

1. Title	Maintain the hydraulic power units of hydraulic lifts
2. Code	EMLEOR310A
3. Range	Arrange and implement the maintenance of the hydraulic power units of hydraulic lifts at field locations.
4. Level	3
5. Credit	3
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Structure and working principles of the hydraulic power units of hydraulic lifts</p> <ul style="list-style-type: none"> ◆ Understand the structure and working principles of different kinds of 3-phase AC motor including: <ul style="list-style-type: none"> • AC star-delta controlled motor • AC variable voltage variable frequency controlled motor ◆ Understand the structure and working principles of different kinds of hydraulic oil pump including: <ul style="list-style-type: none"> • screw-type hydraulic oil pump • gear-type hydraulic oil pump • vane-type hydraulic oil pump ◆ Understand the structure and working principles of different kinds of oil valve controller including: <ul style="list-style-type: none"> • single-stage variable speed oil valve controller • 2-stage variable speed oil valve controller • stage-less variable speed oil valve controller <p>6.2 Maintenance methods and procedures for the hydraulic power units of hydraulic lifts</p> <ul style="list-style-type: none"> ◆ Know the repair and maintenance procedures for different kinds of hydraulic power unit including: <ul style="list-style-type: none"> • inspection, cleaning, oiling and testing ◆ Know the repair and maintenance of different kinds of hydraulic power unit including: <ul style="list-style-type: none"> • 3-phase AC motors such as bearing, belt pulley and coupling • hydraulic oil pumps such as bearing, belt pulley, coupling, oil seal and packing seal • oil valve controllers such as manual hydraulic pump, hydraulic pressure gauge, oil seal and packing seal • hydraulic oil cooling devices such as oil cooling pump, cooling oil tank and cooling fan ◆ Arrange and implement maintenance instructions for the hydraulic power units of hydraulic lifts ◆ Effectively use repairing and testing instruments and tools

	<p>6.3 Professionalism in handling the hydraulic power units of hydraulic lifts</p> <ul style="list-style-type: none"> ◆ Follow manufacturer's maintenance instructions to arrange and implement the maintenance of hydraulic power units ◆ Understand the requirements of safety guidelines and the code of practice for lifts in order to perform the maintenance of hydraulic power units
7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to master the construction and key points of repair and maintenance of the hydraulic power units of hydraulic lifts; (ii) Capable to systematically and effectively complete the repair and maintenance of the hydraulic power units of hydraulic lifts; (iii) Capable to arrange and implement the maintenance instructions for the hydraulic power units of hydraulic lifts; and (iv) Capable to follow manufacturer's maintenance instructions to arrange and implement the maintenance of the hydraulic power units of hydraulic lifts.
8. Remarks	<p>The credit value of this unit of competency is set on the presumption that the person already possesses knowledge and skills in maintaining the hydraulic power units of general hydraulic lifts.</p>