Chapter 24 – Answer Key

ASE-STYLE REVIEW QUESTIONS

1. Which of the following promote atomization of the paint?

a. Center orifices

b. Side orifices

c. Ports

d. All of the above

2. Technician A says that gravity-fed spray guns are the most common type found in body shops today. Technician B says that electrostatic spray guns are more common. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

3. Technician A says that HVLP spray guns should be held a little closer than older low-efficiency spray guns. Technician B disagrees. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

4. If you hold a spray gun too close to the vehicle surface, which problem will result?

a. Poor coverage

b. Dry spray

c. Runs and sags

d. Fish-eyes

5. A spraying pressure that is too high results in which of the following?

a. Poor flow

b. Poor drying characteristics

c. Bubbling

d. Sagging

6. What happens when testing the spray pattern for uniformity of paint distribution?

a. A vertical spray pattern is used.

b. The trigger is pulled all the way back and released immediately.

c. The pattern is flooded.

d. None of the above.

e. Both A and B.

7. This spray system (also known as the “high-solids” system) uses a high volume of air, delivered at low pressure, to atomize paint into a pattern of low-speed particles.

a. LVLP

b. HVLP

c. HVHP

d. LVHP

8. Which type of spray booth is the most popular air movement system used today?

a. Regular flow booth

b. Reverse flow booth

c. Downdraft booth

d. Crossdraft booth

9. Technician A says that a cartridge respirator will protect you from catalyzed paint. Technician B says that an air-supplied respirator is needed with catalyzed materials. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

10. Technician A monitors the booth intake filters and manometer readings hourly. Technician B monitors the booth intake filters and manometer readings daily. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

11. What is the purpose of a tack cloth?

a. wiping off solvent cleaner

b. removing dirt from fresh clearcoat

c. wiping dust off the surface before refinishing

d. None of the above

12. Technician A uses the same spray gun for the topcoat that was used for the undercoat. Technician B uses a different spray gun. Who is correct?

a. Technician A

b. Technician B

c. Both A and B

d. Neither A nor B

ESSAY QUESTIONS

1. What happens if the air vent hole becomes plugged in a spray gun cup?

2. Summarize some advantages of an HVLP spray gun.

3. How do you do a spray pattern test?

4. Describe five problems often found during a spray pattern test.

5. What are some common spray gun handling problems experienced by an inexperienced painter?

CRITICAL THINKING PROBLEMS

1. What will happen if you hold a spray gun too close to a vehicle when spraying?

2. When spraying, if the paint viscosity is too thick, what will be the result?

3. Name six variables that must be addressed before painting.

MATH PROBLEMS

1. An HVLP spray gun requires air delivered at 10 psi (69 kPa). Your gauge only shows 6.3 psi. By what percentage is the pressure too low?

2. If you are holding a spray gun 4.2 inches (106 mm) away when spraying enamel and the specs call for a distance of 3.4 inches (87.2 mm), how much closer do you have to move your gun in?

3. If you spray fluid out of your spray gun into a graduated container for 30 seconds and 7 ounces flow out, what is your spray gun adjustment in ounces per minute?