



国家级职业教育规划教材  
劳动保障部培训就业司推荐

高等职业院校汽车检测与维修技术专业

# 汽车专业英语

# GNH

Qiche Jiance Yu Weixiu Jishu Zhuanye

劳动保障部教材办公室组织编写

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中国劳动保障出版社



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# 前言

为了满足高等职业院校培养汽车检测与维修技术专业高等技术应用型人才的需要,劳动和社会保障部教材办公室组织一批教学经验丰富、实践能力强的教师与行业、企业的一线专家,在充分调研的基础上,编写了汽车检测与维修技术专业教材20余种。

在教材的编写过程中,我们力求做到以下几点:

第一,从汽车制造、维修企业岗位要求分析入手,结合多年高等职业院校培养高等技术应用型人才的经验,确定课程体系、教学目标和教材的结构与内容,强化教材的针对性和实用性。

第二,以国家职业标准为依据,使教材内容涵盖《汽车维修工》等国家职业标准的相关要求,便于“双证书”制度在教学中的贯彻和落实。

第三,根据以汽车底盘、发动机、电气系统的拆装、检测与维修等技能为主线、相关知识为支撑的编写思路,精练教材内容,切实落实“管用、够用、适用”的教学指导思想。

第四,根据学校的教学设备和汽车行业的发展趋势,合理安排教学内容。在使学生掌握典型汽车的相关知识和拆装、检测、维修技能的基础上,介绍其他车型,尤其介绍能够体现先进技术的相关内容,既保证教材的可操作性,又体现先进性。

第五,按照教学规律和学生的认知规律,以实际案例为切入点,并尽量采用以图代文的表现形式,降低学习难度,提高学生的学习兴趣,从而达到好教、好学的目的。

在上述教材的编写过程中,得到了有关省市教育部门、劳动和社会保障部门以及一批高等职业院校的大力支持,教材的诸位主编、参编、主审等做了大量的工作,在此我们表示衷心的感谢!同时,恳切希望广大读者对教材提出宝贵的意见和建议,以便修订时加以完善。

劳动和社会保障部教材办公室

2007年3月

# 内容简介

本书为国家级职业教育规划教材，由劳动保障部培训就业司推荐。

本书根据高等职业技术学院教学实际，由劳动和社会保障部教材办公室组织编写。本书以汽车检测与维修技术专业学生需要的汽车专业词汇和短语为主，力求使内容涵盖汽车结构、维修、检测、电路图和各种信号等知识。

本书主要内容包括：汽车基本结构、仪表面板、活塞和动力、点火开关的位置、变速杆位置和超速挡开关、检查泄漏、测试与充电、发动机冷却系统、如何识读电路图、空调系统、车载计算机、电控悬架系统、防抱死制动系统、混合动力汽车和控制汽车污染等。

