

Republic of the Philippines
TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY
East Service Road, South Luzon Expressway, Taguig City

130th TESDA BOARD MEETING
08 June 2021, Tuesday, 9:00 a.m.
Teleconference Via Zoom Platform

Resolution No. 2021 - 24
(Page 1 of 4 pages)

**APPROVING AND PROMULGATING THE AMENDED TRAINING REGULATIONS
FOR TRANSPORT RAC SERVICING NC II to LAND-BASED TRANSPORT
MOBILE AIR-CONDITIONING (MAC) SERVICING NC II**

WHEREAS, TESDA Board Resolution No. 2005-04 was issued on "Approving and Promulgating the Training Regulations for Transport RAC Servicing NC II and RAC Servicing NC I (Window Type Air-conditioning/Domestic Refrigeration)" last 18 March 2005 during the 45th TESDA Board Meeting;

WHEREAS, it is the policy of TESDA to review after three (3) years any Training Regulations (TRs) promulgated by the TESDA Board;

WHEREAS, there is a need to review the existing Training Regulations in view of the developments in technology and current trends and practices in the industry;

WHEREAS, the **Refrigeration and Air-conditioning Technicians for Development of the Philippines (RACTAP) Inc.** with the assistance of the Qualifications and Standards Office (QSO) of TESDA has reviewed the existing Training Regulations for Transport RAC Servicing NC II to *Land-based Transport Mobile Air-conditioning (MAC) Servicing NC II* to respond to the current skills requirements of the industry with its new technologies and industry manpower set-up and recommended amendments;

WHEREAS, the industry experts and partners, headed by the officers of the **Refrigeration and Air-conditioning Technicians for Development of the Philippines (RACTAP) Inc.** with the technical assistance of the Qualifications and Standards Office (QSO) of TESDA endorsed the proposed revisions of the foregoing Training Regulations;

WHEREAS, during the 135th and 136th Standards Setting and Systems Development (SSSD) Committee Meetings held on 10 May 2021 and 02 June 2021, respectively, the Committee deliberated upon and agreed to favorably recommend the approval and promulgation of the amended Training Regulations for Transport RAC Servicing NC II to *Land-based Transport Mobile Air-conditioning (MAC) Servicing NC II* which is attached as Annex "A" and made an integral part of this Resolution;

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MOBILE AIR-CONDITIONING (MAC) SERVICING NC II**

WHEREAS, during the 130th TESDA Board Meeting on 08 June 2021, the TESDA Board deliberated and considered the proposed Training Regulations for Land-based Transport Mobile Air-conditioning (MAC) Servicing NC II;

NOW, THEREFORE, BE IT RESOLVED AS IT IS HEREBY RESOLVED, that the aforementioned Training Regulations for Land-based Transport Mobile Air-conditioning (MAC) Servicing NC II as herein appended are hereby approved and promulgated;

BE IT RESOLVED, FINALLY, that:

(1) Copies of this Resolution and the abovementioned Training Regulations be published in the Official Gazette or in a newspaper of general circulation, and disseminated to all concerned, and the same shall be effective fifteen (15) days upon publication;

(2) All programs registered under the current Transport RAC Servicing NC II must comply with the requirements of the abovementioned Training Regulations. The one-year period of re-registration under this Training Regulations shall commence on the date of effectivity as indicated in the Implementing Guidelines/TESDA Circular for the deployment of the Training Regulations to be issued by the TESDA Secretariat; and

(3) Graduates of TVET programs covered by the aforementioned Training Regulations shall be required to undergo mandatory assessment under the national assessment and certification program.

Adopted this 8th day of June 2021.

