

1. Title	Formulate maintenance instructions for pneumatic system equipment of trains
2. Code	EMRAMA502A
3. Range	Formulate maintenance instructions for pneumatic system equipment of trains by referring to their design and the repairing guidelines provided by the manufacturer, and considering the overall operational performance of trains and their repair arrangements and history.
4. Level	5
5. Credits	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Design, structure and working principles of pneumatic system equipment of trains</p> <ul style="list-style-type: none"> ◆ Be familiar with the design, structure and working principles of pneumatic system equipment of trains ◆ Apply the repairing guidelines provided by the manufacturer ◆ Master the techniques in calculating the standard for maintaining pneumatic system equipment of trains ◆ Master the applications of instrument and tools commonly used for measuring and checking pneumatic equipment of trains <p>6.2 Method and procedures of formulating maintenance instructions for pneumatic system equipment of trains</p> <ul style="list-style-type: none"> ◆ By referring to the design of air compressor of trains and the repairing guidelines provided by the manufacturer, and considering the overall operational performance of trains and their repair arrangements and history, capable to draft maintenance instructions for the air compressor of trains, including: <ul style="list-style-type: none"> • Maintenance procedures • Maintenance standards • Adjustments, setting and preliminary function tests • Points to note during maintenance ◆ Capable to test the draft maintenance instructions ◆ Capable to analyze data, amend and formulate maintenance instructions for air compressor of trains ◆ Capable to draft, test, analyze data and formulate maintenance instructions for the air compressors control and protection equipment ◆ Capable to draft, test, analyze data and formulate maintenance instructions for the pipe line installations and protection equipment of trains ◆ Capable to draft, test, analyze data and formulate maintenance instructions for the various pipe line and pneumatic equipment of the pneumatic systems of trains ◆ Capable to draft, test, analyze data and formulate maintenance instructions for pressure and leak tests of the entire pneumatic system of trains

	<p>6.3 Professionalism in formulating maintenance instructions for pneumatic system equipment of trains</p> <ul style="list-style-type: none"> ◆ Capable to formulate maintenance instructions and standards for pneumatic system equipment of trains 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 formulating maintenance instructions for pneumatic system equipment of trains
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <ul style="list-style-type: none"> (i) Capable to draft maintenance instructions for specified major pneumatic equipment of trains in compliance with the maintenance requirements for train equipment; and (ii) Capable to test the effectiveness of the draft maintenance instructions analyze data and make amendments effectively.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses professional knowledge of pneumatic equipment engineering and is familiar with the pneumatic equipment of trains.</p>