



Australian Government

AURMTA102 Assemble and prepare competition vehicles for motor sport events

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 6.0

Application

This unit describes the skills and knowledge required to assemble and prepare a competition vehicle in a motor sport environment. It involves preparing for the task, preparing components, installing sub-assemblies and systems, setting vehicle baseline configuration according to team requirements, supplementary regulations and component supplier specifications, and completing workplace processes and documentation.

The unit applies to those working in the motor sport industry. A competition vehicle is any vehicle that competes in a motor sport event of a competitive nature under one of the following categories: race, speed, rally road, off road, auto test and timed.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Motorsport Technical

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Collect event category information and analyse assembly requirements	1.1 Determine job requirements from event category information and workplace instructions 1.2 Check vehicle operating conditions and seek clarification of specifications as required 1.3 Source and interpret methods for assembly and preparation and select those required for the circumstances 1.4 Propose modifications or adaptation of equipment as required 1.5 Prepare component requirements list and communicate to

ELEMENTS	PERFORMANCE CRITERIA
	required persons 1.6 Determine procedures for minimising waste material
2. Prepare work area and equipment	2.1 Source and check tools and equipment for safe and effective operation 2.2 Clean and lay out work area for job requirements according to work safety requirements and team procedures 2.3 Identify hazards associated with the work and manage risks 2.4 Report problems with work area or operation of equipment to persons according to team procedures
3. Prepare components for assembly	3.1 Source and interpret assembly procedures and information 3.2 Clean components to facilitate pre-assembly inspection according to team procedures and safety and environmental requirements, and without causing damage to components 3.3 Inspect components for function and quality to ensure optimum use of resources 3.4 Report problems with components to persons according to team procedures as required
4. Install sub-assemblies	4.1 Inspect sub-assemblies for quality and readiness for installation according to manufacturer specifications 4.2 Install sub-assemblies and tension fasteners according to safety requirements and manufacturer installation sequences and techniques 4.3 Make checks to ensure accurate and complete fitting according to team procedures and manufacturer specifications 4.4 Report problems with sub-assemblies to persons according to team procedures as required
5. Install ancillary systems	5.1 Locate critical components according to function, susceptibility to damage, and ease of maintenance 5.2 Install critical components and tension fasteners according to team procedures and manufacturer specifications 5.3 Confirm optimum layout for wiring loom, connectors, hoses, hard lines and ancillary components 5.4 Install wiring loom, connectors, hoses, hard lines and ancillary components and tension fasteners according to manufacturer specifications, team procedures and safety requirements 5.5 Secure entire installation and shield to maximise reliability and minimise susceptibility to damage according to manufacturer specifications, team procedures and safety requirements 5.6 Make checks during and after installation to ensure accurate and complete fitting according to team procedures and manufacturer specifications

ELEMENTS	PERFORMANCE CRITERIA
	5.7 Report problems with components to persons according to team procedures as required
6. Conduct post-assembly checks	6.1 Check and top up vehicle fluid levels as required according to team procedures and manufacturer specifications 6.2 Remove temporary bungs and covers and conduct engine pre-start checks 6.3 Check sub-assemblies and ancillary systems for operation
7. Set vehicle baseline configuration	7.1 Determine vehicle baseline settings from team instructions, category regulations, and component supplier specifications 7.2 Establish level surface on which to place vehicle for set-up 7.3 Install springs and dampers according to manufacturer specifications, team procedures and safety requirements 7.4 Measure and adjust ride height and corner weight as required and according to manufacturer specifications, team procedures and safety requirements 7.5 Measure and adjust steering angles as required and according to manufacturer specifications, team procedures and safety requirements 7.6 Report potential or existing problems to persons according to team procedures as required
8. Complete work processes	8.1 Conduct final inspection according to workplace procedures and confirm vehicle is ready for use 8.2 Clear work area and dispose of or recycle materials according to workplace procedures 8.3 Check and store tools and equipment, and pack and store surplus components and consumables according to workplace procedures 8.4 Complete documentation according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Learning	Locates required sources of information efficiently.
Numeracy	- Measures components and uses basic addition, subtraction, division and multiplication, to calculate tolerances and clearances - Uses basic mathematical operations to calculate volume and area.
Oral communication	- Clarifies instructions - Reports problems with the work area, the operation of the equipment, or components and sub-assemblies.
Reading	Interprets team instructions, supplementary regulations and manufacturer specifications.
Problem solving	Determines assembly sequence and avoids backtracking or workflow interruptions.

Unit Mapping Information

Supersedes and is equivalent to AURMTA002 Assemble and prepare a competition vehicle for motor sport events.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>