Update to Airframe Test

May 2025

Airframe Mechanic Test Guide 2025

ASA-AMA-25

With the following changes, ASA's *Airframe Mechanic Test Guide 2025* provides complete preparation for the FAA Airframe Knowledge Exam. This test continues to reference the *Airman Knowledge Testing Supplement for Aviation Maintenance Technician* (FAA-CT-8080-4G).

About the Test Changes

The FAA exams are "closed tests," which means the database of questions used on the exam is not available to the public. However, the FAA identifies subjects that have been removed or added to a test, as well as pertinent information to ensure training and testing remain correlated, which, in turn, promotes a reliable certification system.

The questions and answer choices in this book provide a comprehensive representation of FAA questions, derived from history and experience with the airman testing process. You might see similar, though not exactly the same, questions on your official FAA exam. On the test, answer choices may be rearranged from the A, B, C order you see in this book. Therefore, be careful to fully understand the intent of each question and corresponding answer while studying, rather than memorize the A, B, C answer. While you may be asked a question that has unfamiliar wording, studying and understanding the information in this book and the associated reference documents will give you the tools to answer all types of questions with confidence. We invite your feedback. After you take your official FAA exam, let us know how you did. Were you prepared? Did the ASA products meet your needs and exceed your expectations? We want to continue to improve these products to ensure applicants are prepared, and become safe aviation maintenance technicians. Send feedback to: cfi@asa2fly.com

Page Number	Question Number	Correct Answer	Explanation
2	8170	C	**The question is revised to read:** **8170.** The aviation mechanic can distinguish between aluminum and aluminum alloy by
2	8117	A	**The question is revised to read:** **8117.** When straightening members made of 2024-T4, the aviation mechanic should
30	8253	C	**The question is revised to read:** **8253.** Where would the aviation mechanic find precise information to perform a symmetry alignment check for a particular aircraft?
37	8293-2	B	**A new question is added to read:** **8293-2.** What is the primary purpose of a special inspection? A—To perform routine maintenance tasks at scheduled intervals. B—To address specific conditions or events that may affect airworthiness. C—To replace components based on manufacturer-recommended timelines. *During the service life of an aircraft, occasions may arise when something out of the typical care and use of an aircraft could possibly affect its airworthiness. When these situations are encountered, special inspection procedures, also called conditional inspections, are followed to determine if damage to the aircraft structure has occurred. Examples of special inspections include hard or overweight landing inspection, severe turbulence or over "G" inspection, lightning strike, bird strike, flood damage, or fire damage. (AM.II.D.K5) — FAA-H-8083-30*
37	8298	B	**The question is revised to read:** **8298.** Where would the aviation mechanic find the recommended statement for recording the approval or disapproval for return to service of an aircraft after a 100-hour or annual inspection?

Page Number	Question Number	Correct Answer	Explanation
37	8303	A	**The question is revised to read:** **8303.** Where would the aviation mechanic find the operating conditions that make a 100-hour inspection mandatory?
44	8942	C	**The question structure is revised. The question, answer choices, and explanation now read:** **8942.** Which of the following statements is true? A—When an airplane is slowed below approximately 20 mph, the antiskid system automatically activates to give the pilot full control of the brakes for maneuvering and parking. B—An antiskid system consists of two components; wheel speed sensors and control valves. C—When an airplane is slowed below approximately 20 mph, the antiskid system automatically deactivates to give the pilot full control of the brakes for maneuvering and parking. *When all of the wheels are turning at less than 20 mph, the locked-wheel arming circuit becomes inoperative, giving the pilot full braking action for low-speed taxiing and parking. An antiskid system consists basically of three components: the wheel speed sensors, the control box, and the control valves. (AM.II.E.K8) — FAA-H-8083-31*
45	8947	C	**The question structure is revised. The question, answer choices, and explanation now read:** **8947.** Which of the following statements is true? A—An antiskid system is designed to apply enough force to operate just above the skid point. B—A warning lamp lights in the flight deck when the antiskid system is turned on. C—An antiskid system is designed to apply enough force to operate just below the skid point. *An antiskid system is designed to apply the correct amount of force to operate the wheel just below the skid point. This gives the most effective braking. A warning lamp lights when the system is turned off or when there is a system failure. (AM.II.E.K8) — FAA-H-8083-31*
48	8365	A	**The question is revised to read:** **8365.** How long should the aviation mechanic wait after a flight before checking tire pressure?
59	8467	C	**The question is revised to read:** **8467.** Before removing the filler cap of a pressurized hydraulic reservoir, in order to service the system, the aviation mechanic must
78	8582	B	**The question is revised to read:** **8582.** How should the aviation mechanic determine the amount of oxygen in a portable, high-pressure cylinder?
81	8641	C	**The question structure is revised. The question, answer choices, and explanation now read:** **8641.** Which of the following instruments are controlled by gyroscopes? A—Attitude indicator. B—Attitude indicator and heading indicator. C—Attitude indicator, heading indicator, and turn needle of the turn-and-slip indicator. *An attitude indicator is controlled by an attitude gyro that senses aircraft rotation about the roll and pitch axes. A heading indicator is controlled by an attitude gyro that senses aircraft rotation about the yaw axis. The turn needle of a turn and slip indicator is controlled by a rate gyro that senses aircraft rotation about the yaw axis. (AM.II.H.K7) — FAA-H-8083-31*
82	8623	C	**The question is revised to read:** **8623.** Which procedure should the aviation mechanic use if a vacuum-operated instrument glass is found to be loose?

