension and axles</p>
4.3.3 Technical equipment	
<p>You have or have access to:</p> <ul style="list-style-type: none">• wheel alignment measuring equipment• a hand-held inspection lamp• assorted hand tools• a tape measure <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment</p>

4. Structure Scores

4.3 Steering, suspension and axles

Score:	0	1
4.3.1 Correct technical decisions	<p>You do not thoroughly inspect all repairs or modifications to steering, suspension and axles or correctly determine if the repairs or modifications to steering, suspension and axles comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a damaged steering or suspension component has not been replaced, or a suspension of insufficient capacity has been fitted, or a steering arm shows signs of heating or welding as part of the repair. 	<p>You do not thoroughly inspect all repairs or modifications to steering, suspension and axles or correctly determine if the repairs or modifications to steering, suspension and axles comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> steering components have not been replaced using new bolts, or a non load-sharing suspension has been fitted where this is not permitted, or a non-destructive test has not been performed when required.
4.3.2 Technical competence	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to repairs or modifications to steering, suspension and axles, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of repairs or modifications to steering, suspension and axles, or the legal requirements (including LTSA requirements) relating to repairs or modifications to steering, suspension and axles, or LTSA guidelines relating to repairs or modifications to steering, suspension and axles, or the operation of the equipment you use for inspecting repairs or modifications to steering, suspension and axles. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to repairs or modifications to steering, suspension and axles, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of repairs or modifications to steering, suspension and axles, or the legal requirements (including LTSA requirements) relating to repairs or modifications to steering, suspension and axles, or LTSA guidelines relating to repairs or modifications to steering, suspension and axles or the operation of the equipment you use for inspecting repairs or modifications to steering, suspension and axles.
4.3.3 Technical equipment	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all repairs or modifications to steering, suspension and axles or correctly determine if the repairs or modifications to steering, suspension and axles comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- the load-share ratio between axles in the same group is incorrect.

You thoroughly inspect all repairs or modifications to steering, suspension and axles and correctly determine if the repairs or modifications to steering, suspension and axles comply with all legal requirements.

You demonstrate:

- **adequate competence** in the technical aspects relating to repairs or modifications to steering, suspension and axles, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of repairs or modifications to steering, suspension and axles, or
- the legal requirements (including LTSA requirements) relating to repairs or modifications to steering, suspension and axles, or
- LTSA guidelines relating to repairs or modifications to steering, suspension and axles or
- the operation of the equipment you use for inspecting repairs or modifications to steering, suspension and axles

You can demonstrate **comprehensive competence** in the technical aspects relating to repairs or modifications to steering, suspension and axles, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive knowledge** of, or skills in:

- the assessment of repairs or modifications to steering, suspension and axles, or
- the legal requirements (including LTSA requirements) relating to repairs or modifications to steering, suspension and axles, or
- LTSA guidelines relating to repairs or modifications to steering, suspension and axles, or
- the operation of the equipment you use for inspecting repairs or modifications to steering, suspension and axles

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

4. Structure Requirements

4.4 Engine and drive train

What the LTSA expects of you	How the LTSA will assess your performance
4.4.1 Correct technical decisions	
<p>You thoroughly inspect all repairs or modifications to the engine and drive train and correctly determine that the repairs or modifications comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none">• talk to you• observe you at work• inspect the repairs or modifications to the vehicles which you have certified• inspect inspection and certification documents you use and complete
4.4.2 Technical competence	
<p>You are competent in all technical aspects relating to repairs or modifications to the engine and drive train, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none">• the assessment of repairs or modifications to the engine and drive train• legal requirements (including LTSA requirements) relating to repairs or modifications to the engine and drive train and the assessment of repairs or modifications to the engine and drive train• LTSA guidelines relating to repairs or modifications to the engine and drive train• the operation of the equipment used for inspecting repairs or modifications to the engine and drive train.	<p>The LTSA may:</p> <ul style="list-style-type: none">• talk to you• ask questions to check your competence relating to repairs or modifications to the engine and drive train and the assessment of repairs or modifications to the engine and drive train• observe you at work• inspect your <i>Training record</i>. <p>The LTSA may administer a short test on the assessment of repairs or modifications to the engine and drive train</p>
4.4.3 Technical equipment	
<p>You have or have access to:</p> <ul style="list-style-type: none">• a hand-held inspection lamp• assorted hand tools• a protractor• a tape measure• a spirit level• a plumb bob <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment</p>

4. Structure Scores

4.4 Engine and drive train

Score:	0	1
4.4.1	Correct technical decisions	
	<p>You do not thoroughly inspect all repairs or modifications to the engine and drive train or correctly determine if the repairs or modifications to the engine and drive train comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> the transmission mounts are not of sufficient strength to withstand the torsional loads the drive shaft is not aligned or balanced within specification 	<p>You do not thoroughly inspect all repairs or modifications to the engine and drive train or correctly determine if the repairs or modifications to the engine and drive train comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a drive shaft angle has not been checked, or a spline engagement has not been checked.
4.4.2	Technical competence	
	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to repairs or modifications to the engine and drive train, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of repairs or modifications to the engine and drive train, or the legal requirements (including LTSA requirements) relating to repairs or modifications to the engine and drive train, or LTSA guidelines relating to repairs or modifications to the engine and drive train, or the operation of the equipment you use for inspecting repairs or modifications to the engine and drive train. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to repairs or modifications to the engine and drive train, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of repairs or modifications to the engine and drive train, or the legal requirements (including LTSA requirements) relating to repairs or modifications to the engine and drive train, or LTSA guidelines relating to repairs or modifications to the engine and drive train, or the operation of the equipment you use for inspecting repairs or modifications to the engine and drive train.
4.4.3	Technical equipment	
	Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.	All specified equipment is available and in working order, but some or all of it is in poor condition.