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**APPROVING AND PROMULGATING THE AMENDED TRAINING REGULATIONS
FOR TRANSPORT RAC SERVICING NC II to LAND-BASED TRANSPORT
MOBILE AIR-CONDITIONING (MAC) SERVICING NC II**

ATTY. JAN MICHAEL P. JARO
Officer-In-Charge
TESDA Board Secretariat

Attested by:

SEC. ISIDRO S LAPEÑA, PhD, CSEE
Designated Chairperson, TESDA Board
Director General, TESDA

(Original Signed)
USEC. RAFAELITA M. ALDABA
Department of Trade and Industry

(Original Signed)
USEC. ARIEL T. CAYANAN
Department of Agriculture

(Original Signed)
USEC. SANCHO A. MABBORANG
Department of Science and Technology

(Original Signed)
MR. ISIDRO ANTONIO C. ASPER
Board Member, Labor Sector

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FOR TRANSPORT RAC SERVICING NC II to LAND-BASED TRANSPORT
MOBILE AIR-CONDITIONING (MAC) SERVICING NC II**

(Original Signed)
DR. LEONIDA BAYANI-ORTIZ
Board Member, Employer Sector

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FR. ONOFRE G. INOCENCIO JR., SDB
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ANNEX A

**AMENDMENT ON TRAINING REGULATIONS FOR
LAND-BASED TRANSPORT MOBILE AIR-CONDITIONING (MAC) SERVICING NC II**

Existing Promulgated Training Regulations (Board Resolution No. 2011-0012)	Amendments
Qualification Title	
Transport RAC Servicing NC II	Land-Based Transport Mobile Air-Conditioning (MAC) Servicing NC II
Job Title	
Transport Air-conditioning and Refrigeration Technician	Mobile Air-Conditioning (MAC) Technician
Section 1 - Definition of the Qualification	
The TRANSPORT RAC SERVICING NC II Qualification consists of competencies that a person must achieve that will enable him/her to install, service, maintain, troubleshoot and repair air-conditioning and refrigeration units in transport sector.	The LAND-BASED TRANSPORT MOBILE AIR-CONDITIONING (MAC) SERVICING NC II Qualification consists of competencies that a person must achieve to enable him/her to service, maintain, troubleshoot and repair as well as start-up, test and commission land-based transport mobile vehicle air-conditioning systems/units. This qualification covers the mobile air-conditioning units of cars, vans, buses, trucks and trains
Section 2- Competency Standards	
<u>Basic Competencies</u> <ol style="list-style-type: none"> 1. Participate in workplace communication 2. Work in team environment 3. Practice career professionalism 4. Practice occupational health and safety procedures 	<u>Basic Competencies</u> <ol style="list-style-type: none"> 1. Participate in workplace communication 2. Work in team environment 3. Solve/address general workplace problems 4. Develop career and life decisions 5. Contribute to workplace innovation 6. Present relevant information 7. Practice occupational safety and health policies and procedures 8. Exercise efficient and effective sustainable practices in the workplace 9. Practice entrepreneurial skills in the workplace
<u>Common Competencies</u> <ol style="list-style-type: none"> 1. Prepare materials and tools 2. Interpret technical drawing and plans 3. Observe procedures, specifications and manuals of instructions 4. Perform mensurations and calculations 5. Perform basic benchworks 6. Check basic electrical circuits 7. Maintain tools, instruments and equipment 8. Perform housekeeping and safety practices 9. Document work accomplished 	<u>Common Competencies</u> <ul style="list-style-type: none"> • NO AMENDMENTS

