

**Automotive 9**

**Reporting Standards**

AU-9.1	Define health and safety regulations based on OSHA and EPA
AU-9.2	Demonstrate knowledge and use of health and safety practices including proper PPE
AU-9.3	Demonstrate responses to situations that threaten health and safety
AU-9.4	Demonstrate knowledge of the hazards that exist in the automotive repair shop setting and the steps to take to reduce the risk of injuries.
AU-9.5	Demonstrate the use and knowledge of basic automotive hand tools, power tools, and measuring tools.
AU-9.6	Demonstrate the use and knowledge of different types of fasteners and torque
AU-9.7	Demonstrate knowledge and use of vehicle information and service information
AU-9.8	Demonstrate knowledge and skills to perform basic automotive service skills.
AU-9.9	Demonstrate knowledge and skills to perform general engine diagnostic procedures.
AU-9.10	Demonstrate the knowledge and skills to diagnose and repair cooling system concerns.

**Learning Targets**

AU-9.1 Define health and safety regulations based on OSHA and EPA				
	Limited	Developing	Proficient	Exemplary
AU-9.1.1	I am unable to complete the Automotive Service Safety test with a passing score after multiple attempts.	I am unable to complete the Automotive Service Safety test with a passing score.	I am able to complete the Automotive Service Safety test with a passing score.	I am able to complete the Automotive Service Safety test with a perfect score.
AU-9.1.2	I am unable to complete the Automotive Service Pollution Prevention test with a passing score after multiple attempts.	I am unable to complete the Automotive Service Pollution Prevention test with a passing score.	I am able to complete the Automotive Service Pollution Prevention test with a passing score.	I am able to complete the Automotive Service Pollution Prevention test with a perfect score.

AU-9.2 Demonstrate knowledge and use of health and safety practices including proper PPE				
	Limited	Developing	Proficient	Exemplary
AU-9.2.1	I comply with the required use of safety glasses, ear protection, gloves, and shoes during lab/shop activities. I have proper PPE on in the shop only when constantly reminded by one of the instructors.	I comply with the required use of safety glasses, ear protection, gloves, and shoes during lab/shop activities. I also have proper PPE on in the shop with many reminders.	I comply with the required use of safety glasses, ear protection, gloves, and shoes during lab/shop activities. I also have proper PPE on in the shop with very few reminders. C461	I comply with the required use of safety glasses, ear protection, gloves, and shoes during lab/shop activities. I also have proper PPE on in the shop without any reminders.

AU-9.2.2	I can identify and wear appropriate clothing for lab/shop activities at all times only when reminded constantly by one of the instructors.	I can identify and wear appropriate clothing for lab/shop activities at all times with many reminders.	I can identify and wear appropriate clothing for lab/shop activities at all times with very few reminders. C462	I can identify and wear appropriate clothing for lab/shop activities at all times without any reminders.
AU-9.2.3	I secure hair and jewelry for lab/shop activities only when one of the instructors reminds me constantly.	I secure hair and jewelry for lab/shop activities with many reminders.	I always secure hair and jewelry for lab/shop activities with very few reminders. C463	I always secure hair and jewelry for lab/shop activities without any reminders.
AU-9.2.4	I was present during theory class when the topics of this task sheet were covered	I can describe the location of all the safety items asked for and answer required safety questions correctly. I have not passed the safety exams yet.	I can describe the location of all the items asked for and answer all of the questions correctly. I have passed the safety exams. C451	I can describe the location of all the items asked for and answer all of the questions correctly. I have passed the safety exams all with 100's.
AU-9.2.5	I was present during theory class when the topics of this task sheet were covered.	I can describe the location of where the jack and jack stands should go and I can get the car setup with help placing the jack and/or jack stands in the proper locations.	I can describe the location of the jack and jack stand placement and can get the car up on stands safely with only slight prompts on placement of jack and/or jack stands. C453	I can describe the location of the jack and jack stand placement and can get the car up on stands safely with no help. I am able to help others perform this task safely.
AU-9.2.6	I was present during theory class when the topics of this task sheet were covered.	I can describe the location of where the lift arms should go and get the car setup on them with some help and an instructor helping to position the lift.	I can describe the location of the lift placement and get the car up on stands safely with only slight verbal prompts from the instructor. C454	I can describe the location of the lift placement and get the car up on stands safely with no help. I am able to help others perform this task safely.
AU-9.2.7	I was present during theory class when the topics of this task sheet were covered.	I can describe the eyewash station and when it should be used and answer the required other questions correctly.	I can describe the eyewash station and when it should be used and answer questions correctly. C459	I can describe the eyewash station and when it should be used and answer all of the other questions correctly. I can demonstrate proper usage and times based on eye exposure type.