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You do not thoroughly inspect all repairs or modifications to the engine and drive train or correctly determine if the repairs or modifications to the engine and drive train comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- an engine mount does not restrict excessive engine movement.

You thoroughly inspect all repairs or modifications to the engine and drive train and correctly determine if the repairs or modifications to the engine and drive train comply with all legal requirements.

You demonstrate:

- **adequate competence** in the technical aspects relating to repairs or modifications to the engine and drive train, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of repairs or modifications to the engine and drive train, or
- the legal requirements (including LTSA requirements) relating to repairs or modifications to the engine and drive train, or
- LTSA guidelines relating to repairs or modifications to the engine and drive train, or
- the operation of the equipment you use for inspecting repairs or modifications to the engine and drive train

You can demonstrate **comprehensive competence** in the technical aspects relating to repairs or modifications to the engine and drive train, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive knowledge** of, or skills in:

- the assessment of repairs or modifications to the engine and drive train, or
- the legal requirements (including LTSA requirements) relating to repairs or modifications to the engine and drive train, or
- LTSA guidelines relating to repairs or modifications to the engine and drive train, or
- the operation of the equipment you use for inspecting repairs or modifications to the engine and drive train

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

4. Structure Requirements

4.5 Brakes

What the LTSA expects of you	How the LTSA will assess your performance
4.5.1 Correct technical decisions	
<p>You thoroughly inspect all repairs or modifications to brakes and correctly determine that the repairs or modifications comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none">• talk to you• observe you at work• inspect the repairs or modifications to the vehicles which you have certified• inspect inspection and certification documents you use and complete
4.5.2 Technical competence	
<p>You are competent in all technical aspects relating to repairs or modifications to brakes, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none">• the assessment of repairs or modifications to brakes• legal requirements (including LTSA requirements) relating to repairs or modifications to brakes and the assessment of repairs or modifications to brakes• the use of technical repair instructions• LTSA guidelines relating to repairs or modifications to brakes• the operation of the equipment used for inspecting repairs or modifications to brakes.	<p>The LTSA may:</p> <ul style="list-style-type: none">• talk to you• ask questions to check your competence relating to repairs or modifications to brakes and the assessment of repairs or modifications to brakes• observe you at work• inspect your <i>Training record</i>. <p>The LTSA may administer a short test on the assessment of repairs or modifications to brakes</p>

What the LTSA expects of you	How the LTSA will assess your performance
4.5.3 Technical equipment	
<p>You have:</p> <ul style="list-style-type: none"> • a hand-held inspection lamp • assorted hand tools • a tape measure <p>For HV Code only:</p> <ul style="list-style-type: none"> • low pressure air gauges • high pressure air gauges • assorted air line fittings • scale/torque wrench • test reservoirs <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment</p>

4. Structure Scores

4.5 Brakes

Score:	0	1
4.5.1 Correct technical decisions	<p>You do not thoroughly inspect all repairs or modifications to brakes or correctly determine if the repairs or modifications to brakes comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> the brakes do not stop the vehicle within the requirements; the compressor or reservoir capacity is inadequate 	<p>You do not thoroughly inspect all repairs or modifications to brakes or correctly determine if the repairs or modifications to brakes comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a brake pipe has been partially crushed a brake pipe has been routed incorrectly too close to the vehicle's exhaust system
4.5.2 Technical competence	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to repairs or modifications to brakes, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of repairs or modifications to brakes, or the legal requirements (including LTSA requirements) relating to repairs or modifications to brakes, or LTSA guidelines relating to repairs or modifications to brakes, or the operation of the equipment you use for inspecting repairs or modifications to brakes. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to repairs or modifications to brakes, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of repairs or modifications to brakes, or the legal requirements (including LTSA requirements) relating to repairs or modifications to brakes, or LTSA guidelines relating to repairs or modifications to brakes, or the operation of the equipment you use for inspecting repairs or modifications to brakes.
4.5.3 Technical equipment	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all repairs or modifications to brakes or correctly determine if the repairs or modifications to brakes comply with all legal requirements.

The area of non-compliance is unlikely to compromise the safety of vehicle occupants or other road users.

For example:

- the brake pipes have not been secured so that they will not twist.

You thoroughly inspect all repairs or modifications to brakes and correctly determine if the repairs or modifications to brakes comply with all legal requirements.

You demonstrate:

- **adequate competence** in the technical aspects relating to repairs or modifications to brakes, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of repairs or modifications to brakes, or
- the legal requirements (including LTSA requirements) relating to repairs or modifications to brakes, or
- LTSA guidelines relating to repairs or modifications to brakes, or
- the operation of the equipment you use for inspecting repairs or modifications to brakes

You can demonstrate **comprehensive competence** in the technical aspects relating to repairs or modifications to brakes, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive knowledge** of, or skills in:

- the assessment of repairs or modifications to brakes, or
- the legal requirements (including LTSA requirements) relating to repairs or modifications to brakes, or
- LTSA guidelines relating to repairs or modifications to brakes, or
- the operation of the equipment you use for inspecting repairs or modifications to brakes

