Information Sheet

Practical Driving Assessment for the Authorisation to Drive Heavy and Multi Combination Class Vehicles

The heavy and multi combination driving assessment requires applicants to demonstrate competence in the knowledge and skills to control these classes of vehicles.

There are four parts to the practical driving assessment (assessment) which will be conducted over a minimum of a two-hour duration, this is inclusive of a minimum duration of one hour for the on-road drive section:

- conducting a pre-trip vehicle inspection;
- conducting an uncoupling and coupling procedure;
- conducting a mid-trip vehicle inspection; and
- on-road assessment (minimum one hour).

Failure to demonstrate competence in any part of the assessment will result in failure (Not Met Standard) of the overall assessment.

The assessment will be discontinued when:	The assessor will record 'Not Met Standard' when:
• In the judgement of the assessor, the candidate is not capable of taking the assessment. • Candidate's vehicle is not roadworthy. • Candidate's vehicle is not appropriate for the class or type of licence assessment. • The vehicle breaks down during the assessment. • A bribe or inducement is offered. • In the judgement of the assessor, something that would not normally be present during assessment adversely affects the authenticity, fairness, reliability or validity of the assessment.	• Assessor has to intervene or give assistance to avoid a potentially dangerous situation. • Candidate disobeys a mandatory sign. • Candidate exceeds the speed limit. • Candidate disobeys any traffic regulation that immediately or potentially threatens safety. • Candidate drives without wearing a seatbelt. • Candidate fails to respond to a crisis or potential crisis that would normally be anticipated by an experienced driver. • Candidate causes a crisis or potential crisis. • Candidate removes both hands from the steering wheel while the vehicle is in motion. • Candidate drives with 1/3 of the vehicle or more on the incorrect side of the road in any situation (other than turns when necessary). • Candidate refuses to attempt any part of the assessment. • Candidate refuses to follow any reasonable direction given by the assessor.

Communication

All communication when conducting a pre-trip vehicle inspection, an uncoupling and coupling procedure, and a mid-trip vehicle inspection must be spoken in English. This includes all briefings and directions given from the assessor, along with all verbal responses and clarification for checking and describing items for the candidate.

Minimum standard assessment vehicles that may be used to show ability to control a heavy combination class vehicle.

Minimum standard - assessment vehicles

DTMI requires vehicles used for assessments to conform to particular standards in order for driving ability to be appropriately demonstrated. Listed below are the minimum requirements for assessment vehicles.

HC - heavy combination 1 prime mover with 1 semi-trailer

A prime mover that:

- has at least three axles and a GVM of more than 15 t; and
- is attached to one semi-trailer with at least 2 axles, with an unladen mass exceeding 4,500 kg, a GVM of 16 t or more and a length of at least 10 m;
- vehicle combination to have a minimum on-road mass of 28 t.

HC - heavy combination 2 HR class vehicle with 1 trailer

A motor vehicle, except a prime mover, that:

- has at least 3 axles and a GVM of more than 15 t; and
- is attached to 1 trailer that has an unladen mass exceeding 4,500 kg, a GVM of 16 t or more and a length of at least 7 m;
- vehicle combination to be loaded to have a minimum on-road mass of 29 t.

MC - multi combination 1 (B-double configuration)

1. A prime mover that:

- has at least 3 axles and a GVM of more than 15 t;
- is attached to 2 semi-trailers each of which has at least 2 axles, an unladen mass exceeding 4,500 kg, a GVM of 16 t or more;
- together with the semi-trailers has a length of at least 22 m;
- is a B-double configuration; and
- vehicle combination to be loaded to have a minimum on-road mass of 39 t.

MC - multi combination 2 prime mover with 1 semi-trailer and 1 trailer not in a B-double configuration

2. A prime mover that:

- has at least 3 axles and a GVM of more than 15 t;
- is attached to 1 semi-trailer and 1 trailer, each of which, has at least 2 axles, an unladen mass exceeding 4,500 kg, a GVM of 16 t or more; and a length of at least 10 m; and
- vehicle combination to be loaded to have a minimum on-road mass of 51 t.

