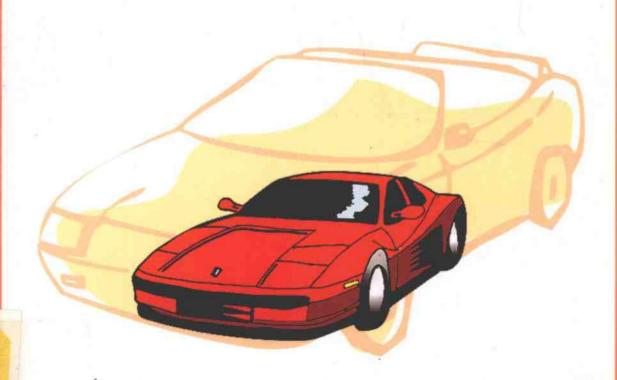
全国中等职业技术学校 汽车类专业教材 专业英语系列教材

汽车维修英语

ENGLISH FOR AUTO SEVICE

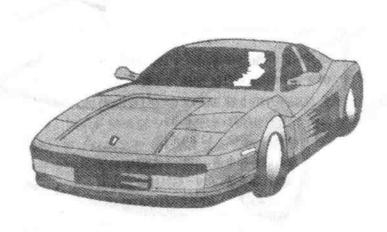


中国劳动社会保障出版社

全国中等职业技术学校 汽车类专业教材 专业英语系列教材

汽拿鐵修英语

ENGLISH FOR AUTO SEVICE



● 中国劳动社会保障出版社

图书在版编目(CIP)数据

汽车维修英语/边明远主编 一北京:中国劳动社会保障出版社,2004 全国中等职业技术学校教材 ISBN 7-5045-3868-X

I. 汽··· II. 边··· III. 汽车-车辆修理-英语 IV. H31 中国版本图书馆 CIP 数据核字(2004)第 037408 号

中国劳动社会保障出版社出版发行

(北京市惠新东街1号 邮政编码: 100029) 出版人、张梦欣

世界知识印刷厂印刷装订 新华书店经销 787毫米×960毫米 16开本 7印张 152千字 2004年6月第1版 2004年6月第1次印刷 印数: 5000册 定价: 12.00元

读者服务部电话: 010 - 64929211 发行部电话: 010 - 64911190 出版社网址: http://www.class.com.cn 版权专有 侵权必究· 举报电话: 010-64911344 随着我国社会主义市场经济的进一步发展,特别是人世以后,越来越多的企业对技术工人的专业外语水平提出了较高的要求,因此,专业英语已成为学生们参与就业竞争,以及今后从业后在工作中所必需的工具之一。为适应这一需要,我们组织编写了这套专业英语教材,并在编写过程中坚持了以下原则:

第一,与专业紧密结合,根据专业需要设置单元内容,力求收录各专业最新、最实用的词汇和用语,并注意在选材时降低相关专业知识的难度,使教材既突出专业特色,又能充分体现英语教学的规律。

第二,根据不同专业对英语教学的要求,教材在单元设置中阅读和口语各有侧重,如《饭店服务英语》《商品经营英语》《文秘英语》等侧重口语,而《电工英语》《电子英语》《机械英语》等则侧重阅读。对专业性较强的部分教材还给出了阅读部分的译文,以方便师生的教与学。

第三,教材在内容上注重选材新颖实用,力求采用地道的英语表达;在形式上注重生动活泼,图文并茂。

本套教材为中等职业技术学校学生设计,初中起点,并与通用教材《英语》相配套。 考虑到通用英语教材中已讲授语法,故此套教材不再列入语法条目,涉及到语法难点时在 "注释"中予以讲解。