本书为高等职业技术学院汽车类专业教材，也可作为成人高校、本科院校举办的二级职业技术学院和民办高校的汽车类专业教材，或作为自学用书。

本书由吕惠敏主编，李桂华、王茂邨、邓碧妍参编，梁启勇主审。

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# Unit 1

## The Basic Components of an Automobile

### Part 1 Text

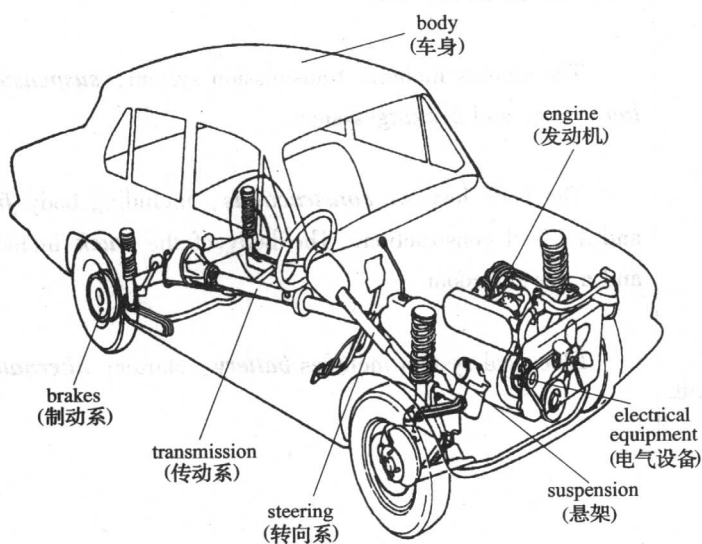


Fig1. 1 Layout of A Modern Automobile

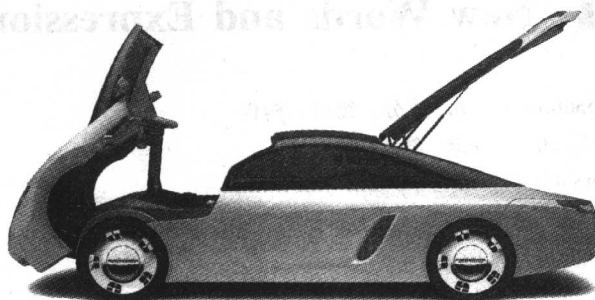


Fig1. 2 A Modern Car



automobile 汽车

engine 发动机

chassis 底盘

body 车身

system 系统

fuel 燃料

ignition 点火

lubrication 润滑

mechanism 机构

valve 阀门

suspension 悬挂

steering 转向

braking 制动

construction 结构

frame 车架

truck 卡车

cargo 货厢

battery 蓄电池

alternator 交流发电  
机

An *automobile* probably has about 15, 000 different parts. Some of them make it more comfortable or better looking, but most of them make it run.

These parts can be divided into four major groups. There are four basic components of the automobile (see Fig 1.1): *engine*, *chassis*, *body* and electrical *system*.

A modern car (see Fig 1.2) is perhaps more beautiful, but these four groups are more important.

The engine changes *fuel* energy into mechanical power. It includes *ignition* system, starting system, *lubrication* system, cooling system and fuel supply system. It also includes crank-connecting rod *mechanism* and *valve* timing mechanism.

The chassis includes transmission system, *suspension* system, *steering* system and *braking* system.

The body has two *constructions*, including body/*frame* construction and unitized construction. The body of the *truck* includes a *cargo* body and a driver's room.

Electrical system includes *battery*, starter, *alternator* etc. .



## New Words and Expressions

component [kəmˈpəʊnənt] *n.* 成分, 组成, 构件

comfortable [ˈkʌmfətəbl] *adj.* 舒适的

automobile [ˈɔ:təməubi:l] *n.* 汽车

engine [ˈendʒin] *n.* 发动机

chassis [ˈʃæsi] *n.* 底盘

body [ˈbɒdi] *n.* 车身

system [ˈsistəm] *n.* 系统, 体系

**mechanism** ['mekənizəm] *n.* 机械装置, 机构  
**ignition** [ig'nifən] *n.* 点火, 点燃  
**lubrication** [lu:bri'keifən] *n.* 润滑  
**fuel** [fjuəl] *n.* 燃料  
**suspension** [səs'penfən] *n.* 悬架  
**steer** [stiə] *v.* 驾驶, 转向  
**construction** [kən'strʌkʃən] *n.* 结构  
**battery** ['bætəri] *n.* 蓄电池  
**alternator** ['ɔ:ltə (: ) neitə] *n.* 交流发电机  
**electrical system** 电气系统  
**fuel energy** 燃油能量  
**mechanical power** 机械能量  
**ignition system** 点火系统  
**starting system** 起动系统  
**lubrication system** 润滑系统  
**cooling system** 冷却系统  
**fuel supply system** 供油系统  
**crank-connecting rod mechanism** 曲柄连杆机构  
**valve timing mechanism** 配气机构  
**transmission system** 传动系  
**suspension system** 悬挂系统  
**steering system** 转向系统  
**braking system** 制动系统  
**body/frame construction** 车身/车架结构  
**unitized construction** 整体式结构