MC - multi combination 3 HR class vehicle with 2 trailers

3. A motor vehicle of class HR that:

- has at least 3 axles and a GVM of more than 15 t;
- is attached to 2 trailers each of which has at least 2 axles, an unladen mass exceeding 4,500 kg, a GVM of 16 t or more and a length of at least 7 m; and
- vehicle combination to be loaded to have a minimum on-road mass of 62 t.

Note: All trailers using a fixed drawbar system are measured for length, from the rear of the trailer the eye of the drawbar.

Vehicles deemed suitable for a heavy, manual assessment purpose must:

- Have a clutch that is used for all standard gear changes; and
- A traditional H style or similar gear pattern; and
- Have no automation within the transmission.

A synchromesh transmission is a type of manual gearbox found in modern cars and trucks. The use of collars (synchronisers) within the gearbox aids the driver in making smooth gear changes.

A non-synchromesh transmission doesn't use these collars, this requires the timing of a gear change to be undertaken manually by the driver, using a double de-clutch technique. These gearboxes are commonly known as road-ranger or crash boxes.

For the purpose of the assessment, a double clutching method for gear changes must be used for the majority of the PDA.

Conducting a pre-trip inspection

Stages and key points	
1. Vehicle posture • Visual inspection of front, rear, and sides of complete vehicle combination with verbal confirmation.	**11. Clearance checks** • Confirm that there is sufficient clearance between the landing legs and rear of prime mover. • Confirm that there is sufficient clearance between front of the trailer and rear of prime mover cab.
2. Access to engine compartment • Cab over is correctly tipped to safe position (fully over). • Engine hood raised to safe position or locked (when possible).	**12. Air tanks** • Check air tanks for moisture; or • Acknowledge and identify if vehicle is fitted with air dryer.
3. Fluid levels • All fluid levels where possible under grill. • All fluid levels where possible within engine bay.	**13. Windscreen washers and wipers** • Condition, serviceability and operation of washers and wipers to be confirmed.
4. Leaks • Any fluid leaks are looked for, identified and mentioned. • Any air leaks are listened for, identified and mentioned.	**14. Turntable / Ringfeder** • Check for lubrication. • All welding and securing bolts are present and secure. • Check jaws and release handle are locked.
5. Drive belts, pulleys, fan blades and radiator • Drive belts, pulleys, fan blades and radiator are all checked for serviceable condition with verbal conformation.	**15. Couplings** • Check all couplings, including hook trailer hitches and towing eyes on drawbars. • Suzi coils for air lines and electric supply. • Air line taps are turned on when applicable.
6. Engine and steering components • Engine is checked for cracks, wear, and damage. • Steering column rods and linkages are checked for serviceability and wear.	**16. Lights and indicators** • Check all head and taillights are fully functional. • Check all turn signals are fully functionable. • Check all clearance lights, side markers, numberplate lights and brake lights are fully functionable.
7. Wheels, tyre wear, inflation and condition • Two nuts on each wheel to be checked or full inspection of nut indicators if present. • Wheel and valve general condition. • Spider rims checked for any fresh movement. • Tyres checked for legality, inflation, and debris in between dual tyres.	**17. Vehicle licence and signage** • Confirm correct signage is present and in secure condition. • Confirm all vehicle licence plates are present and secure.
8. Braking system • Check on all visible brake actuators and brakes (discs or drums) throughout, verbalising type and condition.	**18. Safety and emergency equipment** • Identify warning triangles are present. • Identify other safety and emergency equipment present.
9. Body damage • Check vehicle and trailer(s) body parts including chassis throughout for corrosion wear and damage.	**19. Vehicle and load are secure** • Entry steps and grab handles and mirrors. • All body fixings, fuel tanks and caps, spare wheels. • Load straps and chains.
10. Mudguards and mudflaps • Check all mudguards for condition and security. • Check all mudflaps for condition and security.	**Multiple parts of the vehicle and trailer(s) will be checked while walking around, clear verbal confirmation in English is crucial when conducting the pre-trip inspection.**

