



Australian Government

AURM441638A Manage the preparation of a competition vehicle

Release: 1

Modification History

Not Available

Unit Descriptor

Unit Descriptor This unit covers the work involved in researching competition vehicle assembly requirements, developing preparation specifications and checklists, developing preparation schedules and supervising competition vehicle preparation and post-preparation checks.

Unit Sector No sector assigned

ELEMENT

PERFORMANCE CRITERIA

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| 1. Research information to develop preparation specifications and checklists | 1.1 Regulatory body and category rules, supplementary regulations and component supplier specifications are used to develop task specifications and team instructions including design, quality, material, equipment and quantities
1.2 Regulations and specifications/tolerances are examined for competitive advantage
1.3 OH&S requirements, including regulatory requirements, equipment and system isolation requirements and personal protection needs are observed throughout the work
1.4 Job specifications are written containing steps and stages and are communicated to appropriate persons
1.5 Preparation checklists are produced
1.6 Procedures are developed for minimising waste material |
| 2. Develop preparation schedule | 2.1 Equipment and appropriate person capabilities are assessed in terms of meeting job specifications
2.2 Constraints to schedule are considered. These may include timing and location of upcoming event and equipment/component and appropriate persons availability
2.3 Optimum sequence for preparation is determined and documented
2.4 Critical path and factors affecting that path are considered and documented
2.5 Preparation schedule is produced and communicated to appropriate persons |
| 3. Supervise preparation | 3.1 Implementation of preparation schedule is monitored
3.2 Work area cleanliness and layout for job requirements is |

monitored

3.3 Inspections for quality and readiness of components for installation are supervised

3.4 Installation sequence and techniques are supervised

3.5 Checks are made during and after installation to ensure accurate and complete fitting

3.6 Problems with the work area or the operation of equipment are evaluated and decisions made

3.7 Proposals for modifications or adaptation of equipment and components are evaluated and decisions made

4. Supervise
post-preparation checks

4.1 Vehicle is inspected and problems are identified and addressed

4.2 Post-preparation checks and vehicle start-up are supervised

4.3 Vehicle baseline set-up is supervised

4.4 Clean-up of work area is supervised

4.5 Recording of work and vehicle documentation is inspected for completion

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

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.

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| Unit scope | <ul style="list-style-type: none"> • Work includes researching competition vehicle assembly requirements, developing preparation specifications and checklists, developing preparation schedules and supervising competition vehicle preparation and post-preparation checks |
| Unit context | <ul style="list-style-type: none"> • OH&S requirements include State/Territory and Commonwealth legislation, material safety management systems, controlling body requirements, manufacturer specifications and local safe operating procedures • Work is carried out in accordance with legislative obligations (including environmental requirements), health regulations, manual handling procedures and team insurance requirements |

	• Work requires individuals to demonstrate analytical and organisational ability, judgement and problem-solving skills in the management of competition vehicle preparation • Competitive advantage may include technical advantage, psychological advantage and promotional advantage
Preparation checklists	• Preparation checklists may include, but is not limited to: • assembly checklists • worksheets • pre-race/event checklist • pit lane checklists • post-race/event checklists
Tooling and equipment	• Tooling and equipment may include, but is not limited to: • hand tooling • measuring devices • computers
Personal protective equipment	• Personal protective equipment is to include that prescribed under legislation, regulations and enterprise policies and practices
Information and procedures	• Controlling body rules, category rules and supplementary regulations • Team procedures relating to the preparation of competition vehicles • Task instructions including worksheets, checklists, plans, drawings and designs • Team procedures relating to reporting and communication • Team procedures relating to the use of tooling and equipment • Manufacturer/component supplier specifications and application procedures for test equipment and material • Australian Design Rules (where applicable) • Motorsport/performance enhancement industry publications and electronic sources of information related to the preparation of competition vehicles

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.

Critical aspects of evidence	• Interpret and apply team requirements, controlling body and category rules and supplementary regulations
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	• 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 manage the preparation of a competition vehicle on at least two (2) occasions. The following must be covered: • develop task specifications, preparation checklists and schedule • supervise competition vehicle preparation and post-preparation checks • Work effectively with others • Modify activities to cater for variations in workplace context and environment
Underpinning knowledge	• Team requirements/job specifications, supplementary regulations and component supplier specifications including the examination of information for competitive advantage • Resources availability, including competencies of individuals in the team/group • Specification, checklist and schedule preparation • Work area and component layout • Inspection methods • Assembly and preparation processes applicable to competition vehicles • Problem-solving techniques • Supervision of OH&S requirements • Record keeping techniques
Specific key competencies, underpinning and employability skills required to achieve the performance criteria	These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit. Application of the key competencies in this unit are to satisfy the nominated level in which: Level 1 - relates to working effectively within set conditions

	and processes; Level 2 - relates to the management or facilitation of conditions or processes; and Level 3 - relates to the design, development and evaluation of conditions or process. How will the candidate apply the following key competency in this unit? The candidate will need to:
Collect, analyse and organise information	Research, collect, organise and understand information related to competition vehicle assembly and preparation processes including the technical, regulatory, environmental and safety requirements (Level 3)
Communicate ideas and information	Communicate ideas and information to enable clarification of requirements, coordination of work with technical supervisors and other team members, reporting of work outcomes and resolution of problems (Level 2)
Plan and organise activities	Plan and organise activities including the development of specifications, checklists and schedules and the coordination of appropriate persons, equipment, systems and material to avoid back-tracking, workflow interruptions or wastage (Level 3)
Work with others and in a team	Work with others to foster the team by recognising dependencies and using cooperative approaches to optimise communication, workflow and productivity (Level 3)
Use mathematical ideas and techniques	Use mathematical ideas and techniques to correctly complete measurements and calculations required during the management of the preparation of a competition vehicle (Level 2)
Solve problems	Create and apply systematic problem-solving techniques to anticipate problems, avoid reworking and avoid wastage (Level 3)
Use technology	Use workplace technology related to the management of assembly and preparation including tooling, measuring

	devices, equipment, calculators and computers (Level 2)
Resource implications	• Access to competition vehicles and assembly tooling in real or simulated situations involving the application of assembly techniques and the related computing, operational and inventory support systems • Access to real or simulated work areas, material, equipment and information on work specifications, team requirements, organisational procedures, safety procedures and regulations, and quality standards
Method of assessment	• Assessment methods must confirm consistency of performance over time and in a range of workplace contexts • Assessment should be by direct observation of tasks and questioning on underpinning knowledge • Assessment should be conducted over time and may be in conjunction with assessment of other units of competence
Context of assessment	• Assessment may occur on the job or in a workplace simulated facility with process equipment, material, work instructions and deadlines