## Exercises

### 1. Which one is right? Please read the text again.

- (1) An automobile probably has about 7, 000 different parts in it. They all make it run. ( )
- (2) The vehicle has five basic components of the automobile. ( )
- (3) The drive line belongs to the chassis. ( )
- (4) A cargo body belongs to the body of the truck. ( )

### 2. Fill in the following blanks with proper words and learn them by heart.

- (1) Engine system includes \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.
- (2) Chassis system includes \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.
- (3) Body has a \_\_\_\_\_ construction and a \_\_\_\_\_ construction.
- (4) Electrical system includes \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ etc..

3. Where are the major parts of a chassis (see Fig 1.3)? Please point them out in the picture.

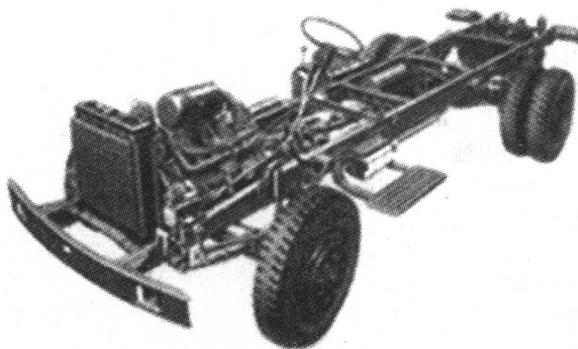


Fig 1.3 Cargo Chassis

## Part 2 Dialogue

### Introduce Yourself

**Hi! I am Kevin Brown.**

Good morning, everybody. So, here am I: Kevin Brown.

I am 16 and I live with my parents in Brighton, on the south coast of England.

I am doing some training at a big car maker, I want to be a **mechanic** (see Fig 1.4) in the future.

And every Monday I go to school at Brighton **Technical College**.

I have a pen pal called Elsa from Australia.



Fig 1.4 Mechanic

mechanic	n. 技工, 机修工
technical college	技术学院



### Exercises

1. Please review the phonetic symbol if necessary. Ref to *appendix A*.
2. Answer the following questions about Kevin Brown in simple way.



Fig 1.5 Skee

- (1) How old is he? \_\_\_\_\_
- (2) Where does he live? \_\_\_\_\_
- (3) What does he do? \_\_\_\_\_
- (4) Where does he study? \_\_\_\_\_

3. Suppose you like sking (see Fig 1.5) or want to be a skier in the future, Please write a passage about yourself and learn how to show yourself.

## ***Part 3 Practice Material***

### **A: Layout of the Transmission System**

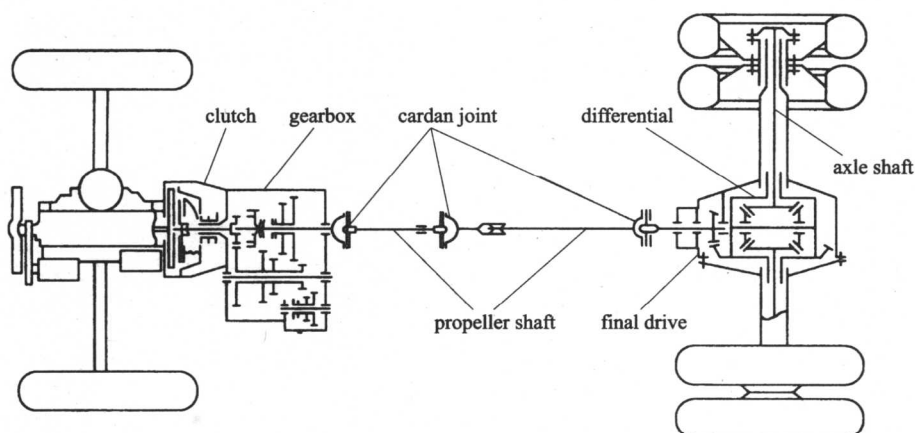


Fig 1.6 Layout of the Transmission System (mechanical, FR type)

### **B: Reading Material: Chassis**

The chassis (see Fig 1.7) brings together several major operating parts of a vehicle. The chassis includes the transmission, suspension, steering and braking systems.