本套教材自成体系,同时每种教材的编写又参照了相关专业的教学计划和主要专业课程的教学大纲,故又可与各相关专业配套使用。

本套教材首先于 2003 年推出《电子英语》《会计英语》《饭店服务英语》《烹饪实用英语》《文秘英语》《商品经营英语》《服装英语》等 7 种, 2004 年将推出《物业管理英语》《汽车维修英语》《机械英语》《电工英语》《机电英语》《计算机专业英语》《市场营销英语》等 7 种。以后,将根据专业需要继续推出《家政与社区服务英语》《美容美发英语》《物流英语》等,以满足各专业学生学习英语的需要。

此次教材的开发工作得到了北京、湖南、湖北、广东、江苏等省(市)劳动和社会保障厅(局)以及有关学校的大力支持,并得到了美国新闻学硕士 Mr. Michael Connelly的大力帮助,对此我们表示诚挚的谢意。

本书为专业英语系列教材,供全国中等职业技术学校汽车类专业使用。主要介绍了 汽车的基本结构和维修保养的初步知识,以及与汽车相关的其他知识以开阔读者眼界。全 书共分为20课,内容丰富,通俗易懂,图文并茂,形式活泼。

本书也可作为职业培训教材和汽车行业职工的自学用书。

本书由边明远主编,陈勇、李军、郭海涛、李丰华参加编写。本书在编写过程中还得到了李克强教授的指导和帮助,在此表示感谢。

此为试读,需要完整PDF请访问: www.ertongbook.com

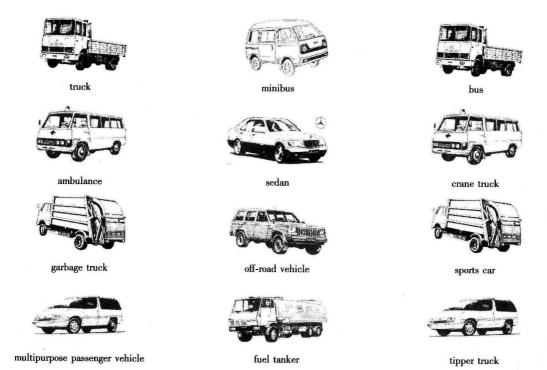
Contents

Lesson One	Automobiles ····	(1)
Lesson Two	The Structure of an Auto	(6)
Lesson Three	The VIN	(10))
Lesson Four	Repair Tools	(15	5)
Lesson Five	Engines	(20))
Lesson Six	The Components of an Engine	(24	1)
Lesson Seven	Transmission Systems	(28	3)
Lesson Eight	Clutches		
Lesson Nine	Gearboxes	(37	7)
Lesson Ten	Final Drives ·····	(41	l)
Lesson Eleven	Cardan Drives	(46	5)
Lesson Twelve	Steering Systems	(50))
Lesson Thirteen	Brake Systems	(55	5)
Lesson Fourteen	The Running Device of an Auto	(60))
Lesson Fifteen	Suspensions	(63	3)
Lesson Sixteen	Wheels and Tires ·····	(67	7)
Lesson Seventeen	Fuels for Cars	(7)	1)
Lesson Eighteen	Other Oil Products for an Auto	(74	4)
Lesson Nineteen	Regular Maintenance of an Auto	(78	3)
Lesson Twenty	Special Detecting Facilities for the Auto Repair	(82	2)
附录1 Vocabula	ary ·····	(89	9)
四三? 会老汉。	,	(96	6)

Automobiles



It's a big family for automobiles. There are many members in this group. Vehicles of today can be classified as many different kinds by their various uses^[1]. Generally there are six kinds of vehicles. They are wagons, off-road vehicles, tipping vehicles, tractors, passenger cars and special vehicles. And there are also many different kinds of vehicles in each group. Trucks and pickups that we often see^[2] belong to the wagon. While buses, minibuses and sedans are all passenger cars. There are some other special vehicles serving us^[3] in daily life, including street water sprinklers, sweepers, garbage trucks, ambulances, fire trucks, fuel tankers and crane trucks, etc. Some of them are listed below:



Let's speak

Peter: Hi, Jack! Your sedan is very nice.

Jack: Hi, Peter! I'm afraid that you have made a mistake [4].