Existing Promulgated Training Regulations (Board Resolution No. 2011-0012)	Amendments
<p><u>Core Competencies</u></p> <ol style="list-style-type: none"> 1. Install transport refrigeration and air-conditioning units 2. Service and maintain transport air-conditioning and refrigeration units 3. Troubleshoot transport air-conditioning and refrigeration systems 4. Recover and recycle refrigerant in transport air-conditioning and refrigeration systems 5. Repair and retrofit transport air-conditioning and refrigeration systems 6. Perform testing and commissioning for transport 	<p><u>Core Competencies</u></p> <ol style="list-style-type: none"> 1. Service and maintain mobile air-conditioning units 2. Troubleshoot and repair mobile air-conditioning systems 3. Perform start-up, test and commissioning for mobile air-conditioning systems
Section 3 - Training Standards	
3.1 Curriculum Design	
Nominal Training Duration	
<p>18 hrs – Basic Competencies 34 hrs – Common Competencies 160 hrs – Core Competencies</p> <hr/> <p>240 hrs - Total training duration</p>	<p>37 hrs – Basic Competencies 35 hrs – Common Competencies 240 hrs – Core Competencies</p> <hr/> <p>312 hrs - Total</p> <p>+ 400 hrs – Supervised-industry learning (SIL)*</p> <hr/> <p>712 hrs. – Total training duration</p> <p>* SIL can be delivered thru Dual Training System (DTS)/Dualized Training Program (DTP) or Enterprise-based Training</p>
3.2 Training Delivery	
<p>The delivery of training should adhere to the design of the curriculum. Delivery should be guided by the 10 basic principles of the competency-based TVET.</p> <ul style="list-style-type: none"> • The training is based on curriculum developed from the competency standards; • Learning is modular in its structure; • Training delivery is learner-centered and should accommodate individualized and self-paced learning strategies; • Training is based on work that must be performed; • Training materials are directly related to the competency standards and the curriculum modules; • Assessment is based in the collection of evidence of the performance of work to the industry required standard; 	<p>The delivery of training shall adhere to the design of the curriculum. Delivery shall be guided by the principles of competency-based TVET.</p> <ul style="list-style-type: none"> • Course design is based on competency standards set by the industry or recognized industry sector; (Learning system is driven by competencies written to industry standards) • Training delivery is learner-centered and should accommodate individualized and self-paced learning strategies; • Training can be done on an actual workplace setting, simulation of a workplace and/or through adoption of modern technology. • Assessment is based in the collection of evidence of the performance of work to the industry required standards; • Assessment of competency takes the trainee's knowledge and attitude into account but requires

Existing Promulgated Training Regulations (Board Resolution No. 2011-0012)	Amendments
<ul style="list-style-type: none"> • Training is based both on and off-the-job components; • Training program allows for recognition of prior learning (RPL) or current competencies; • Training allows for multiple entry and exit; and • Training programs are registered with the UTPRAS. <p>The competency-based TVET system recognizes various types of delivery modes, both on and off-the-job as long as the learning is driven by the competency standards specified by the industry. The following training modalities may be adopted when designing training programs:</p> <ul style="list-style-type: none"> • The dualized mode of training delivery is preferred and recommended. Thus programs would contain both in-school and in-industry training or fieldwork components. Details can be referred to the Dual Training System (DTS) Implementing Rules and Regulations. • Modular/self-paced learning is a competency-based training modality wherein the trainee is allowed to progress at his own pace. The trainer only facilitates the training delivery. • Peer teaching/mentoring is a training modality wherein fast learners are given the opportunity to assist the slow learners. • Supervised industry training or on-the-job training is an approach in training designed to enhance the knowledge and skills of the trainee through actual experience in the workplace to acquire a specific competencies prescribed in the training regulations. • Distance learning is a formal education process in which majority of the instruction occurs when the students and instructors are not in the same place. Distance learning may employ correspondence study, or audio, video or computer technologies. • Project-based instruction is an authentic instructional model or strategy in which students plan, implement and evaluate projects that have real world applications. 	<p>evidence of actual performance of the competency as the primary source of evidence.</p> <ul style="list-style-type: none"> • Training program allows for recognition of prior learning (RPL) or current competencies; and • Training completion is based on satisfactory performance of all specified competencies. <p>The competency-based TVET system recognizes various types of delivery modes, both on-and off-the-job as long as the learning is driven by the competency standards specified by the industry. The following training modalities and their variations/ components may be adopted singly or in combination with other modalities when designing and delivering training programs:</p> <p>2.1. Institution- Based:</p> <ul style="list-style-type: none"> • Dual Training System (DTS)/Dualized Training Program (DTP) which contain both in-school and in-industry training or fieldwork components. Details can be referred to the Implementing Rules and Regulations of the DTS Law and the TESDA Guidelines on the DTP; • Distance learning is a formal education process in which majority of the instruction occurs when the students and instructor are not in the same place. Distance learning may employ correspondence study, audio, video, computer technologies or other modern technology that can be used to facilitate learning and formal and non-formal training. Specific guidelines on this mode shall be issued by the TESDA Secretariat. • The classroom-based or in-center instruction may be enhanced through use of learner-centered methods as well as laboratory or field-work components. <p>2.2. Enterprise-Based:</p> <ul style="list-style-type: none"> • Formal Apprenticeship – Training within employment involving a contract between an apprentice and an enterprise on an approved apprenticeable occupation. • Informal Apprenticeship is based on a training (and working) agreement between an apprentice and a master craftsman wherein the agreement may be written or oral and the master craftsman commits to training the apprentice in all the skills relevant to his or her trade over a significant period of time, usually between one and four years, while the apprentice commits to contributing productively to the work of the

