



高职高专“十二五”规划教材

汽车实用英语

Automobile Practical English

主编 赵锋 杨曼



航空工业出版社

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内容提要

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内 容 提 要

汽车行业对从业人员的英语要求越来越高,为培养新的职业环境下“语言+技能”的复合型人才,我们编写了《汽车实用英语》一书。本教材共8章,分别是 Automobile Basic (汽车基础)、Engine (发动机)、Chassis (底盘)、Body and Electrical Equipment (车身和电气设备)、Auto Maintaining Equipments (汽车维修设备)、Auto Maintenance (汽车维修)、Automobile Sales and After Service (汽车销售和售后服务)和 The Automobile's Present and Future (汽车的现在和未来)。其中第七章汽车销售和售后服务全是实用对话,情景逼真,介绍如何以英语为工作语言进行交流。

本教材采用中英文对照的讲解方法,结合大量图例,介绍了汽车相关的英语知识,浅显、简明、实用性强,是高职高专汽车类专业的首选教材。

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编 者 的 话

随着企业国际化进程的加速、车辆进口化程度的不断提高,进入中国市场的进口汽车的数量越来越多。进口汽车的车型繁多、结构复杂,而且其说明书、配件和指导手册等多用英语写成,给众多汽车行业从业人员带来了使用和维修上的困难。为帮助高职高专学生打好语言基础,满足未来从业时市场对从业者的技能需求,我们精心编写了《汽车实用英语》一书。

本书共分八章,第一章简要介绍了汽车相关的基础知识,包括汽车发展史、汽车总体结构、汽车品牌、汽车标牌。第二、三、四章主要以直观的图片展示汽车组成配件,主要包括发动机、底盘、车身和电器设备,全面而又层次分明地介绍了各配件的名称、作用及原理。第五章详细介绍了常用的多种汽车维修设备的操作,包括汽车专用数字式万用表、示波器、解码器等。第六章是汽车维修英语,重点解说了故障码、电路图,还选取了部分车主手册和维修手册的内容作英汉对照讲解。第七章是实用对话,情景逼真,介绍如何以英语为工作语言进行交流。最后一章描述了汽车的现状和未来。

本书内容多选自国内外汽车生产厂商的维修技术资料、专业书刊,以反映近年来汽车技术的发展动向,提高书本的实用价值,开拓学生视野,提高专业技术水平。同时采用大量的图例,加强英语学习的直观性和趣味性。

本书可作为高职高专汽车类专业的英语教材,也供汽车维修人员、汽车服务人员阅读参考。

本书由赵锋、杨曼任主编,由蒋晶、宋丽、廉玉香、王璐、叶巍、高妍、赵利、姜鹤、丁行海和罗首元任副主编。

由于编写时间仓促,编者水平有限,书中疏漏与不当之处在所难免,敬请广大读者批评指正。

编 者
2012年6月

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Chapter One Automobile Basic

第一章 汽车基础

Section One The History and Development of Automobile 汽车发展史

——History of cars Timeline 汽车历史年表

1769: The first self-propelled car (See Figure 1-1)

Nicolas Cugnot, a French military engineer developed a steam powered road-vehicle for the French army to haul heavy cannons.

Using a steam engine fixed to a three-wheeled cart, Cugnot successfully converted the back-and-forth action of a steam piston into rotary motion.

The truck reputedly reached walking speed and carried four tonnes. The army later abandoned his invention.

1769年：第一辆依靠自身动力行驶的车（参见图 1-1）

法国军事工程师尼古拉斯·柯诺特，为法国军队发明了一辆蒸汽动力汽车用以拖拉沉重的大炮。

柯诺特将蒸汽机安装在一个三轮马车上，成功地将活塞的往复直线运动转变为旋转运动。据说这辆车的速度和步行一样慢，又高达四吨重，军队后来就没用了。

1801: First Horseless Carriage to Transport Passengers

Richard Trevithick built his first functioning steam locomotive. It was the first horseless carriage to transport passengers. Innovations like hand brakes, gears, and steering improvements were developed in subsequent decades. (See Figure 1-2)

1801年：第一辆不用马拉的载人车子
理查·特里维西克发明了首辆有实用价值的蒸汽机车。这是第一辆不用马拉的载人车子。在随后的几十年里，人们又发明了手制动器、传动装置，改良了操纵装置。（参见图 1-2）

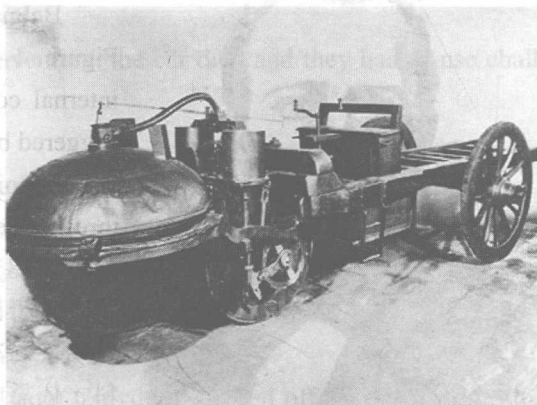


Figure 1-1

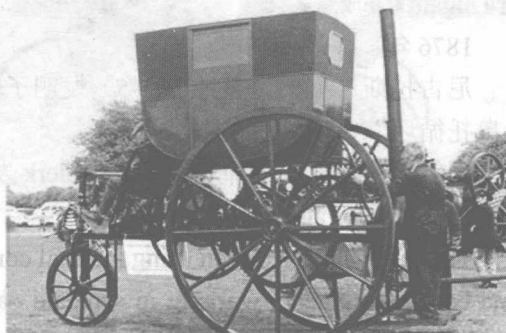


Figure 1-2



1824: Uphill Struggle

English engineer, Samuel Brown (See Figure 1-3) designed an engine that used hydrogen as a fuel—an early example of an internal combustion engine. He used it to briefly power a vehicle up Shooter's Hill—the highest point in south London.