**AU-9.3 Demonstrate responses to situations that threaten health and safety**

	Limited	Developing	Proficient	Exemplary
AU-9.3.1	I was present during theory class when the topics of this task sheet were covered.	I can describe the designation of the 4 types of fire extinguishers and	I can describe the designation of the 4 types of fire extinguishers and	I can describe the designation of the 4 types of fire extinguishers and

		answer most questions correctly.	answer questions correctly. C458	answer questions correctly. I can also demonstrate the proper use of a fire extinguisher.
AU-9.3.2	I was present during theory class when the topics of this task sheet were covered.	I can describe the evacuation route and when it should be used and answer required questions correctly.	I can describe the evacuation route and when it should be used and answer all of the other questions correctly. C460	I can describe the evacuation route and when it should be used and answer required questions correctly. I can demonstrate proper evacuation protocol from anywhere in the shop or classroom.
AU-9.3.3	I was present during theory class when the topics of this task sheet were covered.	I can describe the location of the MSDS and answer all of the questions correctly. I have located all SDS sheets and found the required SDS sheets with help and direction.	I can describe the location of the MSDS and answer all of the questions correctly. I have located all SDS sheets and found the required information with minimal help or direction. C465	I can describe the location of the MSDS and answer all of the questions correctly. I have located all SDS sheets and independently found the required information.

**AU-9.4 Demonstrate knowledge of the hazards that exist in the automotive repair shop setting and the steps to take to reduce the risk of injuries.**

	Limited	Developing	Proficient	Exemplary
AU-9.4.1	I was present during theory class when the topics of this task sheet were covered.	I can describe the location of all the items asked for and answer most of the questions correctly.	I can describe the location of all the items asked for and answer all of the questions correctly. C455	I can describe the location of all the items asked for and answer all of the questions correctly. I can explain what could happen if someone was exposed to high levels of carbon monoxide.
AU-9.4.2	I was present during theory class when the topics of this task sheet were covered.	I can describe the designation of most of the background colors listed.	I can describe the designation of all of the background colors listed. C456	I can describe the designation of all of the background colors listed and show some examples of them in the shop area.
AU-9.4.3	I was present during theory class when the topics of this task sheet were covered.	I can describe the danger and safety aspects of SRS, ABS and Hybrid vehicle systems and answer required questions correctly.	I can describe the danger and safety aspects of SRS, ABS and Hybrid vehicle systems and answer all of the questions correctly. C464	I can describe the danger and safety aspects of SRS, ABS and Hybrid vehicle systems and answer all of the questions correctly. I can demonstrate proper PPE usage and describe why they are important.
AU-9.4.4	I was present during theory class when the	I can describe the danger and safety	I can describe the danger and safety	I can describe the danger and safety

	topics of this task sheet were covered.	aspects of HID, ignition systems, and direct fuel injection systems and answer required questions correctly.	aspects of HID, ignition systems, and direct fuel injection systems and answer all of the questions correctly. C895	aspects of HID, ignition systems, and direct fuel injection systems on modern vehicles. I can answer all the questions correctly and I can demonstrate proper PPE usage and describe why they are important.
AU-9.4.5	I was present during theory class when the topics of this task sheet were covered.	I am able to draw a shop diagram including all of the things listed on the task sheet or show the instructor where each piece of safety equipment is with some help or direction.	I am able to draw a shop diagram including all of the things listed on the task sheet or show the instructor where each piece of safety equipment is. NN00	I am able to draw a shop diagram including all of the things listed on the task sheet. I am able to explain the use of each piece of safety equipment and describe when each should be used.
AU-9.4.6	I was present during theory class when the topics of this task sheet were covered.	I can describe the danger and safety aspects of working on hybrid and electric vehicles. I can answer all the questions correctly with extensive help and direction.	I can describe the danger and safety aspects of working on hybrid and electric vehicles. I can answer all the questions correctly with minimal help or direction. A1007	I can describe the danger and safety aspects of working on hybrid and electric vehicles. I can answer all the questions correctly with no help and I can demonstrate proper PPE usage and describe why they are so important.