Page Number	Question Number	Correct Answer	Explanation
96	8710-1	C	**The question structure is revised. The question, answer choices, and explanation now read:** **8710-1.** A typical large transport aircraft fuel manifold system allows which of the following? A—Tanks must be serviced through multiple connections. B—Engines can be fed only from a specified tank. C—A damaged tank can be isolated from the rest of the fuel system. *In a large aircraft manifold fuel system, all tanks can be serviced through a single connection, any engine can be fed from any tank, all engines can be fed from all tanks simultaneously, and a damaged tank can be isolated from the rest of the fuel system. (AM.II.J.K2) — FAA-H-8083-31*
98	8770	C	**The question structure is revised. The question, answer choices, and explanation now read:** **8770.** Which of the following statements is true? A—Gas-turbine-engine fuel systems are not susceptible to the formation of ice in the fuel filters. B—A fuel heater operates as a heat disperser to cool the fuel. C—Gas-turbine-engine fuel systems are very susceptible to the formation of ice on the fuel filters. *Gas-turbine-engine fuel systems are very susceptible to the formation of ice on the fuel filters. The fuel heater operates as a heat exchanger to warm the fuel. These heat exchangers may use engine compressor bleed air or warm engine oil to furnish the heat. (AM.II.J.K2) — FAA-H-8083-31*
99	8771	B	**The question structure is revised. The question, answer choices, and explanation now read:** **8771.** Which of the following statements is true? A—A fuel heater cannot use engine bleed air as a source of heat. B—A fuel heater can use engine lubricating oil as a source of heat. C—A fuel heater cannot use engine lubricating oil as a source of heat. *A fuel heater can use engine lubricating oil as a source of heat. A fuel heater can also use engine bleed air as a source of heat. (AM.II.J.K2) — FAA-H-8083-31*
99	8772	B	**The question structure is revised. The question, answer choices, and explanation now read:** **8772.** Which of the following statements is true? A—A fuel pressure gauge is not a differential pressure indicator. B—A fuel pressure gauge indicates the pressure of the fuel entering the carburetor. C—A fuel pressure gauge indicates the pressure of the fuel entering the combustion chamber. *The pressure shown on the fuel pressure gauge is the pressure of the fuel as it enters the carburetor. Most fuel-pressure gauges are differential pressure gauges. They measure the difference in the pressure of the fuel and the pressure of some reference air. When a pressure carburetor is used, this reference air pressure is the carburetor upper-deck air pressure. (AM.II.J.K2) — FAA-H-8083-31*
106	8792	C	**The question is revised to read:** **8792.** When inspecting a fuel system, the aviation mechanic should check all valves located downstream of boost pumps with the pumps
107	8797	A	**The question is revised to read:** **8797.** Microbial growth is produced by various forms of micro-organisms that live and multiply in the water interfaces of jet fuels. Which of the following could result if microbial growth exists in a jet fuel tank?
113	8839	C	**The question structure is revised. The question, answer choices, and explanation now read:** **8839.** Which of the following statements is true? A—There are two basic types of DC motors: series and compound. B—In the compound motor, the field windings, consisting of relatively few turns of heavy wire, are connected in parallel with the armature winding. C—In the series motor, the field windings, consisting of relatively few turns of heavy wire, are connected in series with the armature winding. *There are three basic types of DC motors: series motors, shunt motors, and compound motors. In a series motor, the field windings, consisting of a relatively few turns of heavy wire, are connected in series with the armature winding. (AM.II.K.K1) — FAA-H-8083-31*

Page Number	Question Number	Correct Answer	Explanation
116	8931	B	**The question is revised to read:** **8931.** If the Integrated Drive Generator (IDG) scavenge oil filter is contaminated with metal, the aviation mechanic should
124	8875	A	**The question is revised to read:** **8875.** What kind of switch should the aviation mechanic install in a single wire circuit that required the switch to be manually held in the ON position?
126	8968	C	**The question structure is revised. The question, answer choices, and explanation now read:** **8968.** Which of the following statements is true? A—An AC selsyn system is a widely used electrical method of indicating a remote mechanical movement or position. B—A resistance-type indicating system is an electrical system used for transmitting information from one point to another. C—A synchro-type indicating system is an electrical system used for transmitting information from one point to another *A synchro-type indicating system is an electrical system used for transmitting information from one point to another. A DC selsyn system is a widely used electrical method of indicating a remote mechanical movement or position. (AM.II.K.K15) — FAA-H-8083-31*
129	8969	A	**The question is revised to read:** **8969.** Prior to installation of a pneumatic surface-bonded type deicer boots, on the leading edge of the wing, the aviation mechanic should
132	8997	B	**The question is revised to read:** **8997.** In what areas of aircraft would the aviation mechanic find a carbon monoxide detector?
133	9017	B	**The question structure is revised. The question, answer choices, and explanation now read:** **9017.** Regarding fire-extinguishing systems, which of the following statements is true? A—During removal or installation, the terminals of discharge cartridges should not be grounded or shorted. B—Before connecting cartridge terminals to the electrical system, the system should be checked with a voltmeter to see that no voltage exists at the terminal connections. C—Before connecting cartridge terminals to the electrical system, the system should not be checked with a voltmeter to see that no voltage exists at the terminal connections. *The discharge cartridges for a fire-extinguishing system contain explosive charges called squibs. These squibs are ignited with an electrical current when the fire extinguisher agent discharge switch is closed. When removing or installing a discharge cartridge, ground or short the terminals to prevent an accidental firing. Before connecting the cartridge terminals to the electrical system, the system should be checked with a voltmeter to be sure that there is no voltage at the terminal connections. (AM.II.M.K6) — FAA-H-8083-31*