Existing Promulgated Training Regulations (Board Resolution No. 2011-0012)	Amendments
	<p>business. Training is integrated into the production process and apprentices learn by working alongside the experienced craftsperson.</p> <ul style="list-style-type: none"> Enterprise-based Training - where training is implemented within the company in accordance with the requirements of the specific company. Specific guidelines on this mode shall be issued by the TESDA Secretariat. <p>2.3. Community-Based</p> <ul style="list-style-type: none"> Community-Based is short term programs conducted by non-government organizations (NGOs), LGUs, training centers and other TVET providers which are intended to address the specific needs of a community. Such programs can be conducted in informal settings such as barangay hall, basketball courts, etc. These programs can also be mobile training program (MTP).
3.3 Trainee Entry Requirements	
<p>This section specifies the qualifications of trainees and educational experience. Other requirements like health and physical requirements are also stated. Passing entry written examinations may also be indicated if necessary:</p> <ul style="list-style-type: none"> Can communicate both oral and written Good moral character Can perform basic mathematical computation Physically and mentally fit 	<p>This section specifies the qualifications of trainees and educational experience. Other requirements like health and physical requirements are also stated. Passing entry written examinations may also be indicated if necessary:</p> <ul style="list-style-type: none"> Must have completed at least 10 yrs. basic education or an ALS certificate of achievement with grade 10 equivalent holder Can communicate both oral and written Can perform basic mathematical computation
3.4 List of Tools, Equipment and Materials	
<p>Recommended list of tools, equipment and materials for the training of 25 trainees for Transport RAC Servicing NC II:</p>	<p>Recommended list of tools, equipment and materials for the training of 25 trainees for Land-Based Transport Mobile Air-Conditioning (MAC) Servicing NC II:</p> <p>Up-to-date tools, materials, and equipment of equivalent functions can be used as alternatives. This also applies in consideration of community practices and their availability in the local market.</p>

TOOLS	
QTY.	DESCRIPTION
6 sets	System Analyzer
6 pcs	Adjustable Wrench, 12"
6 pcs	Adjustable Wrench, 8"
3 sets	Open end wrench
3 sets	Box wrench
3 sets	Allen wrench
5 sets	Hacksaw
5 pcs	Rubber mallet
5 pcs	Ballpen hammer
10 pcs	Files, assorted
3 sets	Socket wrench
3 sets	Tinner's snip
3 sets	Screw drivers
5 pcs	Long nose plier
5 pcs	Side Cutter
5 pcs	Crimping tools
5 pcs	Vise grip
1 set	Hole saw
2 sets	Oil pump
5 sets	Flaring tools
5 sets	Swaging tool
5 pcs	Tube cutter
5 pcs	Tube bender, 1/4"
5 pcs	Tube bender
5 pcs	Refrigeration ratchet
3 sets	Quick connector for R134a
5 pcs	Push pull rule
5 pcs	Steel rule
5 sets	Soldering iron
2 units	Portable drill
1 unit	Portable grinder
1 set	Puncher
5 sets	Multitester
5 sets	Thermometer, digital
10 pcs	Service cylinder, 2.5 kg
3 pcs	Refractometer
3 units	Vacuum gauge

EQUIPMENT	
QTY.	ITEM
2 units	Recovery/recycling machine
3 units	Vacuum pump
1 unit	Pressure washer
1 unit	Refrigerant identifier
2 sets	Oxyacetylene unit
2 sets	Nitrogen cylinder w/ regulator
2 sets	Charging cylinder, R134a and R12
2 units	Digital weighing scale
1 unit	Portable welding machine