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

5. Occupant features Requirements

5.1 Seatbelts and seatbelt anchorages

What the LTSA expects of you	How the LTSA will assess your performance
5.1.1 Correct technical decisions	
<p>You thoroughly inspect all repairs or modifications to seatbelt and seatbelt anchorages and correctly determine that the repairs or modifications comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • observe you at work • inspect the repairs or modifications to the vehicles which you have certified • inspect inspection and certification documents you use and complete.
5.1.2 Technical competence	
<p>You are competent in all technical aspects relating to repairs or modifications to seatbelts and seatbelt anchorages, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none"> • the assessment of repairs or modifications to seatbelts and seatbelt anchorages • legal requirements (including LTSA requirements) relating to repairs or modifications to seatbelts and seatbelt anchorages and the assessment of repairs or modifications to seatbelts and seatbelt anchorages • the use of technical repair instructions • LTSA guidelines relating to repairs or modifications to seatbelts and seatbelt anchorages • the operation of the equipment used for inspecting repairs or modifications to seatbelts and seatbelt anchorages. 	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • ask questions to check your competence relating to repairs or modifications to seatbelt and seatbelt anchorages and the assessment of repairs or modifications to seatbelts and seatbelt anchorages • observe you at work • inspect your <i>Training record</i>. <p>The LTSA may administer a short test on seatbelts and seatbelt anchorages and the assessment of repairs or modifications to seatbelts and seatbelt anchorages.</p>
5.2.3 Technical equipment	
<p>You have:</p> <ul style="list-style-type: none"> • a hand-held inspection lamp • a mirror • a tape measure • assorted hand tools. <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment.</p>

5. Occupant features Scores

5.1 Seatbelts and seatbelt anchorages

Score:	0	1
5.1.1	Correct technical decisions	
	<p>You do not thoroughly inspect all repairs or modifications to seatbelts and seatbelt anchorages or correctly determine if the repairs or modifications to seatbelts and seatbelt anchorages comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> if calculations are used for proof of compliance for an anchorage they do not take into account local deformation of the panel the anchorage is attached to, or a seatbelt that has been worn in a crash has not been replaced. 	<p>You do not thoroughly inspect all repairs or modifications to seatbelts and seatbelt anchorages or correctly determine if the repairs or modifications to seatbelts and seatbelt anchorages comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a seatbelt buckle and tongue do not release easily.
5.1.2	Technical competence	
	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to repairs or modifications to seatbelts and seatbelt anchorages, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of repairs or modifications to seatbelts and seatbelt anchorages, or the legal requirements (including LTSA requirements) relating to repairs or modifications to seatbelts and seatbelt anchorages, or LTSA guidelines relating to repairs or modifications to seatbelt and seatbelt anchorages, or the operation of the equipment you use for inspecting seatbelts and seatbelt anchorages. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to repairs or modifications to seatbelts and seatbelt anchorages, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of repairs or modifications to seatbelts and seatbelt anchorages, or the legal requirements (including LTSA requirements) relating to repairs or modifications to seatbelts and seatbelt anchorages, or LTSA guidelines relating to repairs or modifications to seatbelts and seatbelt anchorages, or the operation of the equipment you use for inspecting seatbelts and seatbelt anchorages.
5.1.3	Technical equipment	
	Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.	All specified equipment is available and in working order, but some or all of it is in poor condition.

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You do not thoroughly inspect all repairs or modifications to seatbelts and seatbelt anchorages or correctly determine if the repairs or modifications to seatbelts and seatbelt anchorages comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- a seatbelt of the wrong type for the seat position has been fitted.

You thoroughly inspect all repairs or modifications to seatbelts and seatbelt anchorages and correctly determine if the repairs or modifications to seatbelts and seatbelt anchorages comply with all legal requirements.

You demonstrate:

- **adequate** competence in the technical aspects relating to repairs or modifications to seatbelts and seatbelt anchorages, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of repairs or modifications to seatbelts and seatbelt anchorages, or
- the legal requirements (including LTSA requirements) relating to repairs or modifications to seatbelts and seatbelt anchorages, or
- LTSA guidelines relating to repairs or modifications to seatbelts and seatbelt anchorages, or
- the operation of the equipment you use for inspecting seatbelts and seatbelt anchorages.

You can demonstrate **comprehensive** competence in the technical aspects relating to repairs or modifications to seatbelts and seatbelt anchorages, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of repairs or modifications to seatbelts and seatbelt anchorages, or
- the legal requirements (including LTSA requirements) relating to repairs or modifications to seatbelts and seatbelt anchorages, or
- LTSA guidelines relating to repairs or modifications to seatbelts and seatbelt anchorages, or
- the operation of the equipment you use for inspecting seatbelts and seatbelt anchorages.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

5. Occupant features Requirements

5.2 Wheelchair restraints

What the LTSA expects of you	How the LTSA will assess your performance
5.2.1 Correct technical decisions	
<p>You thoroughly inspect all installations, repairs or modifications to wheelchair restraints and correctly determine that they comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • observe you at work • inspect the repairs or modifications to the vehicles which you have certified • inspect inspection and certification documents you use and complete.
5.2.2 Technical competence	
<p>You are competent in all technical aspects relating to installations, repairs or modifications to wheelchair restraints, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none"> • the assessment of installations, repairs or modifications to wheelchair restraints • legal requirements (including LTSA requirements) relating to installations, repairs or modifications to wheelchair restraints and the assessment of installations, repairs or modifications to wheelchair restraints • the use of technical repair instructions • LTSA guidelines relating to installations, repairs or modifications to wheelchair restraints • the operation of the equipment used for inspecting repairs or modifications to wheelchair restraints. 	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • ask questions to check your competence relating to installations, repairs or modifications to seatbelt and seatbelt anchorages and the assessment of repairs or modifications to wheelchair restraints • observe you at work • inspect your <i>Training record</i>. <p>The LTSA may administer a short test on wheelchair restraints and the assessment of installations, repairs or modifications to wheelchair restraints.</p>
5.2.3 Technical equipment	
<p>You have:</p> <ul style="list-style-type: none"> • a hand-held inspection lamp • a mirror • a tape measure • assorted hand tools. <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment.</p>

