

1. Title	Repair and maintain window type and split type air-conditioners
2. Code	EMACOR302A
3. Range	Perform repairs and maintenance of window type and split type air-conditioners, including performance tests and fault detection, independently at servicing stations or work sites.
4. Level	3
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of repairing and maintaining window type and split type air-conditioners</p> <ul style="list-style-type: none"> ◆ Understand the construction and working principles of window type and split type air-conditioners, including: <ul style="list-style-type: none"> • Refrigeration system • Air delivery system • Electrical control system ◆ Understand the structure and working principles of split type air-conditioners, including: <ul style="list-style-type: none"> • Refrigeration system • Air delivery system • Electrical control system ◆ Master the knowledge of repairing window type and split type air-conditioners ◆ Master the knowledge of maintaining window type and split type air-conditioners <p>6.2 Methods and procedures of repairing and maintaining window type and split type air-conditioners</p> <ul style="list-style-type: none"> ◆ Test the performance of air-conditioners, including: <ul style="list-style-type: none"> • Checking the condensate drain to assess whether the air-conditioner works properly • Checking the temperature difference of the supply air and return air of the indoor unit to assess whether the air-conditioner works properly • Checking the operating current to assess whether the air-conditioner works properly • Checking the high side pressure and low side pressure of the refrigeration system to assess whether the air-conditioner works properly ◆ Replenish and recover refrigerants, including: <ul style="list-style-type: none"> • Operating the suction valve to replenish the refrigerant • Determining the correct charge of the refrigerant • Recovering the refrigerant before removing the split type air-conditioner

	<ul style="list-style-type: none"> ◆ Check and repair typical faults of air-conditioners, including: <ul style="list-style-type: none"> • Using typical tools for repairing air-conditioner • Checking and repairing typical faults of refrigeration system • Checking and repairing typical faults of heat dissipation system • Checking and repairing typical faults of air delivery system • Checking and repairing typical faults of electrical control system <p>6.3 Professionalism in repairing and maintaining window type and split type air-conditioners</p> <ul style="list-style-type: none"> ◆ Undertake tasks of repairing and maintaining window type and split type air-conditioners according to codes of practice
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to conduct tests to detect faults; to complete tasks of repairing and maintaining window type and split type air-conditioners independently and efficiently; and (ii) Capable to undertake tasks of repairing and maintaining window type and split type air-conditioners safely according to codes of practice.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge and skills of repairing and maintaining window type and split type air-conditioners.</p>