TOOLS		
Quantity	Unit	Description / Specification
6	sets	System Analyzer
6	pcs	Adjustable wrench, 12"
6	pcs	Adjustable wrench, 8"
3	sets	Open end wrench
3	sets	Box wrench
3	sets	Allen wrench
5	sets	Hacksaw
5	pcs	Rubber mallet
5	pcs	Ballpein hammer
10	pcs	Files, assorted
3	sets	Socket wrench
3	sets	Screw drivers
5	pcs	Long nose plier
5	pcs	Side Cutter
5	pcs	Crimping tools
5	pcs	Vise grip
2	pcs	Bearing puller
1	set	Hole saw
2	sets	Oil pump
5	sets	Flaring tools
5	sets	Swaging tools
5	pcs	Tube cutter
5	pcs	Tube bender, lever type, 1/4", 5/16, 3/8, 1/2
5	pcs	Tube bender, spring type, 1/4", 5/16, 3/8, 1/2
5	pcs	Refrigeration ratchet
6	sets	Quick coupler connector for R134a, high and low
2	sets	Valve core remover
5	pcs	Push pull rule
5	pcs	Steel rule
5	sets	Soldering iron
2	units	Portable drill
1	unit	Portable grinder
1	set	Puncher, center
5	sets	Multitester
5	sets	Thermometer, digital
10	pcs	Service cylinder, 2.5 kg
3	units	Vacuum gauge

EQUIPMENT		
Quantity	Unit	Description / Specification
2	units	Recovery/recycling machine
3	units	Vacuum pump
1	unit	Pressure washer
1	unit	Refrigerant identifier
2	sets	Oxyacetylene unit
2	sets	Nitrogen cylinder w/ regulator

1 unit	Air compressor
5 units	Auxiliary fan
5 units	Evaporator, hang type
5 units	Condenser coil
5 units	Compressor
2 units	Transport Refrigeration Trainer
2 units	Transport air conditioning Trainer

MATERIALS

Qty.	Description
3 pcs	Liquid receiver/drier, R 12
2 pcs	Liquid receiver/drier, R 134a
1 pc	Refrigerant tank R 12
1 pc	Refrigerant tank R 134a
5 pcs	Expansion valve
1 gal	Mineral oil, 3 GS, 5 GS
1 gal	Synthetic oil
1 roll	Copper tube. 3/8"
1 roll	Flexible pipe, discharge line
1 roll	Flexible pipe, suction line
10 rolls	Fittings, discharge line
10 rolls	Fittings, suction line
1 roll	Automotive wire # 12
1 roll	Automotive wire # 14
5 rolls	Electrical tape
100 pcs	Assorted types of clamps
100 pcs	Assorted types of flare nuts
100 pcs	Assorted types of nuts and bolts
100 pcs	Terminal clips
100 pcs	Assorted types of O ring
50 pcs	Silver rod
50 pcs	Aluminum rod
5 jars	Aluminum flux
3 pcs	Thermostat, auto aircon
3 pcs	Thermostat, electronic w/ thermistor
2 cyls	Nitrogen gas
3 sets	Idling stabilizer
5 sets	Overhauling gasket, abacus
5 sets	Overhauling gasket, Nippondenso
5 pcs	ignition lighter
5 boxes	Rags
5 boxes	Soap
10 pcs	Sand paper
5 pcs	Sealant
5 pcs	Pressure switch
5 pcs	Control resistor
5 pcs	Ambient sensor

2	sets	Charging cylinder, R134a
2	units	Digital weighing scale
1	unit	Portable welding machine
1	unit	Air compressor
5	units	Auxiliary fan
5	units	Evaporator assembly
5	units	Condenser assembly
5	units	Compressor assembly
2	units	Mobile air conditioning trainer

