Nebraska CTE

Power Equipment

Apply safety principles, practices, and guidelines to the work environment. STS.HS.28.1	**a** Complete applicable safety assessment with 100% accuracy. STS.HS.28.1.A
	b Identify and explain the use of personal protective equipment. STS.HS.28.1.B
	c Describe proper use of a fire extinguisher. STS.HS.28.1.C
	d Demonstrate power equipment battery safety best-practices. STS.HS.28.1.D
	e Apply the safe use of tools, machines, and equipment in alignment with industry standards to maintain a safe workplace. STS.HS.28.1.E
	f Describe the role of government agencies in providing a safe workplace. STS.HS.28.1.F
	g Describe the safe and environmental disposal of fluids. STS.HS.28.1.G
Identify career opportunities in the Power Equipment industry. STS.HS.28.2	**a** List the most common power equipment careers and related fields of employment. STS.HS.28.2.A
	b List the traits & skills employers look for in their employees. STS.HS.28.2.B
	c Explain how to find job openings in the power equipment field & identify employment trends. STS.HS.28.2.C
	d Explain the specialized tasks completed by each type of technician. STS.HS.28.2.D
	e Explain the types of repair facilities. STS.HS.28.2.E
	f Summarize the different systems used to pay technicians. STS.HS.28.2.F
	g Identify the training, education, certification, and licensing requirements for various careers in the power equipment industry. STS.HS.28.2.G
Identify fundamentals of power equipment measurement and math. STS.HS.28.3	**a** Measure power equipment parts and measurements using both English and metric measuring systems. STS.HS.28.3.A
	b Identify and use basic measuring tools. STS.HS.28.3.B
	c Solve power equipment problems using basic math skills. STS.HS.28.3.C

Explain fundamentals of Power Equipment Service Information. STS.HS.28.4	**a** Describe the different types of service information. STS.HS.28.4.A
	b Explain the different kinds of information and Illustrations used in service information. STS.HS.28.4.B
	c Utilize print and/or online service information. STS.HS.28.4.C
	d Explain how to read and use shop work orders. STS.HS.28.4.D
	e Describe how to order parts for repair. STS.HS.28.4.E
Explain fundamentals of fasteners, gaskets, seals, and sealants used in Power Equipment. STS.HS.28.5	**a** Identify commonly used power equipment fasteners. STS.HS.28.5.A
	b Select and use fasteners properly. STS.HS.28.5.B
	c Remove, select, and install gaskets, seals, and sealants correctly. STS.HS.28.5.C
Explain fundamentals of power equipment principles of engine operation. STS.HS.28.6	**a** Explain simple engine operation. STS.HS.28.6.A
	b Describe four-stroke engine operation and explain the purpose of each stroke. STS.HS.28.6.B
	c Describe two-stroke engine operation and explain the principles of two-cycle operation. STS.HS.28.6.C
	d List the advantages and disadvantages of two-stroke and four-stroke engines. STS.HS.28.6.D
Explain fundamentals of Power Equipment engine components and systems. STS.HS.28.7	**a** Describe the function of major moving components (e.g., piston, crankshaft, camshaft, valves). STS.HS.28.7.A
	b Describe the fundamentals of power equipment fuel supply and air induction. STS.HS.28.7.B
	c Describe the fundamentals of Power Equipment Ignition Systems. STS.HS.28.7.C
	d Describe the fundamentals of power equipment lubrication Systems. STS.HS.28.7.D
	e Describe the fundamentals of Power Equipment Cooling Systems. STS.HS.28.7.E
Demonstrate the fundamentals of power equipment engine disassembly, inspection and reassembly. STS.HS.28.8	**a** List the steps involved in disassembling an engine. STS.HS.28.8.A
	b Explain how to inspect various engine parts for damage and wear. STS.HS.28.8.B
	c Describe the procedure for removing an engine from an implement. STS.HS.28.8.C
	d Explain how to inspect engines for problems. STS.HS.28.8.D

	e Demonstrate power equipment engine assembly. STS.HS.28.8.E
Explain fundamentals of Power Equipment Preventative Maintenance & Troubleshooting. STS.HS.28.9	**a** Explain the steps to perform preventive maintenance on various engine systems. STS.HS.28.9.A
	b Summarize the steps to change the oil in a four-cycle engine. STS.HS.28.9.B
	c Describe the steps to prepare an engine for storage. STS.HS.28.9.C
	d Describe systematic troubleshooting. STS.HS.28.9.D
	e Explain the importance of manufacturers' service manuals to determine engine specifications and explain why this information is necessary when servicing a small engine. STS.HS.28.9.E
	f Discuss the importance of a maintenance schedule and records. STS.HS.28.9.F