Conducting an uncoupling procedure

Stages and key points	
Stage 1. Ensure ground is firm and level, and location is legal • Confirm ground (particularly under landing legs) is firm and level. • Confirm location is legal and appropriate. **Vehicle is secured when completing checks (throughout)** • Apply the parking brake. • Select neutral in a manual, select park in an automatic.	**Stage 6. Turntable jaws are released, or drawbar lock pin is raised** • Pin release handle is pulled, releasing jaws. • Ringfeder pin is unlocked and raised if applicable. **Stage 7. Vehicle is moved partially forward** • Truck is slowly moved forward until king pin is free from the turntable locking mechanism (around 30-40 cm). • Turntable must still be completely under trailer skid plate.
Stage 2. Ensure the vehicle and trailer(s) are straight • Ensure the vehicle and trailer combination is straight. • Adjust if necessary.	**Stage 8. Ensure a gap between trailer and turntable** • Landing legs are now lowered further to take full weight of trailer. • Air suspension can be used to assist. • A gap of 1-2 cm between the skid plate and turntable is clearly visible.
Stage 3. Trailer is secured, brakes applied, and chock if necessary • Confirm braking system and necessity to chock (spring brakes).	**Stage 9. Checks for security, and stability of ground confirmed** • Confirmation that ground is still firm. • Confirmation trailer is now secure and completely standing independent from towing vehicle.
Stage 4. Landing legs are lowered • Landing legs are lowered. • Partial weight should be transferred from the turntable to the trailer legs. • Typically, rear mudguards of prime mover (or A trailer) will raise 4-6 cm above wheel.	**Stage 10. Vehicle is moved forward and clear of trailer** • Vehicle is now driven clear of trailer. • Suspension is readjusted for normal ride height when necessary.
Stage 5. Air lines and electrical cables disconnected (taps turned off) • Taps are turned off. • Air lines and electric cables are disconnected. • Any auxiliary / ABS lines are disconnected. • All lines and cables are stowed safely. • Three points of contact are used climbing on to or alighting catwalk.	**Stages 4 & 5 can be performed the other way around. These are the only stages that can be changed around.**

Conducting a coupling procedure

Stages and key points

Stage 1. Vehicle is positioned just forward of trailer

- Close to trailer but not touching or under (about 1 m away).
- Ensure vehicle is straight and aligned with trailer.

Vehicle is secured when completing checks (throughout)

- Apply the parking brake.
- Select neutral in a manual, select park in an automatic.

Stage 2. Trailer is visually inspected for security and roadworthiness

- Walkaround, quick visual roadworthiness inspection.

Stage 3. Braking system is confirmed and chocked if necessary

- Identify braking system and necessity to chock (spring brakes).

Stage 4. Pin size / drawbar pin is compatible for use

- Check for compatibility of pin size with turntable.
- Check for a block behind pin, if present or required for ball race turntable.
- Check turntable, pin and skid-plate are in serviceable condition and lubricated where necessary.

Stage 5. Check jaws are open on turntable, ready to accept pin

- Ensure the turntable is either flat or tilted back and the jaws are open.

Stage 6. Clearances and height are checked

- Ensure that the height of the turntable is slightly lower than the trailer skid plate (approximately 3-5 cm lower than the skid plate is recommended).
- Ensure that there is sufficient clearance between the landing legs and rear of prime mover.
- Ensure that there is sufficient clearance between front of the trailer and rear of prime mover cab.

Stage 7. Slow reverse under, turntable completely under trailer

- Avoid harsh movement by moving the vehicle slowly.
- Stop immediately the turntable is completely under skid plate and before connecting with king pin.