MATERIALS

Quantity	Unit	Description / Specification
1	pc	Refrigerant tank/cylinder R 134a / *407C – for train
5	pcs	Expansion valve
1	gal	Synthetic oil
1	roll	Copper tube, 3/8"
1	roll	Copper tube, 1/4"
1	pc	Flexible pipe, discharge line
1	pc	Flexible pipe, suction line
10	sets	Fittings, discharge line
10	sets	Fittings, suction line
1	roll	Automotive wire #12
1	roll	Automotive wire #14
5	rolls	Electrical tape
100	pcs	Assorted types of clamps
10	liter	Universal flushing agent
100	pcs	Assorted types of flare nuts
100	pcs	Assorted types of nuts and bolts, Metric
100	pcs	Terminal clips
100	pcs	Assorted types of O-ring
50	pcs	Silver rod
50	pcs	Aluminum rod
5	can	Aluminum flux
5	can	Silver flux
3	pcs	Thermostat, auto aircon
3	pcs	Thermostat, electronic w/ thermistor
2	cylinders	Nitrogen gas
5	pcs	ignition lighter
5	boxes	Rags
5	boxes	Soap
10	pcs	Sand paper
5	pcs	Sealant
5	pcs	Pressure switch
5	pcs	Control resistor
5	pcs	Ambient sensor

Existing Promulgated Training Regulations (Board Resolution No. 2011-0012)	Amendments
	Subject to conformity of the health and safety protocols

3.5 Training Facilities

Based on a class intake of 25 students/trainees:

SPACE REQUIREMENTS	SPACE IN METERS	AREA IN SQ. M	TOTAL AREA IN SQ. M
A. LECTURE AREA*	4 x 8	32	32
B. LEARNING RESOURCE AREA	4 x 6	24	24
C. TOOL/STORAGE AREA*	4 x 4	16	16
D. WASH, TOILET AND LOCKER ROOM*	3 x 4	12	12
E. FACILITIES/ EQUIPMENT/ CIRCULATION			25
TOTAL AREA			109

*Common facilities for all HVAC/R Courses

Based on a class intake of 25 students/ trainees:

TEACHING/ LEARNING AREAS	SIZE IN METERS	AREA IN SQ. M	QTY	TOTAL AREA IN SQ. M
A. LECTURE AREA*	6 x 8	48	1	48
B. WORKSHOP AREA	6 x 10	60	1	60
C. LEARNING RESOURCE AREA	4 x 4	16	1	16
D. TOOL/ STORAGE AREA*	3 x 4	12	1	12
E. WASH, TOILET AND LOCKER ROOM*	3 x 4	12	1	12
Total				148
F. Facilities / Equipment / Circulation (Area requirement is equivalent to 30% of the total teaching/learning areas)				45
Total Area				193

*Common facilities for all HVAC/R Courses

Subject to conformity of the health and safety protocols

3.6 Trainer's Qualifications

Existing Promulgated Training Regulations (Board Resolution No. 2011-0012)	Amendments
<p>TRANSPORT RAC SERVICING NC II</p> <ul style="list-style-type: none"> • Must have undergone training on Training Methodology II (TM II) • He must be a holder of RAC Servicing, NC III • Good moral character • Must be physically and mentally fit • Must be computer literate • Must be a Civil Service eligible (for government position or appropriate professional license issued by the Professional Regulatory Board) • *Must have at least two (2) years job/industry experience <p>*Optional: Only when required by the hiring institution Reference: TESDA Board Resolution No. 2004-03</p>	<p>LAND-BASED TRANSPORT (MAC) SERVICING NC II</p> <ul style="list-style-type: none"> • Holder of National TVET Trainers Certificate (NTTC) Level I in RAC Servicing (DomRAC) NC II or Commercial Air-conditioning Installation and Servicing NC III / Commercial Refrigeration Installation and Servicing NC III or graduate of BSIE/BTTE/BTVTEd - Major in RAC and with RAC Servicing (DomRAC) NC II or Commercial Air-conditioning Installation and Servicing NC III / Commercial Refrigeration Installation and Servicing NC III certificate • Must be computer literate • Must have at least two (2) years related industry experience within the past 5 years
3.7 Institutional Assessment	
<p>Institutional assessment is undertaken by trainees to determine their achievement of units of competency. A certificate of achievement is issued for each unit of competency.</p> <p>As a matter of policy, graduates of programs registered with TESDA under these training regulations are required to undergo mandatory national competency assessment upon completion of the program.</p>	<p>Institutional Assessment is gathering of evidences to determine the achievements of the requirements of the qualification to enable the trainer make judgement whether the trainee is competent or not competent.</p>
Section 4. National Assessment and Certification Arrangements	
<p>4.1. To attain the National Qualification of Transport RAC Servicing NC II, the candidate must demonstrate competence in all the units listed in Section 1. Successful candidates shall be awarded a National Certificate signed by the TESDA Director General.</p> <p>4.2. The qualification of Transport RAC Servicing NC II may be attained through:</p> <p>4.2.1. Accumulation of Certificates of Competency (COCs) in all the following areas:</p> <p>4.2.1.1. Install transport air-conditioning and refrigeration units</p>	<p>4.1 To attain the National Qualification of Land-Based Transport Mobile Air-Conditioning (MAC) Servicing NC II, the, the candidate must demonstrate competency in all the units listed in Section 1. Successful candidates shall be awarded a National Certificate signed by the TESDA Director General.</p> <p>4.2 The qualification Land-Based Transport Mobile Air-Conditioning (MAC) Servicing NC II may be attained through demonstration of competence through a single comprehensive project-type assessment covering all required units of competency of this qualification.</p>

