



Unit:	Air conditioning system		
Prerequisites:	<ul style="list-style-type: none"> - Basic knowledge of engine mechanic - Basic knowledge of electricity - Basic knowledge in A/C components and circuits (compressor condenser dryer expansion valve evaporator fan) - Basic knowledge in English including technical vocabulary according to the subject 		
Work tasks that the student should be able to do/solve after completed unit	Student should be able do service and management on an air condition system following legal requirements		
Learning outcomes:	<i>Knowledge</i>	<i>Skills</i>	<i>Competences</i>
	<ul style="list-style-type: none"> - To know about the European reglement for A/C maintenance 	<ul style="list-style-type: none"> - Able to know what is authorized or not 	<ul style="list-style-type: none"> - Able to do maintenance process according to the reglement
	<ul style="list-style-type: none"> - To know the impact of A/C fluids on environment/human being 	<ul style="list-style-type: none"> - Able to connect the machine to the system and choose the individual protection 	<ul style="list-style-type: none"> - Able to do maintenance process according to the environment/individual protection
	<ul style="list-style-type: none"> - To know the components of A/C with regulator and Harrison system 	<ul style="list-style-type: none"> - Able to draw the diagram with each component 	<ul style="list-style-type: none"> - Able to recognize and name the components and technology used on a truck
	<ul style="list-style-type: none"> - To know the function and how it works for each component 	<ul style="list-style-type: none"> - Able to describe and explain the functions of each component (theory) 	<ul style="list-style-type: none"> - Able to explain how it works on a truck
	<ul style="list-style-type: none"> - To know the state, pressure and temperature of the fluid at different places in the A/C circuit 	<ul style="list-style-type: none"> - Able to measure the temperature, pressure on a truck 	<ul style="list-style-type: none"> - Able to do efficiency test



	<ul style="list-style-type: none"> - To know the values of pressure (HP and BP) in a stopped A/C system 	<ul style="list-style-type: none"> - Able to connect the machine and read the values 	<ul style="list-style-type: none"> - Able to check if the circuit is empty of fluid on a truck
	<ul style="list-style-type: none"> - To know the steps to maintain A/C 	<ul style="list-style-type: none"> - Able to use the A/C machine 	<ul style="list-style-type: none"> - Able (in autonomy) to manage all the steps and interpret the failures
	<ul style="list-style-type: none"> - To know if there is a leak and the different ways to find it 	<ul style="list-style-type: none"> - Able to check the values using the A/C machine and use the tools to find a leak 	<ul style="list-style-type: none"> - Able to use the tools and the dye/Googles and UV lamp
	<ul style="list-style-type: none"> - To know the process how to change a component 	<ul style="list-style-type: none"> - Able to change the component on a truck 	<ul style="list-style-type: none"> - Able to use the A/C machine in autonomy, according to the steps/ environment / reglement
Reference to national qualification:	<p>Sweden – Fordon och Transportprogrammet (SeQF 4) France – BTS Après-Vente des Véhicules Automobiles - Option Véhicules Industriels - Classe Europe (poids lourds, camions) Turkey – Engine Vehicle technology Vocational School Turkey The Netherlands – Bedrijfsautotechnicus Finland - Vehicle Sector, competence area in Vehicle Technology, Vehicle Mechanic (EQF 4)</p>		
Reference to EQF/NQF:	<p>The unit is too small to refer to an EQF level. Because it refers to an NQF this is an indirect reference to the EQF to which the regarding NQF belongs.</p>		
ECVET points	<p>N/A</p>		
Assessment:	<p>Students will be assessed based on their knowledges, skills and competences given in this unit. Theoretical test (MCQ) 30 questions in 30 min and practical test (1h30) in autonomy (efficiency test, full maintenance, looking for a leak, replace a component).</p>		