Stage 8. Pin alignment confirmed

- Ensure the turntable is aligned with the kingpin.
- Adjust if not aligned and reverse slightly further until pin is just forward of or within the turntable 'V'.
- If a ball race turntable, the king pin should be within the turntable 'V'.

Stage 9. Landing legs are raised just off the ground

- Weight should be transferred from the trailer legs to the turntable.
- Legs should be raised just off from the ground with 2-3 cm clearance.

Stage 10. Slow reverse under, pin is engaged and locked in

- Truck is slowly reversed until king pin locks into the turntable.
- Usually audible confirmation, but a brief visual check can be performed if uncertain.

Stage 11. Tug test is performed

- Tug test is performed using a low forward gear.
- A second tug test is performed for confirmation.

Stage 12. Pin confirmed as locked in

- A visual check is now performed to confirm jaws and release handle are in the locked position.

Stage 13. Landing legs are fully raised

- Landing legs are fully raised and winding handle stowed.

Stages 13 & 14 can be performed the other way around. These are the only stages that can be changed around.

Stage 14. Air-lines & electrical cables are connected, taps turned on

- Connect air-lines correctly and rotate twist locks.
- Connect electric cables and any auxiliary / abs lines.
- Ensure all air-lines and cables have adequate flexibility and do not rub or catch on obstructions.
- Turn on air supply taps.
- Three points of contact are used climbing on to or alighting catwalk.

Stage 15. Clearances are confirmed

- Confirm that there is sufficient clearance between the landing legs and rear of prime mover.
- Confirm that there is sufficient clearance between front of the trailer and rear of prime mover cab.

Stage 16. All lights are checked

- Check all head and taillights are fully functional.
- Check all turn signals are fully functional.
- Check all clearance lights, side markers, numberplate lights and brake lights are fully functional.

- Remove any chocks used and stow whilst checking lights.
- Stages 15 & 16 can be completed at the same time.

Stage 17. Checks for air leaks are conducted

- Run engine until the air pressure has reached its maximum in the air tanks.
- Activate trailer brakes if required to supply air to trailer air tanks.
- Switch off the engine, fully apply the trailer brakes and walk around the vehicle listening for air leaks.

Stage 18. Mobile steering and brake checks are performed

- At a slow speed (5 km/h) from initial moving off vehicle foot brake is applied all brakes are checked visually for operation using cab mirrors.
- At a slow speed (5 km/h) from initial moving off again, trailer brake is applied, all trailer brakes are checked visually for operation using cab mirrors.
- At a slow speed (5 km/h) from initial moving off again, vehicle is steered to left and right, trailer articulation points are checked visually for correct operation using cab mirrors.

Conducting a mid-trip inspection

Stages and key points

1. Vehicle posture is checked

- Visual inspection of front, rear, and sides of complete vehicle combination with verbal confirmation.

2. Fluid Leaks

- Visual inspection on and under vehicle and trailer(s) for fresh fluid leakage.

3. Air Leaks

- Listen for and identify any air leaks, vehicle and trailer(s).

4. Wheels and hub temperatures

- Two nuts on each wheel to be checked or full inspection of nut indicators if present.
- Wheel and valve general condition.
- Spider rims checked for any fresh movement.
- Wheel hub temperatures checked for overheating.

5. Tyre wear, inflation, and condition

- Tyres checked for legality, inflation and debris in between dual tyres.

6. Body damage

- Check vehicle and trailer(s) body parts including chassis throughout for new wear or damage.

7. Mudguards and mudflaps

- Check all mudguards for condition new damage and security.

8. Turntable, security, and lubrication

- Check for lubrication.
- All welding, and securing bolts are present and secure.
- Confirm jaws and release handle are locked.

9. All Couplings

- Check all couplings, including hook trailer hitches and towing eyes on drawbars.
- Suzi coils for air lines and electric supply.
- Air-line taps are turned on when applicable.