5. Occupant features Scores

5.2 Wheelchair restraints

Score:	0	1
5.2.1	Correct technical decisions	
	<p>You do not thoroughly inspect all installations, repairs or modifications to wheelchair restraints or correctly determine if the installations, repairs or modifications to wheelchair restraints comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> there are no steps or ramp to an entrance that is more than 410 mm above the level roadway. 	<p>You do not thoroughly inspect all installations, repairs or modifications to wheelchair restraints or correctly determine if the installations, repairs or modifications comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a restraint system does not release easily.
5.2.2	Technical competence	
	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to installations, repairs or modifications to wheelchair restraints, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of installations, repairs or modifications to wheelchair restraints, or the legal requirements (including LTSA requirements) relating to installations, repairs or modifications to wheelchair restraints, or LTSA guidelines relating to installations, repairs or modifications to seatbelt and seatbelt anchorages, or the operation of the equipment you use for inspecting wheelchair restraints. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to installations, repairs or modifications to wheelchair restraints, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of installations, repairs or modifications to wheelchair restraints, or the legal requirements (including LTSA requirements) relating to installations, repairs or modifications to wheelchair restraints, or LTSA guidelines relating to installations, repairs or modifications to wheelchair restraints, or the operation of the equipment you use for inspecting wheelchair restraints.
5.2.3	Technical equipment	
	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all installations, repairs or modifications to wheelchair restraints or correctly determine if the installations, repairs or modifications to wheelchair restraints comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- a fully extended ramp from a vehicle on a level surface has a gradient that is slightly steeper than one in four.

You thoroughly inspect all installations, repairs or modifications to wheelchair restraints and correctly determine if the installations, repairs or modifications to wheelchair restraints comply with all legal requirements.

You demonstrate:

- **adequate** competence in the technical aspects relating to installations, repairs or modifications to wheelchair restraints, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of installations, repairs or modifications to wheelchair restraints, or
- the legal requirements (including LTSA requirements) relating to installations, repairs or modifications to wheelchair restraints, or
- LTSA guidelines relating to installations, repairs or modifications to wheelchair restraints, or
- the operation of the equipment you use for inspecting wheelchair restraints.

You can demonstrate **comprehensive** competence in the technical aspects relating to installations, repairs or modifications to wheelchair restraints, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of installations, repairs or modifications to wheelchair restraints, or
- the legal requirements (including LTSA requirements) relating to installations, repairs or modifications to wheelchair restraints, or
- LTSA guidelines relating to installations, repairs or modifications to wheelchair restraints, or
- the operation of the equipment you use for inspecting wheelchair restraints.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

5. Occupant features Requirements

5.3 PSV rollover and stability

What the LTSA expects of you	How the LTSA will assess your performance
5.3.1 Correct technical decisions	
<p>You thoroughly inspect all PSV rollover and stability characteristics and correctly determine that they comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • observe you at work • inspect the repairs or modifications to the vehicles which you have certified • inspect inspection and certification documents you use and complete.
5.3.2 Technical competence	
<p>You are competent in all technical aspects relating to PSV rollover and stability characteristics, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none"> • the assessment of PSV rollover and stability characteristics • legal requirements (including LTSA requirements) relating to PSV rollover and stability characteristics and the assessment of PSV rollover and stability characteristics • the use of technical repair instructions • LTSA guidelines relating to PSV rollover and stability characteristics • the operation of the equipment used for inspecting PSV rollover and stability characteristics. 	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • ask questions to check your competence relating to PSV rollover and stability and the assessment of modifications to PSV rollover and stability characteristics • observe you at work • inspect your <i>Training record</i>. <p>The LTSA may administer a short test on PSV rollover and stability characteristics and the assessment of PSV rollover and stability.</p>
5.3.3 Technical equipment	
<p>You have:</p> <ul style="list-style-type: none"> • standard loading weights for all seating positions • loading weights for roof racks • a tape measure • vernier callipers • a profile gauge. <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment.</p>

5. Occupant features Scores

5.3 PSV rollover and stability characteristics

Score:	0	1
5.3.1	Correct technical decisions	
	<p>You do not thoroughly inspect all PSV rollover and stability characteristics or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a vehicle was physically tested without being properly weighted in all seating positions, including the roofrack, if any. 	<p>You do not thoroughly inspect all PSV rollover and stability characteristics or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> the ring-frame or body section was not recorded at the first point of failure.
5.3.2	Technical competence	
	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to PSV rollover and stability characteristics, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of PSV rollover and stability, or the legal requirements (including LTSA requirements) relating to PSV rollover and stability, or LTSA guidelines relating to PSV rollover and stability, or the operation of the equipment you use for inspecting PSV rollover and stability characteristics. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to PSV rollover and stability, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of PSV rollover and stability, or the legal requirements (including LTSA requirements) relating to PSV rollover and stability, or LTSA guidelines relating to PSV rollover and stability, or the operation of the equipment you use for inspecting PSV rollover and stability characteristics.
5.3.3	Technical equipment	
	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all PSV rollover and stability characteristics or correctly determine if they comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- the luggage capacity/weight was not correctly applied to the centre of gravity calculation.

You thoroughly inspect all PSV rollover and stability characteristics and correctly determine if they comply with all legal requirements.

You demonstrate:

- **adequate** competence in the technical aspects relating to PSV rollover and stability, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are minor gaps in your knowledge of, or skills in:

- the assessment of PSV rollover and stability, or
- the legal requirements (including LTSA requirements) relating to PSV rollover and stability, or
- TSA guidelines relating to PSV rollover and stability, or
- the operation of the equipment you use for inspecting PSV rollover and stability characteristics.