Peter: Why?

Jack: It's not a sedan. It's a sports car. Actually you should call it SUV.

Peter: Really? Oh, there are so many kinds of automobiles today, and I cannot know all of them.

Jack: Yeah, generally automobiles are classified by their use.

Peter: I know that. For example, passenger cars are used to send passengers, and wagons are used to transport eargos.

Jack: Right. Different vehicles have different use, but they all serve for our daily life.

Peter: Sure! The sweeper and the garbage truck can make our city clean, the truck can load much goods, and the car can make you ride comfortably and go anywhere easily.

Jack: Yeah, so I choose a sports car. I like the feeling of flying on the highway.

New words and expressions

automobile ['o:təməbi:l] n. 汽车 vehicle [·viːikl] n. 交通工具, 车辆; 媒介物; 传达手段 classify [·klæsifai] v. 分类,分等 wagon [wægən] n. 四轮马车,货车 off-road ['of raud] adj. 越野的 tip [tip] v. 翻倒,倾斜 tractor ['træktə] n. 拖拉机;牵引车 passenger ['pæsindʒə] n. 乘客, 旅客 special [rspefal] adj. 特别的,特殊的;专门的,专用的 truck [trak] n. 卡车,敞篷货车 pickup ['pik,Ap] n. 皮卡车,轻型货车 belong [birlon] v. 位于,处在(适当位置),属于 minibus [·minibas] n. 小型公共汽车,小巴 sedan [si·dæn] n. 轿车 serve [səːv] v. 服务 include [in·kluːd] v. 包括,包含

sprinkler ['sprinkle] n. 洒水车, 洒水装置 sweeper ['swirpa] n. 扫除机,清扫车,打扫的人 garbage ['gq:bid3] n. 垃圾,废物 ambulance [·æmbjuləns] n. 救护车 fire [faiə] n. 火 fuel [fjuəi] n. 燃料 tanker [ˈtæŋkə] n. 罐车,油槽车 crane [krein] n. 起重机 multipurpose [maltipo:po:pos] adj. 多用途的,多功能的 tipper [tipə] n. 翻斗卡车, 自卸车 transport [træn·sport] v. 传送, 运输 cargo [·kq:gəu] n. (由车、船、飞机等运输的)货物 load [laud] v. 装载 comfortably [·kʌmftəbəli] adv. 安乐地, 舒适地, 充裕地 choose [tfuzz] v. 选择, 选定 highway [haiwei] n. 公路

off-road vehicle 越野车
tipping vehicle 自卸车
passenger car 客车
special vehicle 专用车辆,特种车辆
street water sprinkler 洒水车
garbage truck 垃圾车
fire truck 消防车
fuel tanker 运油车
crane truck 汽车起重机
sports car 跑车
multipurpose passenger vehicle 多用途客车(MPV)
tipper truck 自卸货车
SUV(sports utility vehicle) 运动型多功能车



- 1. by 引导的介词短语作为状语来修饰谓语动词。
- 2. that 引导的从句作为定语修饰主语 trucks and pickups。

- 3. "serving us"作"vehicles"的定语。
- 4. "make a mistake" 意思是"犯错误"。



Let's do exercises

I. Oral Practice.

- 1. Tell your partner something about your favorite car in English.
- 2. Point out some kinds of automobiles that can be used to send passengers.

II. Put the following into Chinese.

- 1. automobile family
- 2. fuel tanker
- 3. off-road vehicle
- 4. sports car
- 5. fire truck

III. Put the following into English.

- 1. 自卸车
- 2. 客车
- 3. 多用途客车
- 4. 垃圾车
- 5. 洒水车



Let's learn more

Emergency Equipment (緊急装备)

A car's trunk (行李箱) can hold only a certain amount of equipment (一定数量的装备). Because of the limited space in the trunk, the following are the essentials (基本工具) for safety and emergent repairs. Several of the smaller items listed may be carried in the glove compartment (汽车仪表板上的小柜,手套柜) for easy access (取用), so that they won't get lost under heavier equipment:

