



Australian Government

Department of Education, Employment and Workplace Relations

RIIVEH307A Operate heavy rigid vehicle

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit covers the operation of heavy rigid vehicles (with more than 2 axles) including the starting, driving and stopping; and the conduct of operator checks and actions.

Application of the Unit

This unit is appropriate for those working in an operational role at worksites within:

- Civil construction
- Coal mining
- Drilling
- Extractive industries
- Metalliferous mining

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for operations	1.1. Obtain, interpret and clarify/confirm work requirements and details in the form of shift briefings, handover details or work orders before proceeding 1.2. Access, interpret and apply geological and survey data required to complete the allocated work in accordance with site procedures 1.3. Access and apply safety information and procedures throughout the work
2. Operate heavy rigid vehicle	2.1. Resolve coordination activities with others at the site prior to commencement of, and during, the work activity 2.2. Carry out pre-start, start-up, park-up and shutdown procedures in accordance with manufacturer and/or site procedures 2.3. Operate ancillary attachments to the heavy rigid vehicle in accordance with manufacturer instructions and site procedures 2.4. Operate heavy rigid vehicle with or without ancillary attachments in accordance with manufacturer specifications and site procedures 2.5. Manage engine power to ensure efficiency of vehicle movement and to minimise damage to the engine and drive line 2.6. Recognise and respond to hazardous and emergency situations in accordance with manufacturer instructions and site procedures 2.7. Complete work in accordance with the agreed plan and outcomes and within the operating capacity of the heavy rigid vehicle
3. Carry out operator maintenance	3.1. Carry out equipment inspections and fault finding in accordance with manufacturer instructions and site requirements 3.2. Carry out routine operational servicing, lubrication and housekeeping tasks in accordance with manufacturer instructions

	and site authorised procedures and practices 3.3. Carry out minor maintenance to manufacturer instructions and site requirements 3.4. Provide operator support during preparation for, and conduct of, major maintenance tasks in accordance with site requirements 3.5. Process records in accordance with site requirements
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Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to operate heavy rigid vehicles:

- apply operational safety requirements
- access, interpret and apply technical information
- match appropriate equipment with tasks
- maintain equipment records
- use relevant hand tools
- apply diagnostic techniques
- communicate effectively
- apply environmental constraints relate to specified operations
- dispose of environmentally sensitive fluids and materials

Required knowledge

Specific knowledge is required to achieve the performance criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following as required to operate heavy rigid vehicles:

- site and equipment safety requirements
- heavy rigid vehicle operational procedures
- basic mine geological and survey data
- mine operational procedures
- equipment characteristics, technical capabilities and limitations
- heavy rigid vehicle maintenance requirements/procedures
- vehicle record systems
- communication systems
- mine environmental conditions

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following: • knowledge of procedures, requirements and instructions to operate a heavy rigid vehicle appropriate to a mine site • implementation of appropriate procedures and techniques for the efficient and effective operation of a heavy rigid vehicle appropriate to a worksite, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include: • applying personal and operational safety procedures • interpreting and communicating operational information on heavy rigid vehicle operations and mine site traffic rules • completing pre-start, start-up, park-up and shutdown procedures • operating the heavy rigid vehicle for its specified purpose • operating the heavy rigid vehicle within manufacturer instructions/constraints • applying environmental requirements • carrying out operator maintenance
Context of and specific resources for assessment	• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment

	skills • The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job • Customisation of assessment and delivery environment to sensitively accommodate cultural diversity • Aboriginal people and other people from a non English speaking background may have second language issues • Assessment of this competency requires typical resources normally used in the work environment. Selection and use of resources for particular worksites may differ due to site circumstances • Where applicable, physical resources should include equipment modified for people with disabilities • Access must be provided to appropriate learning and/or assessment support when required
Method of assessment	This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods: • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate requirement, procedures and techniques for the safe, effective and efficient achievement of required outcomes • consistently achieving the required outcomes • first hand testimonial evidence of the candidate's: • working with others to operate heavy rigid vehicles
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and equity issues.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Work requirements and details may include:	• heavy rigid vehicle identification/allocation • nature and scope of work • route • working conditions • achievement targets • site lighting arrangements • equipment defects • hazards and potential hazards • coordination requirements/issues • shift briefings • handover details • work orders
Safety information and procedures may include:	• use of seat belts • security of door • conditions of brakes and braking system (air pressure) • load characteristics • vehicle speed • fluid levels • safety requirements, including: • use of authorised cargo restraining equipment • observing authorised parking areas • correct distances between vehicles • observing mine traffic rules • passenger safety and control • load security and safety • transport rules • operations signals procedures
Pre-start procedures may include:	• fluid levels, including fuel, engine oil, brake fluid, coolant, clutch/transmission fluid and windscreen washer fluid • windows and mirrors for clear visibility • tyres and wheels (air pressure, tyre damage,

	- illegal tread depth and condition, abnormal wear pattern and tyre compatibility) - fan belts - seat belts - door hatches and latches - battery and connections - visible and current registration and licences - spare wheel - wheel nuts - rear guards - warning horn
Start-up procedures may include:	- heavy rigids (head heavy mediums, clearance heavy rigids, indicators, hazard heavy rigids, reversing heavy rigids) - brakes - heating and ventilation - instruments and gauges - windscreen washers and wipers
Manufacturer specifications may include:	- engine crank/start - idling - engine rpm - operating temperatures - torque range
Engine power may be managed by:	- selecting gear ratio to achieve smooth take-off - changing gears to maintain specified torque range at all speeds - utilising engine retarder
Operator maintenance procedures are those:	established and authorised for the site
Records may include manual or electronic data collection systems and cover:	- log-on/off - activity recording - trip records - refuelling information

Unit Sector(s)

Vehicle Operations

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.