

1. Title	Lead workgroups to maintain and repair auxiliary units of ships	
2. Code	EMSRRM402A	
3. Range	In daily tasks related to maintenance of ships and marine auxiliary units, apply the knowledge on these areas to lead workgroups to maintain and repair auxiliary units of ships, formulate work specifications, and supervise repairs.	
4. Level	4	
5. Credit	3	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Working principles and repair items of auxiliary units of ships</p> <ul style="list-style-type: none"> ◆ Understand the operation and maintenance items of marine auxiliary machinery, including pumping system , heat energy exchanger, fresh water machine, refrigeration machine, air compressor, blower, oil purifier and auxiliary boiler, and the steering gear system ◆ Understand the operation and maintenance items of control system, cargo handling equipment and deck machinery ◆ Master the repair standards for fire fighting facilities onboard, ballast pump suction, fuel supply, waste water and piping systems <p>6.2 Leading workgroups to maintain and repair auxiliary units of ships</p> <ul style="list-style-type: none"> ◆ Plan and supervise the maintenance/repairs of auxiliary units of ships, ensure that the work procedures are carried out according to approved practice, and the performance of the units meets the technical specification in manufacturer’s maintenance manual ◆ Ensure that the safe and high-performance operation and status of marine auxiliary equipment is applicable to different modes of operation <p>6.3 Professionalism in leading the groups to maintain and repair auxiliary units of ships</p> <ul style="list-style-type: none"> ◆ Check the actual status of operation of the auxiliary units of ships to see if the performance of units tallies with manufacturer’s guidelines or the requirements in the maintenance manual ◆ Take action according to approved practice or the specifications and limitations recommended in repair manuals, and make decisions on repair methods ◆ Prepare repair procedures and coordinate the repairs 	

7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to lead the workgroups to carry out maintenance and repairs of auxiliary units of ships; identify causes of failures of machines and methods to eliminate the failures according to approved procedures or repair manual instructions; and (ii) Capable to effectively supervise the repairs of auxiliary units of ships, and adopt the most appropriate repair measures to restore the functions of the units.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses basic mechanical principles and the knowledge of repairing auxiliary components and equipment of ships (such as: EMSRRM204A “Repair and maintain ship auxiliary equipment” and EMSRIN301A “Assemble and install marine engineering system and mechanical equipment”) and know about the basic management and planning techniques.</p>