

1. Title	Undertake component function tests for trains after installation
2. Code	EMRAIN402A
3. Range	Undertake component function tests for trains after installation according to installation instructions and equipment functions, and record the data as reference for testing.
4. Level	4
5. Credits	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Working principles and function test standards for the major systems and equipment of trains</p> <ul style="list-style-type: none"> ◆ Understand the working principles of the major systems and equipment of trains, including: <ul style="list-style-type: none"> • Power system • Traction supply system • Brake system • Pneumatic system • Auxiliary system • Protection system ◆ Understand the scope and standards of component function tests for the major systems and equipment of trains <p>6.2 Methods and procedures of function tests for the major systems and equipment of trains</p> <ul style="list-style-type: none"> ◆ Able to read the installation instructions of the major systems and equipment of trains and select information for component function tests ◆ Make preparations for undertaking function tests for the major systems and equipment of trains, such as visual inspection and insulation tests for electrical equipment ◆ Undertake component function tests for the major systems and equipment of trains according to installation instructions and relevant information ◆ Maintain a proper and accurate record of certain component function tests and measurements ◆ Enforce sufficient safety and protective measures for undertaking train equipment function tests ◆ Use general E&M and pneumatic equipment checking instruments and certain dedicated instruments for train function tests efficiently <p>6.3 Professionalism in component function tests for the major systems and equipment of trains</p> <ul style="list-style-type: none"> ◆ Undertake component tests for trains after installation according to the standards and requirements for work safety, health, environmental protection and quality management of railway works ◆ Understand the safety guidelines as required by the law and codes of practice in handling component function tests for train equipment

7. Assessment Criteria	The integrated outcome requirement of this unit of competency is: (i) Capable to undertake safely and efficiently component function tests for the major equipment of trains according to the standards based on installation instructions and equipment functions, and to measure the data from such tests and maintain an accurate record.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses knowledge of electrical, mechanical and train equipment.