



Australian Government

Department of Education, Employment and Workplace Relations

AURM340951B Perform pit lane/service area operations

Release: 1

AURM340951B Perform pit lane/service area operations

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit of competency describes the skills and knowledge required to perform pit lane and service operations within the time constraints of motorsport events. It requires the technical ability to prepare for vehicle stops, service and perform adjustments or emergency repairs during stops, and conduct post-stop clean-ups. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
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Application of the Unit

Application of the unit	This unit applies to individuals who undertake repairs, adjustments and service work on competition vehicles during pit lane, pit bay or service area stops in a motorsports environment.
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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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. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for work	1.1. Use team instructions/specifications and category rules and supplementary regulations to determine job requirements, including configuration, quality, equipment and quantities 1.2. Observe occupational health and safety (OHS) requirements, including regulatory requirements, complying with controlling body rules, category rules and supplementary regulations, equipment and system isolation requirements, and personal protection needs, throughout the work 1.3. Position equipment and tooling and eliminate hazards and obstacles to ensure path of movement 1.4. Locate tooling and equipment and check for safe and effective operation 1.5. Clean and lay out work area for job requirements
2. Follow pit lane/service area safety procedures	2.1. Fit jacks and other lifting devices, including lifting lock-outs, prior to underbody servicing 2.2. Follow fire hazard and prevention procedures according to team procedures or event category rules and supplementary regulations 2.3. Use pit lane/service area signals according to team procedures, and event category rules and supplementary regulations 2.4. Follow event category and supplementary regulations relating to pit lane/service area operations 2.5. Monitor non-team persons access to pit area and walkways according to team procedures
3. Conduct pit stop/competition vehicle service	3.1. Check competition vehicle components according to team pit stop/service area schedule 3.2. Perform minor adjustments in accordance with instructions 3.3. Conduct emergency repairs in accordance with instructions 3.4. Replace components, as required 3.5. Modify work practices and pit stop/service area procedures to manage contingency issues 3.6. Report problems to team members
4. Conduct post-stop clean-up	4.1. Prepare and position tooling and equipment ready for the next vehicle stop 4.2. Tag and shelve/store surplus

ELEMENT	PERFORMANCE CRITERIA
	components/consumables 4.3. Clean spillage and dispose of correctly 4.4. Complete team/event documentation

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Required skills include:

- technical skills to the level required to use workplace technology related to servicing and conducting emergency repairs on a competition vehicle, including tooling, equipment and measuring devices, and use checking and inspection techniques
- communication skills to the level required to communicate ideas and information to respond to issues during pit stops/competition and vehicle servicing, and to report problems for post-stop or post-event analysis
- literacy skills to the level required to collect, organise and understand information related to servicing procedures and emergency repairs
- numeracy skills to the level required to use mathematical ideas and techniques to correctly complete measurements and adjustments
- problem-solving skills to the level required to identify faults or required adjustments and analysis and judgement when interpreting instructions for adjustment and emergency repair within strict timeframes
- team skills to the level required to work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow within strict timeframes
- planning skills to the level required to plan and organise activities, including conduct of service procedures to avoid backtracking or workflow interruptions

Required knowledge

Required knowledge includes:

- controlling body rules, category rules and supplementary regulations and team requirements/job specifications
- work area layout at an event
- preparation processes applicable to pit stops/service area
- pit stop/service area sequence and conduct

REQUIRED SKILLS AND KNOWLEDGE

- pit/lane service area signals and communication techniques
- emergency repair methods and techniques
- record keeping techniques
- equipment faults and component defects reporting procedures
- workplace guidelines regarding acceptable tolerance levels
- OHS policies and procedures
- applicable commonwealth, state or territory legislation, regulations, standards and codes of practice, including OHS, personal safety and environment, relevant to performing pit lane servicing operations

Evidence Guide

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

Assessors must be satisfied that the candidate can competently and consistently:

- apply team requirements, controlling body and category rules and supplementary regulations
- correctly apply and use safety equipment and personal protective equipment
- follow task instructions, operating procedures and inspection processes to:
 - minimise the risk of injury to self or others
 - prevent damage to competition vehicle or equipment
 - achieve required outcomes within team time and quality standards
- correctly perform pit lane/service area operations on a minimum of 2 (two) occasions, both of which must be at an appropriate event
- work with and around other team members
- work effectively with others
- modify activities to cater for variations in workplace context and environment.