10. Lights and indicators and reflectors

- Check all head and taillights are fully functional.
- Check all turn signals are fully functional.
- Check all clearance lights, side markers, numberplate lights and brake lights are fully functionable.

11. Licence plates and signage

- Confirm correct signage is present and still secure.
- Confirm all licence plates are present and secure.

12. Vehicle and load are secure

- Entry steps and grab handles and mirrors.
- All body fixings, fuel tanks, caps and spare wheels.
- Load straps and chains.

13. Vision and cab safety

- Cab cleanliness is confirmed.
- Windows and windscreen are clean.

Multiple parts of the vehicle and trailer(s) will be checked while walking around, clear verbal confirmation in English is crucial when conducting the mid-trip inspection.

Conducting an on-road assessment

Stages and key points

1. Prepares to drive

- Legal requirements are confirmed (vehicle licence, permits current, access to RAV mapping).
- Cabin drill is performed - verbalise all parts.
- Engine is started.
- All gauges, warning lights confirmed as functioning correctly. Gauges are read air pressure, oil pressure, fuel level, engine temperature and battery charge (if no gauge warning lights are confirmed as light gone out).
- All controls are identified and briefly explained.
- Instruments and switches are monitored, and used throughout the drive when required.
- Before initial moving off, mobile checks are conducted on vehicle and trailer brakes, along with steering and articulation checks.

2. Manages the accelerator and brakes

- Use accelerator and brakes efficiently.
- Use accelerator for best control on inclines.
- Use accelerator for best control when turning.
- Brake sufficiently to slow, stop and control speed when gearing down.

3. Manages the steering

- Steer vehicle smoothly with both hands.
- In a straight line and curves maintain a correct and accurate course.
- Position hands correctly on steering wheel (left hand between 7 & 11 and right hand between 1 & 5).

4. Manages the gears

- Make all gear changes smooth and precise.
- Be in the correct gear at all times (including split gears).
- Adjust to correct speed before selecting a gear.
- Select correct gear in preparation for a severe incline.
- If appropriate and best option, use skip changes.
- Change gear when no steering input is required to turn the wheel.

5. Uses safe driving procedures

- Check mirrors at regular intervals, including before turning, braking and signalling.
- Use signals efficiently whenever required.
- Plan and negotiate the best route ahead.
- Generally, drive efficiently at all times.
- Use good judgment to time all manoeuvring without effecting other vehicles, pedestrians and stay on correct path.
- Be courteous and considerate with all vehicle interaction.

6. Reversing

- When approaching starting position use mirrors and signal as necessary.
- Continually monitor the surrounding area with clear observation.
- Ensure the correct gear is selected and maintain precise control over vehicle and positioning.
- Complete manoeuvre being in a safe and legal position.

- A HC reverse exercise will consist of one left or right reverse into a side street.
- For a HC reverse, one (1) shunt or restart is allowed.
- A MC reverse exercise will always be a straight reverse of at least 70 m. To be completed within 7 minutes.
- For a MC reverse, two (2) shunts or restarts are allowed.

7. Stops, shuts down, secures, and parks vehicle

- Stop and park in a legal position or place.
- Apply park brakes.
- Select neutral gear position or park position if an automatic.

8. Fail when criteria

- If assistance is required or an intervention occurs.
- The driver is in a situation causing a crisis or that could lead to a potential crisis.
- If any traffic regulation, sign or marking is disobeyed.
- Directions given from an assessor are not followed or adhered to.
- Speeding up to 5 km/h over occurs more than once.
- Speeding over 6 km/h occurs at any time.
- Any part of an exercise is unable to be completed under the expected criteria.
- The vehicle is moved off from stationary in high range gear, when range change is a feature of gearbox.
- If both hands are removed from contact with steering wheel when vehicle is in motion (at any speed).
- Gears are lost when changing for seven seconds or more with no recovery.
- The vehicle is driven with one third or more of the vehicle on the wrong side of the road other than when necessary on turns.