

# LOVEJOY JUNIOR LAB OFF-SITE LEARNING PACKET DAY 4

**Instructor**            **Michael Lovejoy**

**Date**    **2019-2020**

**Program/Class** JR AST

**Period**    **1-4**

## **Activities:**

1. Students will be able to list 4 out of 5 types of information found in service manuals.

1. Detail how to repair vehicle
2. Contain for each vehicle model
  1. Step-by-step procedures
  2. Specifications
  3. Diagrams
  4. Exploded part illustrations
  5. Troubleshooting charts
3. Also called shop manuals

2. Students will be able to list 3 types of manuals with 100% accuracy.

1. Manufactures
  2. Manuals produced for each specific vehicle by manufacturer in given model year
2. Specialized manuals
  1. Cover only specific repair areas or sections
3. General repair manuals
  1. Published by companies other than manufacturer
  2. Include Mitchell, Motor, and Chilton manuals
4. Repair sections cover vehicle's major systems
  1. How to recognize and diagnose problems
  2. How to inspect, *test*, and repair each system
  3. Any special tools needed
5. General information

1. Section of manual that helps you with vehicle Identification, basic maintenance, and other general subjects.
3. Student will be able to list 4 out of 5 reasons for manual illustrations.
  1. How to measure part wear
  2. How to install part
  3. Exploded views
  4. Disassembled views
  5. Essential for understanding procedures and specifications
4. Students will be able to list 7 of 8 types of service manual abbreviations.
  1. 1. A/C: air conditioning
  2. 2. A/T: automatic trans axle
  3. 3. EGR: engine gas recirculation
  4. 4. GND: ground
  5. 5. IC: ignition coil
  6. 6. MAP: manifold absolute pressure
  7. 7. PCV: positive crankcase ventilation
  8. 8. WOT: wide open throttle
5. Students will be able to list 3 out of 4 types of diagnostic charts.
  1. Types
    1. Tree
    2. Block
    3. Illustrated
    4. Component location
6. Students will be able to list 3 types of service publications with 100% accuracy.
  1. Owner's manual
    1. Aids purchaser of new vehicle with basic vehicle issues
  2. Flat-rate manual
    1. Lists flat-rate times for repairs
  3. Technical bulletin
    1. Helps technician stay up-to-date

7. Students will be able to list 4 types of information that needs to be placed on a work order with 100% accuracy.

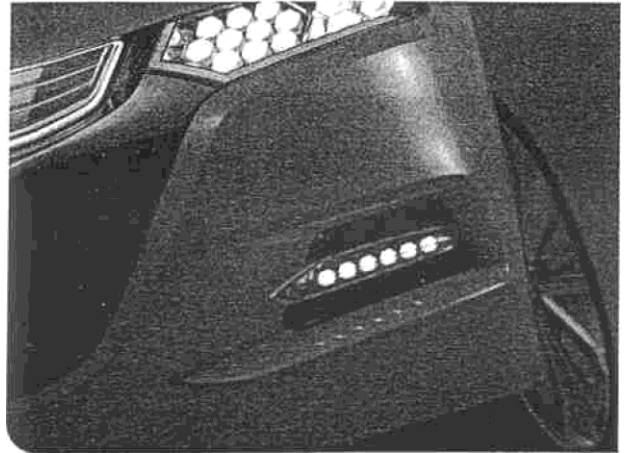
1. Also known as repair order or shop ticket
  1. Use to record information about vehicle being serviced
  2. Initiated by shop service writer or manager
    1. Customer information
    2. Vehicle information
    3. Written description of problems or symptoms
    4. Work authorization (signature)
2. Technician
  1. Uses information as starting point
  2. Records services or repairs completed
  3. Lists flat rates or actual time of repairs
  4. Calculates total labor charge
  5. Calculates total parts charges
  6. Calculates tax rates
  7. Provides final cost of repairs

**Assessment:**

Students will receive 20 points on completion of Chapter 7 work sheet.

# Chapter 7

## Service Information and Work Orders



Name \_\_\_\_\_ Date \_\_\_\_\_

Instructor \_\_\_\_\_ Score \_\_\_\_\_

**Objective:** After completing this chapter, you will be able to properly use automotive service manuals and other sources of automotive service information.

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### Service Manuals

1. Describe the following types of service manuals.

(A) Manufacturer's manual: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(B) Specialized manual: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(C) General repair manual: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. The \_\_\_\_\_ section of a service manual helps you with \_\_\_\_\_ a vehicle's identification, basic maintenance, lubrication, and other general subjects.

3. Where is a vehicle identification number (VIN) normally located?  
\_\_\_\_\_  
\_\_\_\_\_

4. The \_\_\_\_\_ sections of a service manual cover the \_\_\_\_\_ vehicle's major systems.



5. What purpose(s) do service illustrations serve?

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6. What do the following abbreviations stand for?

(A) A/C: \_\_\_\_\_

(B) A/T: \_\_\_\_\_

(C) EGR: \_\_\_\_\_

(D) GND: \_\_\_\_\_

(E) IC: \_\_\_\_\_

(F) MAP: \_\_\_\_\_

(G) PCV: \_\_\_\_\_

(H) WOT: \_\_\_\_\_

7. Name four basic types of diagnostic charts.

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## Service Publications

8. What information is normally contained in an owner's manual?

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9. How is a flat rate manual used?

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10. \_\_\_\_\_ help the technician stay up-to-date with recent technical changes, repair problems, and other service-related information.

11. Name four methods for storing computer-based service data.

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Name \_\_\_\_\_

- 12. One \_\_\_\_\_ can hold the information from an entire set of service manuals.
- 13. \_\_\_\_\_ services allow a service facility to find service information that is not available in the manuals or electronic media they have on hand.

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## Work Orders

- \_\_\_\_\_ 14. A work order may be used \_\_\_\_\_.
- (A) to record information about a vehicle that is being serviced
  - (B) as the invoice for the customer
  - (C) when preparing a repair estimate
  - (D) All of the above.

15. In your own words, explain the procedure for filling out a work order.

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