

1. Title	Repair diesel engines
2. Code	EMSRRM208A
3. Range	Use common or tailor-made mechanical tools to repair or maintain diesel engines e.g. diesel engines below 3000kW (or 4000BHP), at repair workshops or locations with diesel engines according to repair instructions and standards.
4. Level	2
5. Credit	4
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Structure and basic principles of diesel engine</p> <ul style="list-style-type: none"> ◆ Understand the structure and basic principles of various component systems of a diesel engine, including: <ul style="list-style-type: none"> • The principles of a diesel engine - suction, compression, power and exhaust • Engine cylinder and its mechanical devices • Fuel supply system • Fuel injector and fuel filter • Governor and its control devices • Cooling system and equipment • Lubrication system and equipment <p>6.2 Methods and procedures of repairing diesel engines</p> <ul style="list-style-type: none"> ◆ Capable to assemble, dismantle, and align the mechanical jointing of a diesel engine and its loading equipment ◆ Capable to repair various component systems and fittings of a diesel engine effectively, including checking, cleaning, measurement, maintenance and testing, according to repair instructions and standards ◆ Handle and eliminate faults in diesel engine effectively ◆ Test the overall performance of a diesel engine ◆ Capable to use common and tailor-made mechanical tools and inspection instruments effectively <p>6.3 Professionalism in diesel engine repair and maintenance</p> <ul style="list-style-type: none"> ◆ Capable to perform general repair and maintenance of diesel engines according to repair instructions and standards ◆ Understand the legal requirements on work safety and the code of practice when performing repair and maintenance of diesel engines

7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"><li data-bbox="379 304 1469 376">(i) Capable to check and maintain the core systems of a diesel engine effectively and correctly according to repair standards; and<li data-bbox="379 405 1469 477">(ii) Capable to adjust and test various component systems of a diesel engine effectively so as to accurately control the operational performance of the engine.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of repairing mechanical equipment.</p>