You can demonstrate **comprehensive** competence in the technical aspects relating to PSV rollover and stability, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of PSV rollover and stability, or
- the legal requirements (including LTSA requirements) relating to PSV rollover and stability, or
- LTSA guidelines relating to PSV rollover and stability, or
- the operation of the equipment you use for inspecting PSV rollover and stability characteristics.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

6. Stability Requirements

6.1 Static rollover threshold (SRT)

What the LTSA expects of you	How the LTSA will assess your performance
6.1.1 Correct technical decisions	
<p>You thoroughly inspect all SRT characteristics and correctly determine that they comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • observe you at work • inspect the repairs or modifications to the vehicles which you have certified • inspect inspection and certification documents you use and complete.
6.1.2 Technical competence	
<p>You are competent in all technical aspects relating to SRT characteristics, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none"> • the assessment of SRT • legal requirements (including LTSA requirements) relating to SRT characteristics and the assessment of SRT • the use of technical repair instructions • LTSA guidelines relating to SRT • the operation of the equipment used for measuring SRT. 	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • ask questions to check your competence relating to SRT and the assessment of modifications to SRT characteristics • observe you at work • inspect your <i>Training record</i>. <p>The LTSA may administer a short test on SRT characteristics and the assessment of SRT.</p>
6.1.3 Technical equipment	
<p>You have:</p> <ul style="list-style-type: none"> • access to an LTSA approved calculator, or • practical testing facilities. <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment.</p>

6. Stability Scores

6.1 SRT

Score:	0	1
6.1.1 Correct technical decisions	<p>You do not thoroughly inspect all SRT characteristics or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> the load height or mass was incorrectly determined. 	<p>You do not thoroughly inspect all SRT characteristics or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a retractable axle has not been tested in the lowered position.
6.1.2 Technical competence	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to SRT characteristics, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of SRT, or the legal requirements (including LTSA requirements) relating to SRT, or LTSA guidelines relating to SRT, or the operation of the equipment you use for inspecting SRT characteristics. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to SRT, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of SRT, or the legal requirements (including LTSA requirements) relating to SRT, or LTSA guidelines relating to SRT, or the operation of the equipment you use for inspecting SRT characteristics.
6.1.3 Technical equipment	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all SRT characteristics or correctly determine if they comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- the documentation for certification is incomplete in minor aspects.

You thoroughly inspect all SRT characteristics and correctly determine if they comply with all legal requirements.

You demonstrate:

- **adequate** competence in the technical aspects relating to SRT, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of SRT, or
- the legal requirements (including LTSA requirements) relating to SRT, or
- LTSA guidelines relating to SRT, or
- the operation of the equipment you use for inspecting SRT characteristics.

You can demonstrate **comprehensive** competence in the technical aspects relating to SRT, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of SRT, or
- the legal requirements (including LTSA requirements) relating to SRT, or
- LTSA guidelines relating to SRT, or
- the operation of the equipment you use for inspecting SRT characteristics.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

7. Equipment fitting Requirements

7.1 Cranes and hoists

What the LTSA expects of you	How the LTSA will assess your performance
7.1.1 Correct technical decisions	
<p>You thoroughly inspect all cranes and hoists and correctly determine that they comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • observe you at work • inspect the repairs or modifications to the vehicles which you have certified • inspect inspection and certification documents you use and complete.
7.1.2 Technical competence	
<p>You are competent in all technical aspects relating to cranes and hoists, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none"> • the assessment of cranes and hoists • legal requirements (including LTSA requirements) relating to cranes and hoists and the assessment of cranes and hoists • the use of technical repair instructions • LTSA guidelines relating to cranes and hoists • the operation of the equipment used for inspecting cranes and hoists. 	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • ask questions to check your competence relating to cranes and hoists and the assessment of modifications to cranes and hoists • observe you at work • inspect your <i>Training record</i>. <p>The LTSA may administer a short test on cranes and hoists and the assessment of cranes and hoists.</p>
7.1.3 Technical equipment	
<p>You have:</p> <ul style="list-style-type: none"> • a tape measure • a hand-held inspection lamp. <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment.</p>

7. Equipment fitting Scores

7.1 Cranes and hoists

Score:	0	1
7.1.1 Correct technical decisions	<p>You do not thoroughly inspect all cranes and hoists or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> the chassis and body of a vehicle is not of adequate strength for all conditions of loading and operation of the equipment. 	<p>You do not thoroughly inspect all cranes and hoists or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> the body attachment stresses have not been calculated under the worst loading condition.
7.1.2 Technical competence	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to cranes and hoists, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of cranes and hoists, or the legal requirements (including LTSA requirements) relating to cranes and hoists, or LTSA guidelines relating to cranes and hoists, or the operation of the equipment you use for inspecting cranes and hoists. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to cranes and hoists, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of cranes and hoists, or the legal requirements (including LTSA requirements) relating to cranes and hoists, or LTSA guidelines relating to cranes and hoists, or the operation of the equipment you use for inspecting cranes and hoists.
7.1.3 Technical equipment	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all cranes and hoists or correctly determine if they comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- locking of equipment is not easily verifiable by visual inspection.

You thoroughly inspect all cranes and hoists and correctly determine if they comply with all legal requirements.

You demonstrate:

- adequate** competence in the technical aspects relating to cranes and hoists, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of cranes and hoists, or
- the legal requirements (including LTSA requirements) relating to cranes and hoists, or
- LTSA guidelines relating to cranes and hoists, or
- the operation of the equipment you use for inspecting cranes and hoists.

You can demonstrate **comprehensive** competence in the technical aspects relating to cranes and hoists, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of cranes and hoists, or
- the legal requirements (including LTSA requirements) relating to cranes and hoists, or
- LTSA guidelines relating to cranes and hoists, or
- the operation of the equipment you use for inspecting cranes and hoists.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