Transmission system—sends the drive to the wheel.

Suspension system—absorbs the road shocks.

Steering system—controls the direction of movements.

Braking system—slows down the vehicle.

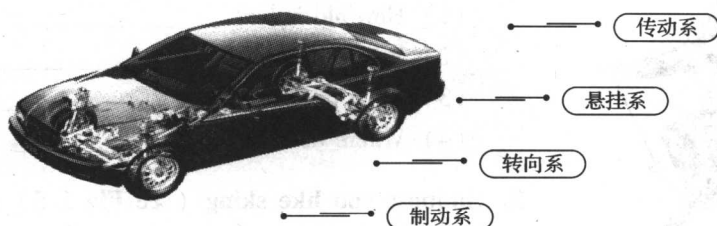


Fig 1.7 the Chassis



## Exercises

1. Study Fig 1.6 (Layout of the transmission system) and translate the English into Chinese.
2. What does the transmission system include?
3. What does the chassis include?

# Unit 2

## Instrument Panel

### Part 1 Text

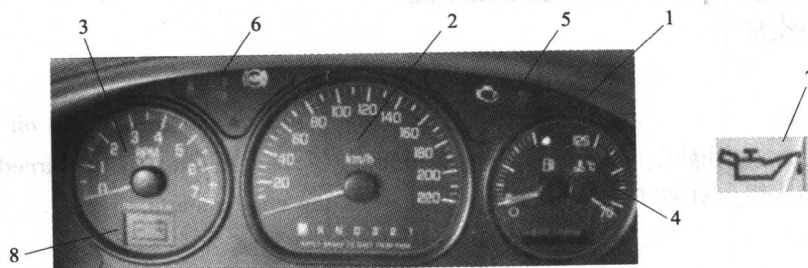


Fig 2. 1 Instrument Panel

The **instrument panel** ( see Fig 2. 1 ) has many **indicators** to give you important information about your car. For example:

#### 1. Fuel gauge

The **fuel gauge** displays approximately how much fuel you have in the **fuel tank**. For proper fuel gauge operation, the **ignition switch** must be in the OFF position before you add fuel to the fuel tank.

#### 2. Speedometer

The **speedometer** tells you how many miles (kilometers) per hour your vehicle is moving.

#### 3. Tachometer

The **tachometer** tells you the approximate **engine revolutions** per minute (how fast the engine is running). The tachometer is on the left side of the instrument Panel. Driving with the pointer in the red zone may cause engine damage.

**instrument panel** 仪表板

**indicator** 指示器

**fuel gauge** 油量表

**fuel tank** 油箱

**ignition switch** 点火开关

**speedometer** 车速表

**tachometer** 转速表

**engine revolution**  
发动机转速

coolant system 冷却系统

parking brake 驻车制动

brake fluid level 制动液面

master cylinder reservoir 制动主储油缸

qualified service technician 专业技术人员

engine oil pressure 机油压力

ignition key 点火钥匙

#### 4. Engine coolant temperature gauge

This gauge indicates the temperature of the fluid in your vehicle's **coolant system**. If the pointer moves out of the NORMAL band, the engine will overheat and be damaged.

#### 5. Air bag light

The light comes on for six seconds when the ignition is turned to the ON position, then goes out.

#### 6. Brake system light

The warning light for the brakes can show two things—that the **parking brake** is not fully released, or that the **brake fluid level** is low in the **master cylinder reservoir**.

If the fluid level is low, the brake system should be checked by a **qualified service technician**.