1. Flashlight (手电筒)

- 2. Spare tire (备用轮胎)
- 3. Jack (千斤顶)
- 4. Four-way lug wrench (扳手)
- 5. Water pump belt (水泵带)
- 6. Tire pressure gauge (轮胎气压表)
- 7. Wrench-and-socket set (成套的套筒扳手和套筒)
- 8. Utility knife (工具刀)
- 9. Both Standard and Phillips screwdrivers (标准型和菲利浦螺钉旋具)
- 10. Battery-jumper cables (蓄电池跨接线)
- 11. Pliers (钳子)
- 12. Fuses (熔断器)
- 13. Hose clamps (软管夹)
- 14. One quart of motor oil (一夸脱电动机润滑油)
- 15. Six reflected road flares or a set of warning triangles (6 个反光路标或一套三角警示 牌)
 - 16. 1 gallon plastic water jug (一加仑容量的塑料水壶)
 - 17. Aerosol flat tire fixer (溶胶补胎胶)
 - 18. Small fire extinguisher (小型灭火器)
 - 19. Rags or paper towels (抹布或纸巾)

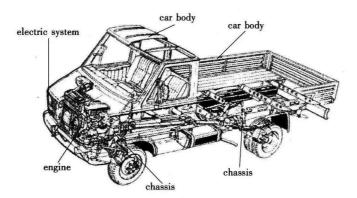
The Structure of an Auto



Commonly an automobile consists of [1] four basic mechanisms: the engine, the chassis, the car body and its accessories, and the electric system. Among them, the engine is the power source that makes a car move [2]. There are two kinds of engines in use [3]: gasoline engines and diesel engines.

The chassis acts as^[4] the base for an automobile to support other parts equipped on the vehicle. It includes the transmission system, the running device, the steering and the brake systems.

The car body is the structure used to protect the driver, passengers and cargos. The electric system is composed of the air-conditioning system, lights, windshield wipers and so on. The following figure shows the layout of an automobile.





- Andy: Hi, Mike! I want to ask you a question.

Mike: Go ahead^[5].

Andy: I always hear people say "the heart of the car." But which part is the heart of a vehicle?

Mike: Oh, it is the engine.

Andy: But why?

Mike: Because the engine provides the power that makes a car move, just like the heart of a hu-

man body.

Andy: I see. Thank you! Mike: It's my pleasure [6].

New words and expressions

structure ['straktfo] n. 结构,构造 auto ['ortau] n. 汽车 commonly ['kəmənli] adv. 普通地, 一般地 consist [kən·sist] v. 由……组成 basic ['beisik] adj. 基本的, 基础的 mechanism ['mekənizəm] n. 机械装置, 机构, 机制 engine [rendzin] n. 发动机 chassis [·ʃæsi] n. 底盘 accessory [ak·sesəri] n. 附件, 附加物 electric [i·lektrik] adj. 电的, 电动的, 电气的 system ['sistem] n. 系统,体系,制度,体制 power ['pauə] n. 动力,能量,功率 source [sois] n. 源泉,来源,源头 move [muːv] v. 移动 gasoline ['gæsəlim] n. 汽油 diesel [ˈdiːzəl] n. 柴油 base [beis] n. 基础,底座 support [sə'poɪt] v. 支撑; 支持 equip [i·kwip] v. 装备, 配备 transmission [trænz·miʃən] n. 传动装置; 变速器 device [di-vais] n. 装置,设备 steer [·stiə] v. 驾驶, 掌舵 brake [breik] n. 车闸,制动器; v. 刹车,制动 protect [prə·tekt] 保护,维护,防护 compose [kəm·pəuz] v. 由……组成,由……构成 air-condition ['eəˌkən'diʃən] n. 空气调节装置 light [lait] n. 光, 灯

windshield ['windshield] n. 挡风玻璃wiper ['waipə] n. 擦拭者, 刮擦器figure ['figə] n. 图表, 图解layout ['lei,aut] n. 布局, 设计, 安排provide [prə'vaid] v. 供应, 供给

car body 车身
electric system 电气系
gasoline engine 汽油机
diesel engine 柴油机
transmission system 传动系
running device 行驶系
steering system 转向系
brake system 制动系
air-conditioning system 空调系统
windshield wiper 雨刮器