**AU-9.5 Demonstrate the use and knowledge of basic automotive hand tools, power tools, and measuring tools.**

	Limited	Developing	Proficient	Exemplary
AU-9.5.1	I can demonstrate safe handling and use of appropriate tools. I put all of my tools away clean and in the correct spots when reminded to do so.	I can demonstrate safe handling and use of appropriate tools. I put all of my tools away clean and in the correct spots most times.	I can demonstrate safe handling and use of appropriate tools. I put all of my tools away clean and in the correct spots every time. C468	I can demonstrate safe handling and use of appropriate tools. I show that I clean, maintain, and care for tools properly without being asked to do so.
AU-9.5.2	I can demonstrate proper cleaning, storage, and maintenance of tools and equipment. I put all of my tools away clean and in the correct spots when reminded to do so.	I can demonstrate proper cleaning, storage, and maintenance of tools and equipment. I put all of my tools away clean and in the correct spots most times.	I can demonstrate proper cleaning, storage, and maintenance of tools and equipment. I put all of my tools away clean and in the correct spots every time. C469	I can demonstrate proper cleaning, storage, and maintenance of tools and equipment. I show that I clean, maintain, and care for tools properly without being asked to do so.
AU-9.5.3	I can demonstrate proper use of precision measuring tools (micrometer, dial-indicator, vernier caliper, dial caliper) and read each tool	I can demonstrate proper use of precision measuring tools (micrometer, dial-indicator, vernier caliper, dial caliper) and read each tool	I can demonstrate proper use of precision measuring tools (micrometer, dial-indicator, vernier caliper, dial caliper) and read each tool	I can demonstrate proper use of precision measuring tools (micrometer, dial-indicator, vernier caliper, dial caliper) and show that I read,

	only with a great deal of help and direction and put all of my tools away clean and in the correct spots when reminded to do so.	with help or direction and put all of my tools away clean and in the correct spots most times.	with limited help or direction and put all of my tools away clean and in the correct spots every time. C896	clean, maintain, and care for tools properly without being asked to do so.
AU-9.5.4	I can utilize safe handling of tools and equipment including proper cleaning, maintenance, and storage of the tools and equipment. I put all of my tools away clean and in the correct spots when reminded to do so.	I can utilize safe handling of tools and equipment including proper cleaning, maintenance, and storage of the tools and equipment. I put all of my tools away clean and in the correct spots most times.	I can utilize safe handling of tools and equipment including proper cleaning, maintenance, and storage of the tools and equipment. I put all of my tools away clean and in the correct spots every time. C452	I can utilize safe handling of tools and equipment including proper cleaning, maintenance, and storage of the tools and equipment. I show that I clean, maintain, and care for tools properly without being asked to do so.

**AU-9.6 Demonstrate the use and knowledge of different types of fasteners and torque.**

	Limited	Developing	Proficient	Exemplary
AU-9.6.1	I was present during theory class when the topics of this task sheet were covered.	I was able to use the tables provided and calculate all of the examples correctly with extensive help or the use of a conversion calculator.	I was able to use the tables provided and calculate all of the examples correctly with minimal help or direction. C467	I was able to use the tables provided and calculate all of the examples correctly by myself.
AU-9.6.2	I was present during theory class when the topics of this task sheet were covered.	I am able to extract a broken bolt or stud, chase or tap a hole, install a thread insert and can answer all questions correctly with extensive help and direction.	I am able to extract a broken bolt or stud, chase or tap a hole, install a thread insert and can answer all questions correctly with minimal help or direction. A1006	I am able to extract a broken bolt or stud, chase or tap a hole, install a thread insert and can answer all questions correctly with no help.

