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SELF - ASSESSMENT GUIDE

Qualification:	LAND-BASED TRANSPORT MOBILE AIR-CONDITIONING SERVICING NC II		
Unit of Competency covered:	<ul style="list-style-type: none"> • Service and maintain mobile air-conditioning units • Troubleshoot and repair mobile air-conditioning systems • Perform start-up, test and commissioning for mobile air-conditioning systems 		
Instruction:			
<ul style="list-style-type: none"> • Read each of the questions in the left-hand column of the chart. • Place a tick in the appropriate box opposite each question to indicate your answer. 			
Can I?	YES	NO	
Clean and replace air filter			
• Identify and remove air filter following standard operating procedures (SOPs)			
• Check air filter for damage and replaced if required in line with SOPs			
• Clean air filter using the correct tools and cleaning procedures			
• Replace air filter in accordance with filter specifications			
Service evaporator/ condenser assembly			
• Select tools in dismantling the evaporator/ condenser as per standard operating procedures (SOPs)			
• Pull out and disassemble evaporator/condenser as per manufacturer's service manual *			
• Use high pressure washer and compressed air in cleaning evaporator/condensing coil based on established enterprise procedures *			
• Straighten evaporator/condenser coil fins in accordance with service procedure *			
• Use cleaning agent or non-corrosive chemical in cleaning and maintaining evaporator/ condensing coil, fins and other body accessories as per standard operating procedures (SOPs) *			
• Maintain condenser fan motor and evaporator blower assembly as per standard operating procedures*			
• Flush evaporator/condenser assembly using updated environment friendly flushing solution and oxygen-free nitrogen (OFN) as per manufacturer's service manual*			
• Assemble evaporator/condenser as per manufacturer's service manual*			

Perform leak testing, evacuation and charging		
• Perform leak testing as per manufacturer’s service manual *		
• Perform evacuation following SOP *		
• Perform charging following SOP *		
• Check operating parameters following SOP *		
Service compressor assembly, pulley and belt		
• Service magnetic clutch in line with manufacturer’s instruction*		
• Maintain alignment of compressor, pulley and belt tension in line with SOP*		
• Check compressor parameters in line with manufacturers service manual *		
• Check belt for damaged and replaced if necessary, as manufacturer’s service manual *		
• Service loose tube and hose fittings in line with manufacturer’s instruction *		
Service electrical power and control circuits		
• Use proper instrument in checking power supply and diagnosing electrical control system *		
• Check, repairs and reports loose connections/ wirings in line with SOP *		
• Check fuse and terminal sockets in line with SOP *		
• Service electrical controls in line with SOP *		
• Check motor controls for train system in line with manufacturer’s specifications *		
• Check grounding in line with SOP *		
Accomplish service and maintenance report		
• Report all defects and problems encountered in line with enterprise policies and procedures.		
• Report observation and recommendation in line with enterprise policies and procedures.		
Plan and prepare for troubleshooting and repair		
• Interpret appropriate wiring diagrams, charts and manuals in line with the job requirements *		
• Select appropriate materials, tools and equipment based on job requirements *		

<ul style="list-style-type: none"> Observe work safety during preparation according to established operating standards * 		
Identify and repair faults/ troubles		
<ul style="list-style-type: none"> Select and use appropriate PPE in line with job requirements * 		
<ul style="list-style-type: none"> Test components following manufacturer's manual, RAC Code of Practice and/or enterprise troubleshooting policy * 		
<ul style="list-style-type: none"> Diagnose faults/problems with components in line with manufacturer's manual, RAC Code of Practice and/or enterprise troubleshooting policy * 		
<ul style="list-style-type: none"> Take remedial action to overcome faults/problems in line with manufacturer's manual, RAC Code of Practice and/or enterprise troubleshooting policy * 		
<ul style="list-style-type: none"> Completes work safely in line with workplace safety guidelines* 		
<ul style="list-style-type: none"> Complete report on testing procedure, including faults and minor repair, in line with manufacturer's manual, RAC Code of Practice and/or enterprise troubleshooting policy * 		
Perform refrigerant recovery/ recycling on mobile air-conditioning unit		
<ul style="list-style-type: none"> Observe safe working practices throughout the task as per enterprise procedure * 		
<ul style="list-style-type: none"> Select and use suitable tools and equipment based on job requirement * 		
<ul style="list-style-type: none"> Perform optimum recovery of refrigerant in line with RAC Code of Practice * 		
<ul style="list-style-type: none"> Perform refrigerants recovery/recycling according to manufacturer's recommendations and RAC Code of Practice * 		
Test-run repaired unit		
<ul style="list-style-type: none"> Test unit in line with troubleshooting/repair procedures * 		
<ul style="list-style-type: none"> Check and measure operating parameters in line with manufacturer's testing procedures * 		
<ul style="list-style-type: none"> Prepare report on repair and testing of unit in line with enterprise procedures * 		
Prepare for start-up, test and commissioning of MAC unit		
<ul style="list-style-type: none"> Read and interpret work instructions to determine job requirements 		
<ul style="list-style-type: none"> Select tools and equipment in accordance with job requirements 		
<ul style="list-style-type: none"> Complete and comply pre-start-up, testing and commissioning checks with manufacturer's manuals* 		
<ul style="list-style-type: none"> Perform commissioning method and program and prepares recording sheets in accordance with manufacturer's manuals* 		
<ul style="list-style-type: none"> Select PPEs in line with job requirements 		

Conduct start-up, test and commissioning of MAC unit		
• Perform electrical related checks based on manufacturer's manuals*		
• Perform refrigerant piping and fitting connection related checks based on manufacturer's manuals*		
• Perform compressor assembly related checks based on manufacturer's manuals*		
• Perform temperature and airflow check based on manufacturer's manual*		
• Perform control panel related checks based on manufacturer's manuals and site conditions*		
• Check system operating pressure and temperature in accordance with manufacturer's manual*		
• Accomplish start-up, testing and commissioning reports in line with enterprise policies and procedures*		
I agree to undertake assessment in the knowledge that information gathered will only be used for professional development purposes and can only be accessed by concerned assessment personnel and my manager/supervisor		
Candidate's Name and Signature		Date

*NOTE: *Critical aspects of competency*