8. Towing connections Requirements

8.1 Drawbars, drawbeams and towbars

What the LTSA expects of you	How the LTSA will assess your performance
8.1.1 Correct technical decisions	
You thoroughly inspect all drawbars, drawbeams and towbars and correctly determine that they comply with all legal requirements, including Land Transport Rules, taking into account all technical information, including that provided by the LTSA, such as the HVS VIRM.	The LTSA may: <ul style="list-style-type: none">• talk to you• observe you at work• inspect the repairs or modifications to the vehicles which you have certified• inspect inspection and certification documents you use and complete.
8.1.2 Technical competence	
You are competent in all technical aspects relating to drawbars, drawbeams and towbars, including their compliance with Land Transport Rules. This means you are competent in: <ul style="list-style-type: none">• the assessment of drawbars, drawbeams and towbars• legal requirements (including LTSA requirements) relating to drawbars, drawbeams and towbars and the assessment of drawbars, drawbeams and towbars• the use of technical repair instructions• LTSA guidelines relating to drawbars, drawbeams and towbars• the operation of the equipment used for inspecting drawbars, drawbeams and towbars.	The LTSA may: <ul style="list-style-type: none">• talk to you• ask questions to check your competence relating to drawbars, drawbeams and towbars and the assessment of modifications to drawbars, drawbeams and towbars• observe you at work• inspect your <i>Training record</i>. The LTSA may administer a short test on drawbars, drawbeams and towbars and the assessment of drawbars, drawbeams and towbars.
8.1.3 Technical equipment	
You have: <ul style="list-style-type: none">• a tape measure• a hand-held inspection lamp• vernier callipers• a straight edge. The equipment is in good condition and working order.	The LTSA may inspect your technical equipment.

8. Towing connections Scores

8.1 Drawbars, drawbeams and towbars

Score:	0	1
8.1.1	Correct technical decisions	
	<p>You do not thoroughly inspect all drawbars, drawbeams and towbars or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> the original date of manufacture and attachment to the vehicle of a towing component cannot be demonstrated. 	<p>You do not thoroughly inspect all drawbars, drawbeams and towbars or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> an extendable drawbar is not fitted with end stops.
8.1.2	Technical competence	
	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to drawbars, drawbeams and towbars, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of drawbars, drawbeams and towbars, or the legal requirements (including LTSA requirements) relating to drawbars, drawbeams and towbars, or LTSA guidelines relating to drawbars, drawbeams and towbars, or the operation of the equipment you use for inspecting drawbars, drawbeams and towbars. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to drawbars, drawbeams and towbars, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of drawbars, drawbeams and towbars, or the legal requirements (including LTSA requirements) relating to drawbars, drawbeams and towbars, or LTSA guidelines relating to drawbars, drawbeams and towbars, or the operation of the equipment you use for inspecting drawbars, drawbeams and towbars.
8.1.3	Technical equipment	
	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all drawbars, drawbeams and towbars or correctly determine if they comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- the safety chain is connected to the vehicle by a chain slot.

You thoroughly inspect all drawbars, drawbeams and towbars and correctly determine if they comply with all legal requirements.

You demonstrate:

- **adequate** competence in the technical aspects relating to drawbars, drawbeams and towbars, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of drawbars, drawbeams and towbars, or
- the legal requirements (including LTSA requirements) relating to drawbars, drawbeams and towbars, or
- LTSA guidelines relating to drawbars, drawbeams and towbars, or
- the operation of the equipment you use for inspecting drawbars, drawbeams and towbars.

You can demonstrate comprehensive competence in the technical aspects relating to drawbars, drawbeams and towbars, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of drawbars, drawbeams and towbars, and
- the legal requirements (including LTSA requirements) relating to drawbars, drawbeams and towbars, and
- LTSA guidelines relating to drawbars, drawbeams and towbars, and
- the operation of the equipment you use for inspecting drawbars, drawbeams and towbars.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

8. Towing connections Requirements

8.2 Fifth wheels and kingpins

What the LTSA expects of you	How the LTSA will assess your performance
8.2.1 Correct technical decisions	
<p>You thoroughly inspect all fifth wheels and kingpins and correctly determine that they comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • observe you at work • inspect the repairs or modifications to the vehicles which you have certified • inspect inspection and certification documents you use and complete.
8.2.2 Technical competence	
<p>You are competent in all technical aspects relating to fifth wheels and kingpins, including their compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none"> • the assessment of fifth wheels and kingpins • legal requirements (including LTSA requirements) relating to fifth wheels and kingpins and the assessment of fifth wheels and kingpins • the use of technical repair instructions • LTSA guidelines relating to fifth wheels and kingpins • the operation of the equipment used for inspecting fifth wheels and kingpins. 	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • ask questions to check your competence relating to fifth wheels and kingpins and the assessment of modifications to fifth wheels and kingpins • observe you at work • inspect your <i>Training record</i>. <p>The LTSA may administer a short test on fifth wheels and kingpins and the assessment of fifth wheels and kingpins.</p>
8.2.3 Technical equipment	
<p>You have:</p> <ul style="list-style-type: none"> • a tape measure • a hand-held inspection lamp • vernier callipers • a straight edge. <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment.</p>

5. Towing connections Scores

8.2 Fifth wheels and kingpins

Score:	0	1
8.2.1	Correct technical decisions	
	<p>You do not thoroughly inspect all fifth wheels and kingpins or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a kingpin other than a 50mm or 90mm diameter has been fitted a kingpin has been repaired. 	<p>You do not thoroughly inspect all fifth wheels and kingpins or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a rigid fifth wheel has not been installed in accordance with the manufacturer's instructions.
8.2.2	Technical competence	
	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to fifth wheels and kingpins, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of fifth wheels and kingpins, or the legal requirements (including LTSA requirements) relating to fifth wheels and kingpins, or LTSA guidelines relating to fifth wheels and kingpins, or the operation of the equipment you use for inspecting fifth wheels and kingpins. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to fifth wheels and kingpins, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of fifth wheels and kingpins, or the legal requirements (including LTSA requirements) relating to fifth wheels and kingpins, or LTSA guidelines relating to fifth wheels and kingpins, or the operation of the equipment you use for inspecting fifth wheels and kingpins.
8.2.3	Technical equipment	
	Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.	All specified equipment is available and in working order, but some or all of it is in poor condition.