- 1. "consist of" 意思是 "由……构成"。
- 2. "that makes a car move" 修饰 "power"。后置定语在译成中文时应按照中文的习惯将定语的位置放到中心词的前面,这里可译为"使汽车运动的动力"。
- 3. "be in use" 意思是"正在使用"。
- 4. "act as" 意思是"承担,起……作用"。
- 5. "go ahead"表示将原来做的事继续进行下去,此处表示对提问者的鼓励,可译为"请问吧"。
- 6. "It's my pleasure" 意思是"没什么",是一种表客气的礼貌用语。



Let's do exercises

I. Discuss the following questions in English.

1. How many basic components are there in a car? What are they?

2. Point out some parts you know in the chassis of an automobile.

II. Put the following into Chinese.

- 1. running device
- 2. the car body
- 3. steering system
- 4. electric system
- 5. transmission system

III. Put the following into English.

- 1. 空调系统
- 2. 汽油机
- 3. 柴油机
- 4. 雨刮器
- 5. 制动系统



Let's learn more

Logos (标志) of Automakers (1)

This is the trademark of an automaker whose name is related to the horse. BMW, always called "宝马" in China, is the abbreviation (缩写) of the Bavarian Motor Works of Germany (德国巴伐利亚汽车公司). Famous for its comfortable and easy riding, BMW has become the dream of more and more people who wish to enjoy the popular automotive culture with ease.

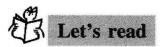






Lesson Three

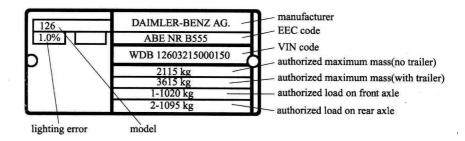
The VIN

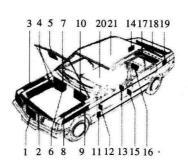


It's necessary for a technician to know the details about a car^[1]. An efficient way to know those details is to check the VIN.

The VIN is short for the Vehicle Identification Number, which is a 17-digit number composed of a series of letters and Arabic numerals^[2]. The VIN contains a lot of information about a car, such as the production area and time, the manufacturer's name, the trademark and the model, etc.

The VIN plate can be set up on different parts of an auto. The following figures show a VIN plate and its installation place on the car.

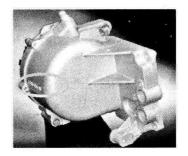


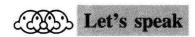


Manufacturer	Chinese Name	Country	VIN installation place
Audi	奥迪 .	Germany	14 17 18
BMW	宝马	Germany	3 4 7 8
Chrysler	克莱斯勒	the U. S. A.	2 8 9
Rolls Royce	劳斯莱斯	Britain	3 5
Toyota	丰田	Japan	3 4 7 8 10 15 17
Volkswagon	大众	Germany	1 2 3 7 8 14 17 18 19

Besides the VIN, Chinese also identify an auto by using two other numbers. The one is the chassis number, which is stamped on the front part of the frame for a truck. For a sedan, it is stamped on the firewall under the engine hood. The other one is the engine serial number, which is stamped on the cylinder block^[3].







David: Hi, Mike! What's this plate?

Mike: Oh, it's the VIN.

David: VIN?

Mike: It's the Vehicle Identification Number. It's used to identify a car.

David: I know that people identify their cars with the engine serial number and the chassis number.

Mike: But the VIN can provide more information. Actually it includes the information of the engine and the chassis.

David: Really? Oh, it's great!