Context of, and specific resources for assessment

- The application of competency is to be assessed in the workplace or a simulated environment that reflects as far as possible the actual working environment.
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints.
- Assessment is to comply with relevant regulatory requirements, including specified Australian standards.
- Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.
- The following resources should be made available:
 - process equipment, material, work instructions and deadlines
 - access to a competition vehicle at an appropriate event

EVIDENCE GUIDE	
	motorsport team procedures and instructions.
Method of assessment	- Assessment must satisfy the endorsed Assessment Guidelines of this Training Package. - Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of Required Skills and Knowledge. - Assessment methods must be by direct observation of tasks and include questioning on Required Skills and Knowledge to ensure its correct interpretation and application. - Assessment may be applied under project-related conditions (real or simulated) and require evidence of process. - Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances. - Competence in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role.
Guidance information for assessment	Assessment processes and techniques must be culturally sensitive and appropriate to the language and literacy capacity of the candidate and the work being performed.

Range Statement

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. 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.	
Servicing of the vehicle	Servicing of the vehicle as allowed in: - event category and supplementary regulations - emergency repairs - supporting driver changeover

RANGE STATEMENT	
Stops	Stops include: • scheduled stops according to event category/ supplementary regulations • unscheduled stops for emergency repairs or refuelling
Pit stops/competition vehicle servicing tasks	Pit stops/competition vehicle servicing tasks may include: • replacing tyres/wheels • refuelling • cleaning windscreen/visor/fairing/screen • minor adjustments (e.g. wing angles and roll centres) • removing pit stop notification tag
OHS requirements	OHS requirements are to be in accordance with applicable commonwealth, state or territory legislation and regulations, and organisational safety policies and procedures, and may include: • personal protective equipment and clothing, including closed shoes, long trousers, fire-retardant gloves, crash helmets and other equipment • safety equipment • first aid equipment • hazard and risk control • control of hazardous materials and substances • manual handling, including shifting, lifting and carrying • emergency procedures • team insurance requirements • material safety management systems • controlling body requirements • manufacturer specifications • local safe operating procedures
Legislative requirements	Legislative requirements are to be in accordance with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice, and may include: • award and enterprise agreements • industrial relations

RANGE STATEMENT	
	• Australian standards • confidentiality and privacy • OHS • the environment • equal opportunity • anti-discrimination • duty of care
Tooling and equipment	Tooling and equipment may include: • gas bottles and boom • toolbox components (e.g. spanners, wrenches and screwdrivers) • race tape • impact (rattle) gun • refuelling churns/rigs • lubricants and coolants • tyre pressure gauges and pyrometers • go-jacks • safety jacking stands • lifting stands • tyre warmers • restarting equipment
Material	Material may include: • automotive fuel • coolants • lubricants and cleaning agents • supplementary regulations • team procedures
Information and procedures	Information and procedures may include: • controlling body rules, category rules and supplementary regulations • team procedures and standards relating to: • pit lane/service area operations • reporting and communication • use of tooling and equipment • emergency service contacts and team persons emergency contacts • team emergency and event procedures for accidents or injury

RANGE STATEMENT

	- work instructions, including worksheets, material safety data sheets (MSDS), assembly procedures, plans, drawings, designs and checklists - manufacturer/component supplier specifications and application procedures for test equipment and material - safety body publications - environmental, hazardous chemicals and dangerous goods legislation and local requirements relating to the disposal and use of fuels, lubricants, coolants and cleaning agents
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Unit Sector(s)

Unit sector	Motorsport
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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