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You do not thoroughly inspect all fifth wheels and kingpins or correctly determine if they comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- a vehicle fitted with a 90 mm kingpin is not correctly labelled.

You thoroughly inspect all fifth wheels and kingpins and correctly determine if they comply with all legal requirements.

You demonstrate:

- **adequate competence** in the technical aspects relating to fifth wheels and kingpins, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of fifth wheels and kingpins, or
- the legal requirements (including LTSA requirements) relating to fifth wheels and kingpins, or
- LTSA guidelines relating to fifth wheels and kingpins, or
- the operation of the equipment you use for inspecting fifth wheels and kingpins.

You can demonstrate **comprehensive** competence in the technical aspects relating to fifth wheels and kingpins, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of fifth wheels and kingpins, and
- the legal requirements (including LTSA requirements) relating to fifth wheels and kingpins, and
- LTSA guidelines relating to fifth wheels and kingpins, and
- the operation of the equipment you use for inspecting fifth wheels and kingpins.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

9. Load retention Requirements

9.1 Load retention

What the LTSA expects of you	How the LTSA will assess your performance
9.1.1 Correct technical decisions	
You thoroughly inspect all load retention anchorages and correctly determine that they comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.	The LTSA may: <ul style="list-style-type: none">• talk to you• observe you at work• inspect the repairs or modifications to the vehicles which you have certified• inspect inspection and certification documents you use and complete.
9.1.2 Technical competence	
You are competent in all technical aspects relating to load retention, including compliance with Land Transport Rules. This means you are competent in: <ul style="list-style-type: none">• the assessment of load retention anchorages• legal requirements (including LTSA requirements) relating to load retention and the assessment of load retention anchorages• the use of technical repair instructions• LTSA guidelines relating to load retention• the operation of the equipment used for inspecting load retention anchorages.	The LTSA may: <ul style="list-style-type: none">• talk to you• ask questions to check your competence relating to load retention and the assessment of modifications to load retention anchorages• observe you at work• inspect your <i>Training record</i>. The LTSA may administer a short test on load retention and the assessment of load retention anchorages.
9.1.3 Technical equipment	
You have: <ul style="list-style-type: none">• a tape measure• a hand-held inspection lamp• vernier callipers. The equipment is in good condition and working order.	The LTSA may inspect your technical equipment.

9. Load retention Scores

9.1 Load retention

Score:	0	1
9.1.1 Correct technical decisions	<p>You do not thoroughly inspect all load retention anchorages or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> corrosion or other weakening of a load anchorage is visually apparent and causes the vehicle to be unsafe. 	<p>You do not thoroughly inspect all load retention anchorages or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> a modification or repair to a load anchorage has not been correctly certified.
9.1.2 Technical competence	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to load retention, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of load retention, or the legal requirements (including LTSA requirements) relating to load retention, or LTSA guidelines relating to load retention, or the operation of the equipment you use for inspecting load retention anchorages. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to load retention, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of load retention, or the legal requirements (including LTSA requirements) relating to load retention, or LTSA guidelines relating to load retention, or the operation of the equipment you use for inspecting load retention anchorages.
9.1.3 Technical equipment	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all load retention anchorages or correctly determine if they comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- there are insufficient anchorages for the vehicle.

You thoroughly inspect all load retention anchorages and correctly determine if they comply with all legal requirements.

You demonstrate:

- **adequate** competence in the technical aspects relating to load retention, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of load retention anchorages, or
- the legal requirements (including LTSA requirements) relating to load retention, or
- LTSA guidelines relating to load retention, or
- the operation of the equipment you use for inspecting load retention anchorages.

You can demonstrate **comprehensive** competence in the technical aspects relating to load retention, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of load retention, and
- the legal requirements (including LTSA requirements) relating to load retention, and
- LTSA guidelines relating to load retention, and
- the operation of the equipment you use for inspecting load retention anchorages.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

9. Load retention Requirements

9.2 Bolster attachment

What the LTSA expects of you	How the LTSA will assess your performance
9.2.1 Correct technical decisions	
You thoroughly inspect all bolsters and their attachment and correctly determine that they comply with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.	The LTSA may: <ul style="list-style-type: none">• talk to you• observe you at work• inspect the repairs or modifications to the vehicles which you have certified• inspect inspection and certification documents you use and complete.
9.2.2 Technical competence	
You are competent in all technical aspects relating to bolsters, including their compliance with Land Transport Rules. This means you are competent in: <ul style="list-style-type: none">• the assessment of bolsters• legal requirements (including LTSA requirements) relating to bolsters and the assessment of bolsters• the use of technical repair instructions• LTSA guidelines relating to bolsters• the operation of the equipment used for inspecting bolsters.	The LTSA may: <ul style="list-style-type: none">• talk to you• ask questions to check your competence relating to bolsters and the assessment of modifications to bolsters• observe you at work• inspect your <i>Training record</i>. The LTSA may administer a short test on bolsters and the assessment of bolsters.
9.2.3 Technical equipment	
You have: <ul style="list-style-type: none">• a tape measure• a hand-held inspection lamp. The equipment is in good condition and working order.	The LTSA may inspect your technical equipment.

9. Load retention Scores

9.2 Bolster attachment

Score:	0	1
9.2.1 Correct technical decisions	<p>You do not thoroughly inspect all bolsters and their attachment or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> corrosion or other weakening of a bolster is visually apparent and causes the vehicle to be unsafe. 	<p>You do not thoroughly inspect all bolsters and their attachment or correctly determine if they comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> the vehicle has not completed 250,000 km.
9.2.2 Technical competence	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to bolsters, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of bolsters, or the legal requirements (including LTSA requirements) relating to bolsters, or LTSA guidelines relating to bolsters, or the operation of the equipment you use for inspecting bolsters. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to bolsters, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of bolsters, or the legal requirements (including LTSA requirements) relating to bolsters, or LTSA guidelines relating to bolsters, or the operation of the equipment you use for inspecting bolsters.
9.2.3 Technical equipment	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all bolsters and their attachment or correctly determine if they comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- you do not establish the bolster identity where this is important

You thoroughly inspect all bolsters and their attachment and correctly determine if they comply with all legal requirements.