**AU-9.7 Demonstrate knowledge and use of vehicle information and service information**

	Limited	Developing	Proficient	Exemplary
AU-9.7.1	I was present during theory class when the topics of this task sheet were covered.	I can describe and list all of the information needed to complete a proper customer repair order and list the customer concerns with extensive help.	I can describe and list all of the information needed to complete a proper customer repair order and list the customer concerns with limited help or direction. C472	I can independently describe and list all of the information needed to complete a proper customer repair order and list the customer concerns.
AU-9.7.2	I was present during theory class when the topics of this task sheet were covered.	I can describe the purpose of vehicle protection mats, covers, and show proper installation and placement of each with extensive assistance.	I can describe the purpose of vehicle protection mats, covers, and show proper installation and placement of each with minimal assistance. C473	I can describe the purpose of vehicle protection mats, covers, and show proper installation and placement of each with no assistance.

AU-9.7.3	I was present during theory class when the topics of this task sheet were covered.	I can describe the 3 C's and answer all of the questions correctly. I have listed all of the pertinent information under each line with extensive help and direction.	I can describe the 3 C's and answer all of the questions correctly. I have listed all of the pertinent information under each line with minimal help or direction.C474	I can describe the 3 C's and answer all of the questions correctly. I have listed all of the pertinent information under each line with no help or direction.
AU-9.7.4	I was present during theory class when the topics of this task sheet were covered.	I can describe and list all of the information needed to complete a proper customer repair order and list the customer concerns, the cause of the concerns, correction of the concerns and a calculated total within 50% of the actual total with extensive help.	I can describe and list all of the information needed to complete a proper customer repair order and list the customer concerns, the cause of the concerns, correction of the concerns and a calculated total within 25% of the actual total with minimal help. C590	I can describe and list all of the information needed to complete a proper customer repair order and list the customer concerns, the cause of the concerns, correction of the concerns and a calculated total within 5% of the actual total with no help.

**AU-9.8 Demonstrate knowledge and skills to perform basic automotive service skills.**

	Limited	Developing	Proficient	Exemplary
AU-9.8.1	I was present during theory class when the topics of this task sheet were covered.	I am able to find all of the information about the selected vehicle using service information and answer all of the questions correctly with extensive help and direction.	I am able to find all of the information about the selected vehicle using service information and answer all of the questions correctly with minimal help or direction. A1001	I am able to find all of the information about the selected vehicle using service information and answer all of the questions correctly with no help.
AU-9.8.2	I was present during theory class when the topics of this task sheet were covered.	I am able to operate and inspect all dashboard indicator lights and warnings and can answer all questions correctly with extensive help and direction.	I am able to operate and inspect all dashboard indicator lights and warnings and can answer all questions correctly with minimal help or direction. A1002	I am able to operate and inspect all dashboard indicator lights and warnings and can answer all questions correctly with no help.
AU-9.8.3	I was present during theory class when the topics of this task sheet were covered.	I am able to find all of the leaks on the car, pinpoint the type of fluid leaking, and the exact location of the leak with extensive help and direction.	I am able to find all of the leaks on the car, pinpoint the type of fluid leaking, and the exact location of the leak with minimal help or direction. A1003	I am able to find all of the leaks on the car, pinpoint the type of fluid leaking, and the exact location of the leak with no help.
AU-9.8.4	I was present during theory class when the topics of this task sheet were covered.	I am able to find the procedure, remove and reinstall the belt or belts on a vehicle, properly torque and assemble everything correctly with extensive help and	I am able to find the procedure, remove and reinstall the belt or belts on a vehicle, properly torque and assemble everything correctly with minimal help or direction.	I am able to find the procedure, remove and reinstall the belt or belts on a vehicle, properly torque and assemble everything correctly with no help.

		direction.	A1011	
AU-9.8.5	I was present during theory class when the topics of this task sheet were covered.	I am able to perform an engine oil change, using proper fluid type, resetting the vehicle maintenance monitor and assemble everything correctly with extensive help or direction.	I am able to perform an engine oil change, using proper fluid type, resetting the vehicle maintenance monitor and assemble everything correctly with minimal help or direction.	I am able to perform an engine oil change, using proper fluid type, resetting the vehicle maintenance monitor and assembling everything correctly with no help.