Existing Promulgated Training Regulations (Board Resolution No. 2011-0012)	Amendments
<ul style="list-style-type: none"> • Install transport air-conditioning and refrigeration units • Perform testing and commissioning for transport air-conditioning and refrigeration units <p>4.2.1.2. Service and maintain transport air-conditioning and refrigeration units</p> <p>4.2.1.3. Troubleshoot transport air-conditioning and refrigeration systems</p> <p>4.2.1.4. Recover and Recycle refrigerant in transport air-conditioning and refrigeration systems</p> <p>4.2.1.5. Repair and retrofit transport air-conditioning and refrigeration systems and its accessories</p> <ul style="list-style-type: none"> • Repair and retrofit transport air-conditioning and refrigeration systems and its accessories • Perform testing and commissioning for transport air-conditioning and refrigeration <p>Successful candidates shall be awarded Certificates of Competency (COCs).</p> <p>4.2.2. Demonstration of competence through project-type assessment covering all required units of the qualification.</p> <p>4.3. Assessment shall focus on the core units of competency. The basic and common units shall be integrated or assessed concurrently with the core units.</p> <p>One or two additional evidences in the form of Portfolio, Third Party Report, Written Test and Demonstration with Questioning may be required by the assessor in addition to those specified in the Methods of Assessment in the Competency Standards, depending on the need for supplementary evidences.</p>	<p>4.3 Assessment shall cover all competencies, with basic and common integrated or assessed concurrently with the core units of competency</p>

Existing Promulgated Training Regulations (Board Resolution No. 2011-0012)	Amendments
<p>4.4. The following are qualified to apply for assessment and certification:</p> <p>4.4.1. Graduate of formal, non-formal and informal including enterprise-based training programs</p> <p>4.4.2. Experienced workers (wage employed or self-employed)</p>	<p>4.4 Any of the following are qualified to apply for assessment and certification:</p> <p>4.4.1. Graduate of formal, non-formal and informal including enterprise-based training programs</p> <p>4.4.2. Experienced workers in RAC servicing for at least 2 years (wage employed or self-employed)</p> <p>4.5 Recognition of Prior Learning (RPL). Candidates who have gained competencies through previous work or life experiences, education, and informal training related to all the core competencies may apply for recognition in the qualification through Portfolio Assessment in accordance with the provision of TESDA Circular No. 59, Series of 2020.</p>
<p>4.5. The guidelines on assessment and certification are discussed in detail in the "Procedures Manual on Assessment and Certification" and "Guidelines on the Implementation of the Philippine TVET Qualification and Certification System (PTQCS)".</p>	<p>4.6 The existing National Certificate (NC) of individuals in Transport RAC Servicing (DomRAC) NC II shall be in effect until the said NC have expired. Individuals are advised to take the assessment for this amended/updated TR on or before the expiration of such certificates.</p> <p>4.7 The guidelines on assessment and certification are discussed in detail in the "Procedures Manual on Assessment and Certification" and "Guidelines on the Implementation of the Philippine TVET Competency Assessment and Certification System (PTCACS)".</p>