You demonstrate:

- **adequate** competence in the technical aspects relating to bolsters, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of bolsters, or
- the legal requirements (including LTSA requirements) relating to bolsters, or
- LTSA guidelines relating to bolsters, or
- the operation of the equipment you use for inspecting bolsters.

You can demonstrate **comprehensive** competence in the technical aspects relating to bolsters, including their compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of bolsters, and
- the legal requirements (including LTSA requirements) relating to bolsters, and
- LTSA guidelines relating to bolsters, and
- the operation of the equipment you use for inspecting bolsters.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

10. Additional topics Requirements

10.1 Welding

What the LTSA expects of you	How the LTSA will assess your performance
10.1.1 Correct technical decisions	
<p>You thoroughly inspect all welding completed as part of the repair or modification and correctly determine that the welding complies with all legal requirements, including Land Transport Rules, taking into account all technical information including that provided by the LTSA such as the HVS VIRM.</p>	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • observe you at work • inspect the repairs or modifications to the vehicles which you have certified • inspect inspection and certification documents you use and complete.
10.1.2 Technical competence	
<p>You are competent in all technical aspects relating to welding, including its compliance with Land Transport Rules. This means you are competent in:</p> <ul style="list-style-type: none"> • the assessment of welded repairs or modifications • legal requirements (including LTSA requirements) relating to welded repairs or modifications and the assessment of welded repairs or modifications • the use of technical repair instructions • LTSA guidelines relating to welded repairs or modifications • the operation of the equipment used for inspecting welded repairs or modifications. 	<p>The LTSA may:</p> <ul style="list-style-type: none"> • talk to you • ask questions to check your competence relating to welding and the assessment of welded repairs or modifications • observe you at work • inspect your <i>Training record</i>. <p>The LTSA may administer a short test on the assessment of welded repairs or modifications.</p>
10.1.3 Technical equipment	
<p>You have:</p> <ul style="list-style-type: none"> • a hand-held inspection lamp • assorted hand tools • a tape measure. <p>The equipment is in good condition and working order.</p>	<p>The LTSA may inspect your technical equipment.</p>

10. Additional topics **Scores**

10.1 Welding

Score:	0	1
10.1.1	Correct technical decisions	
	<p>You do not thoroughly inspect all welded repairs or modifications or correctly determine if the welded repairs or modifications comply with all legal requirements.</p> <p>The area of non-compliance is likely to compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> the welding is of a poor quality, eg weld has poor penetration, undercut or porosity. 	<p>You do not thoroughly inspect all welded repairs or modifications or correctly determine if the welded repairs or modifications comply with all legal requirements.</p> <p>The area of non-compliance may compromise the safety of vehicle occupants or other road users.</p> <p>For example:</p> <ul style="list-style-type: none"> the incorrect welding wire has been used, or welding has been done by an unqualified technician.
10.1.2	Technical competence	
	<p>You demonstrate:</p> <ul style="list-style-type: none"> little or no competence in the technical aspects relating to welded repairs or modifications, or a level of competence that is likely to compromise the safety of vehicle occupants or other road users. <p>This means there are significant gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of welded repairs or modifications, or the legal requirements (including LTSA requirements) relating to welded repairs or modifications, or LTSA guidelines relating to welded repairs or modifications, or the operation of the equipment you use for inspecting welded repairs or modifications. 	<p>You demonstrate:</p> <ul style="list-style-type: none"> some competence in the technical aspects relating to welded repairs or modifications, or a level of competence that may compromise the safety of vehicle occupants or other road users. <p>This means there are some gaps in your knowledge of, or skills in:</p> <ul style="list-style-type: none"> the assessment of welded repairs or modifications, or the legal requirements (including LTSA requirements) relating to welded repairs or modifications, or LTSA guidelines relating to welded repairs or modifications, or the operation of the equipment you use for inspecting welded repairs or modifications.
10.1.3	Technical equipment	
	<p>Not all of the specified equipment is available. Where equipment is available, some or all of it is not in working order.</p>	<p>All specified equipment is available and in working order, but some or all of it is in poor condition.</p>

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You do not thoroughly inspect all welded repairs or modifications or correctly determine if the welded repairs or modifications comply with all legal requirements.

The area of non-compliance is **unlikely** to compromise the safety of vehicle occupants or other road users.

For example:

- the weld appears sound but NDT was incomplete.

You thoroughly inspect all welded repairs or modifications and correctly determine if the welded repairs or modifications comply with all legal requirements.

You demonstrate:

- **adequate** competence in the technical aspects relating to welded repairs or modifications, or
- a level of competence that is **unlikely** to compromise the safety of vehicle occupants or other road users.

This means there are **minor** gaps in your knowledge of, or skills in:

- the assessment of welded repairs or modifications, or
- the legal requirements (including LTSA requirements) relating to welded repairs or modifications, or
- LTSA guidelines relating to welded repairs or modifications, or
- the operation of the equipment you use for inspecting welded repairs or modifications.

You can demonstrate **comprehensive** competence in the technical aspects relating to welding, including its compliance with Land Transport Rules.

This means you can demonstrate **comprehensive** knowledge of, or skills in:

- the assessment of welded repairs or modifications, or
- the legal requirements (including LTSA requirements) relating to welded repairs or modifications, or
- LTSA guidelines relating to welded repairs or modifications, or
- the operation of the equipment you use for inspecting welded repairs or modifications.

All specified equipment is available, in working order, and in at least adequate condition.

All specified equipment is available and in good condition and working order.