#### 7. Engine oil pressure warning light

This light indicates the **engine oil pressure**, not the oil level. The light should come on every time your **ignition key** is turned to ON or START, and should go out when the engine starts.

#### 8. Charging system light

This light comes on every time you turn your ignition key to ON or START. The light should go off when the engine starts and the alternator begins to charge.

If the light stays on or comes on when the engine is running, have the electrical system checked as soon as possible.



## New Words and Expressions

indicator [ˈɪndɪkeɪtə] *n.* 指示器

information [ˌɪnfəˈmeɪʃən] *n.* 通知, 资料, 信息

display [dɪˈspleɪ] *vt.* 陈列, 显示

approximately [əˈprɒksɪˈmætli] *adv.* 近似地, 大约

speedometer [spiˈdɒmɪtə] *n.* 车速表

tachometer [tæˈkɒmɪtə] *n.* 转速表

cause [kɔːz] vt. 引起  
 damage [ˈdæmɪdʒ] n. 损害, 伤害  
 indicate [ˈɪndɪkeɪt] vt. 指出, 显示  
 show [ʃəʊ] v. 显示  
 check [tʃek] vt. 检查  
 release [rɪˈliːs] n. 释放, 放松  
 fluid [ˈfluː(ɪ)d] n. 流体  
 instrument panel 仪表板



## Exercises

1. Please review the phonetic symbols if necessary. Ref to appendix A.
2. Please read the text again, and fill in the blanks.

(1) The \_\_\_\_\_ displays approximately how much fuel you have in the fuel tank.  
 (2) The \_\_\_\_\_ tells you how fast the engine is running.  
 (3) The engine will \_\_\_\_\_ and \_\_\_\_\_, if the pointer moves out of the NORMAL band.  
 (4) The charging system light should \_\_\_\_\_ when you turn your ignition key ON or START.

3. Read the text again and connect the following phrases.

engine oil pressure warning light

油量表



fuel gauge

机油压力警告灯



charging system light

制动指示灯



braking system light

充电指示灯



4. Translate the following sentences into Chinese.

(1) Many of the indicator lights come on when you turn the ignition switch ON.  
 (2) When the Low fuel indicator glows, it means you should refuel.  
 (3) Light Symbols normally come on when you turn the ignition switch ON and go off after the engine starts.  
 (4) The air bag light comes on for six seconds when the ignition is turned to the ON position, then it goes out.



5. Look at Fig 2.2 and talk with your classmates about the indicators you know.

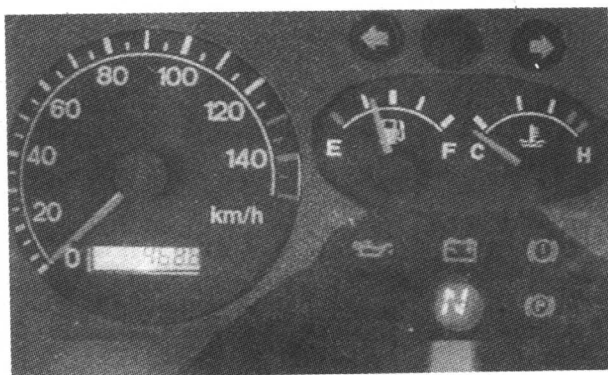


Fig 2.2 Indicator in Car

## Part 2 Dialogue

### I Want to Change A New Car

- A: Oh, there is something wrong with my car. The air bag light comes on when driving.
- B: Your car is rather old. Why not change a new one?
- A: I want to change a new car and I like Honda best, especially the red one, but it is too expensive.
- B: Oh, there is a car exhibition (汽车展览) tomorrow afternoon. I have two tickets. Would you like to go with me?
- A: Yeah, maybe I can find my favorite car besides Honda.
- B: And the bank will offer you loans for twenty years.
- A: That's all right.



### Exercises

1. Make a dialogue with your partner.
2. Have you ever been to visit a car exhibition? Talk with your classmate.