**AU-9.9 Demonstrate knowledge and skills to perform general engine diagnostic procedures.**

	Limited	Developing	Proficient	Exemplary
AU-9.9.1	I was present during theory class when the topics of this task sheet were covered.	I am able to find the procedure, remove and reinstall the valve cover on a vehicle, properly torque and assemble everything correctly with extensive help and direction.	I am able to find the procedure, remove and reinstall the valve cover on a vehicle, properly torque and assemble everything correctly with minimal help or direction. A1004	I am able to find the procedure, remove and reinstall the valve cover on a vehicle, properly torque and assemble everything correctly with no help.
AU-9.9.2	I was present during theory class when the topics of this task sheet were covered.	I am able to find the procedure to check the engine mechanical timing and answer all of the questions with extensive help and direction.	I am able to find the procedure to check the engine mechanical timing and answer all of the questions with minimal help or direction. A1005	I am able to find the procedure to check the engine mechanical timing and answer all of the questions with no help.
AU-9.9.3	I was present during theory class when the topics of this task sheet were covered.	I am able to find the procedure, adjust the valves to specification, properly torque and assemble everything correctly with extensive help and direction.	I am able to find the procedure, adjust the valves to specification, properly torque and assemble everything correctly with minimal help or direction. A1008	I am able to find the procedure, adjust the valves to specification, properly torque and assemble everything correctly with no help.
AU-9.9.4	I was present during theory class when the topics of this task sheet were covered.	I can describe each component of the cylinder head and valve train and explain the purpose of each component and how it works with extensive help and direction.	I can describe each component of the cylinder head and valve train and explain the purpose of each component and how it works with minimal help or direction. A1009	I can describe each component of the cylinder head and valve train and explain the purpose of each component and how it works with no help. I can also point out these components on a cylinder head when asked.
AU-9.9.5	I was present during theory class when the topics of this task sheet were covered.	I can describe each component of the lubrication and cooling systems and explain the purpose of each component and how it works with	I can describe each component of the lubrication and cooling systems and explain the purpose of each component and how it works with	I can describe each component of the lubrication and cooling systems and explain the purpose of each component and how it works with no

		extensive help and direction.	minimal help or direction. A1015	help. I can also point out these components on a vehicle when asked.
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**AU-9.10 Demonstrate the knowledge and skills to diagnose and repair cooling system concerns.**

	Limited	Developing	Proficient	Exemplary
AU-9.10.1	I was present during theory class when the topics of this task sheet were covered.	I am able to check the coolant level and condition, test the coolant with a hydrometer, PH test strips, and perform a system pressure test correctly with extensive help and direction.	I am able to check the coolant level and condition, test the coolant with a hydrometer, PH test strips, and perform a system pressure test correctly with minimal help or direction. A1010	I am able to check the coolant level and condition, test the coolant with a hydrometer, PH test strips, and perform a system pressure test correctly with no help.
AU-9.10.2	I was present during theory class when the topics of this task sheet were covered.	I am able to find the procedure to inspect and replace the thermostat, properly torque and assemble everything correctly with extensive help and direction.	I am able to find the procedure to inspect and replace the thermostat, properly torque and assemble everything correctly with minimal help or direction. A1012	I am able to find the procedure to inspect and replace the thermostat, properly torque and assemble everything correctly with no help.
AU-9.10.3	I was present during theory class when the topics of this task sheet were covered.	I am able to find the procedure to drain and recover coolant, refill and properly bleed cooling system and assemble everything correctly with extensive help or direction.	I am able to find the procedure to drain and recover coolant, refill and properly bleed cooling system and assemble everything correctly with minimal help or direction. A1013	I am able to find the procedure to drain and recover coolant, refill and properly bleed cooling system and assemble everything correctly with no help.