Viewer's Guide

Basic Car Care

(Revised 1999)

Introduction

A car is an expensive and vital asset in your life. It makes good sense to learn how to take care of it. This video will supply you with the information required to properly maintain and perform basic service on your automobile. Maintenance tips will increase vehicle safety, resale value and the pride of ownership.

Student Objectives

After viewing this video, the student will be able to:

- Check an automobile tire for wear
- Define the term "tire rotation"
- Make a general inspection of the engine compartment
- Explain how to jump start a car
- Check an automobile's fluid levels

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To The Instructor

This video is designed to be a valuable supplement to your curriculum. Since young people are extremely acclimated to television, it is a natural way to help present important aspects of your subject matter. This video is designed to give a detailed, yet broad coverage of the topic.

Most educators agree that it is best to use as many instructional methods as possible. Utilize quality textbooks, workbooks, videos, lectures, demonstrations, overheads, and other methods to present the technical information. This will hold interest and help pupils understand the large amount of information required to succeed in today's complex world.

This video is organized into major sections or topics. Each section covers one major segment of the subject. Graphic breaks are given between each section so that you can stop the video for class discussion, demonstrations, to answer questions, or to ask questions. This allows you to only watch a portion of the program each day or to present the complete video, depending on your curriculum requirements.

The video is designed to simplify the complex. Concise wording and carefully selected graphics are used to provide maximum learning in minimum time.

Close-up shots of components and service procedures are used to make every second of viewing instructional, as if each student was standing right behind you, watching over your shoulder while you were working or giving a demonstration.

Computer animation is used to explain difficult to comprehend principles or techniques. These images show how parts work, how they fit together, or how they vary in design.

Quiz Answer Key

1. a 2. c 3. c 4. a 5. d 6. d 7. c 8. b 9. c 10. b

ASE Answer Key

1. c 2. a 3. b 4. b 5. a 6. b 7. a 8. a 9. b 10.a

Use your own judgment to evaluate the definitions, short answer questions and discussion topics.

Video Discussion Topics

Here are a few topics that might be used for a class discussion:

1. Why should you consider an automotive engine an "engineering miracle?"

2. What is the value of maintaining a car regularly?

3. What is the best source of information on care of a car or light truck?

4. How can a dirty air filter affect an automobile engine's performance?

5. What are the benefits of keeping a vehicle clean?

Video Quiz

Choose the most correct answer after reading the statement:

1. Paint and appropriate car body care will prevent _____ damage.
   a. rust b. salt c. sun d. water

2. Always refer to the _____ for specific information on your car.
   a. yellow pages b. garage
   c. owner's manual d. internet

3. To restore weathered paint on a car, use _____.
   a. touch-up paint b. steel wool
   c. polishing compound d. car wax

4. _____ is an excellent lubricant for doors and trunk locks..
   a. Graphite b. White Lithium Grease
   c. Dry Stick Lubricant d. Silicone Lubricant

5. _____ is especially suited for rubber door weather stripping.
   a. Graphite b. White Lithium Grease
   c. Dry Stick Lubricant d. Silicone Lubricant

6. A tire bulging next to the road surface means _____,
   a. the tire needs air b. the tire has too much air
   c. damage could result if driven d. a & c

7. What is generally the first step when changing a tire?
   a. Block tires b. Raise vehicle
   c. Loosen lug nuts d. Remove tire

8. A whining or squealing noise from the engine is often due to _____.
   a. poor compression b. loose belts
   c. bad bearings d. broken fan blade

9. How often should engine coolant be changed?
   a. Every year b. 1 to 2 years
   c. 2-3 years d. Never

10. How much air should you put in a tire?
    a. exact recommended tire pressure
    b. several pounds less
    c. several pounds more
    d. until the tire is firm

Short Answer

Briefly answer the following questions in your own words:

1. Why is it important to inspect your car for paint chips?
2. What happens if you don't clean debris from under trim and moldings?
3. Where can you find the recommended tire inflation pressure listed?
4. How can you tell if the tire tread on a car is worn and needs to be replaced?
5. When should wiper blades be replaced?
6. What should you look for when checking hoses in the engine?
7. Describe how to check an automobile engine's oil level.
8. Explain how to check a car's brake fluid level
9. Why is contaminating brake fluid dangerous?
10. How do you check the transmission fluid?
11. Describe how to jump start a car.
12. Why should you be careful about touching a headlight with your bare skin?

ASE Questions

Choose the correct answer to the following questions.

1. Technician A recommends using white lithium grease when lubricating easy-to-reach automobile door hinges and latches. Technician B recommends using silicone lubricant on a car's rubber door weather stripping to ease window action. Who is right?
   a. Technician A only
   b. Technician B only
   c. Both A and B are correct
   d. Neither A nor B is correct

2. The tires on a particular automobile have a recommended maximum tire inflation pressure of 30 psi. Technician A is going to inflate each tire to 28 psi. Technician B is going to inflate each tire to 32 psi. Who is right?
   a. Technician A only
   b. Technician B only
   c. Both A and B are correct
   d. Neither A nor B is correct

3. Technician A says when changing a flat tire, you should loosen the wheel's lug nuts after raising the vehicle. Technician B says when changing a flat tire, you should loosen the wheel's lug nuts before raising the vehicle. Who is right?
   a. Technician A only
   b. Technician B only
   c. Both A and B are correct
   d. Neither A nor B is correct

4. Technician A says most automobile rear seats can be removed by pushing the seat rearward and downward. Technician B says most automobile rear seats can be removed by pushing the seat rearward and upward. Who is right?
   a. Technician A only
   b. Technician B only
   c. Both A and B are correct
   d. Neither A nor B is correct

5. Technician A says before checking an automobile engine for coolant leaks, you should allow the engine to reach full operating temperature. Technician B says when checking an automobile engine for coolant leaks, the engine should be cold. Who is right?
   a. Technician A only
   b. Technician B only
   c. Both A and B are correct
   d. Neither A nor B is correct

6. An automobile engine's oil level needs checking. Technician A is going to check this engine's oil level with the engine cold. Technician B is going to check the oil level after warming the engine. Who is right?
   a. Technician A only
   b. Technician B only
   c. Both A and B are correct
   d. Neither A nor B is correct

7. Technician A says an automatic transmission should be in park

when checking its fluid level. Technician B says an automatic transmission should be in neutral when checking its fluid level. Who is right?

a. Technician A only
b. Technician B only
c. Both A and B are correct
d. Neither A nor B is correct

8. The fluid level in a car's power steering pump is low. Technician A looks in the automobile's owner's manual to see if the power steering system uses automatic transmission fluid or power steering fluid. Technician B says all automotive power steering system's use power steering fluid. Who is right?

a. Technician A only
b. Technician B only
c. Both A and B are correct
d. Neither A nor B is correct

9. An older model car's master cylinder fluid level is one-quarter inch down from the top. Technician A says brake fluid should be added to this master cylinder. Technician B says the fluid level in this master cylinder is at the proper level. Who is right?

a. Technician A only
b. Technician B only
c. Both A and B are correct
d. Neither A nor B is correct

10. A particular automobile has a dead battery. Another vehicle's battery will be used to jump start the car. Technician A is going to jump start the car by first connecting the red jumper cable to the positive terminals of both batteries and then connect the black jumper cable to any ground on both vehicles. Technician B is going to jump start the car by first connecting the black jumper cable to any ground on both automobiles and then connect the red jumper cable to the positive terminals of both batteries. Who is right?

a. Technician A only
b. Technician B only
c. Both A and B are correct
d. Neither A nor B is correct