1824 年：艰苦“爬”山

英国工程师塞缪尔·布朗（参见图 1-3）发明了以氢气为燃料的发动机——早期内燃机的一种。

他用这个发动机给一辆“爬”射手山的车短暂地提供动力，射手山是伦敦南部的最高峰。



Figure 1-3



Figure 1-4

1858: First Coal-gas Engine

Belgian-born engineer, Jean Joseph Étienne Lenoir (See Figure 1-4) invented and patented (1860) a two-stroke, internal combustion engine. It was fuelled by coal gas and triggered by an electric spark-ignition.

Lenoir later attached an improved engine to a three-wheeled wagon and completed a fifty-mile road trip.

1858 年：第一辆煤气发动机

生于比利时的工程师艾蒂安·勒努瓦（参见图 1-4）发明了二冲程内燃机并申请了专利。该发动机以煤气为燃料、依靠电火花点火启动。

后来勒努瓦将发动机应用在一辆三轮车上，成功行驶了 50 英里的路程。

1876: Stroke of Genius

Nikolaus Otto (See Figure 1-5) invented and later patented a successful four-stroke engine, known as the “Otto cycle.”

The same year, the first successful two-stroke Clerk cycle internal-combustion engine was invented by the Scottish engineer, Sir Dugald Clerk.

1876 年：了不起的发明

尼古拉斯·奥托（参见图 1-5）发明了四冲程发动机并由“奥托循环”申请专利。

同年，苏格兰工程师 Sir Dugald Clerk 发明了首台二冲程克拉克循环发动机。

1886: Motor age moves forward

The first vehicles driven using internal combustion engines were developed roughly at the same time by two engineers working in separate parts of Germany—Gottlieb Daimler (See Figure 1-6) and Karl Benz. They simultaneously formulated highly successful and practically powered vehicles that, by and large, worked like the cars we use today. The age of modern motor cars had begun.



Figure 1-5



1886 年：汽车时代继续向前推进

在德国的不同地方，两个工程师——戈特利布·戴姆勒（参见图 1-6）和卡尔·本茨——几乎在同一时间发明了靠内燃机驱动的汽车。他们同时成功建造了非常实用的汽车，工作原理与我们今天的汽车大体相同。现代汽车的时代开始了。

1889: The First Motor Company Formed

Two former French wood machinists, Rene Panhard and Emile Levassor, set up the world's first car manufacturers. Their first car was built in 1890 using a Daimler engine.

Rene Panhard and Emile Levassor were also the inventors of the modern version of the transmission.

The day they planned on showing the media their invention, the car died and they had to use chalk diagrams instead.

1889 年：第一个汽车公司成立

两个法国木材机械师，雷纳·潘哈德（Rene Panhard）和埃米尔·莱瓦索尔（Emile Lavassor）创建了世界上第一个汽车制造厂。他们的第一辆车诞生于 1890 年，用的是戴姆勒发动机。

雷纳·潘哈德和埃米尔·莱瓦索尔还是现代版传动装置的发明者。就在他们要向媒体展示他们的发明的那天，车却坏了，最后他们不得不画粉笔图演示。

1896: First Road Traffic Death

Bridget Driscoll, a 44-year old mother of two from Croydon, stepped off a kerb and into the history books. She was hit by a passing motor car (See Figure 1-7) near Crystal Palace in London. She died from head injuries.

The driver, Arthur Edsell, was doing just 4mph at the time. The coroner, returning a verdict of accidental death, said “I trust that this sort of nonsense will never happen again.”

1896 年：第一起道路交通死亡事故

44 岁的 Bridget Driscoll，一个两岁小孩的老母亲，从街头走进了历史书。她在伦敦的水晶宫附近被一辆经过的机动车（参见图 1-7）撞到，脑部受伤致死。

当时，司机 Arthur Edsell 的驾驶速度只有 4 英里每小时。验尸官在返回了一份意外死亡的判决后说：“我相信这种荒唐的事不会再次发生。”

1903: The Ford Motor Company Formed

After fitting moving assembly lines to the factory in 1913, Ford became the world's biggest car

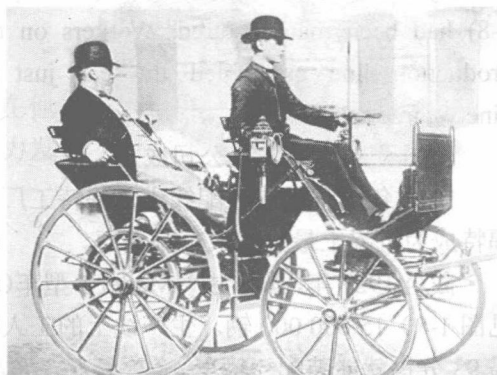


Figure 1-6



Figure 1-7

manufacturer.

By 1927, 15 million Model Ts (See Figure 1-8) had been manufactured. Workers on the production line assembled the car just in ninety-three minutes.

1903 年: 福特汽车公司成立

1913 年, 移动式装配线进入福特工厂, 福特成为世界上最大的汽车制造商。

截至 1927 年, 福特生产 Model T 型车(参见图 1-8) 15 000 000 辆。生产线上的工人只需 93 分钟就能装配一辆车。

1911: Key development

Working for Cadillac's design and development department, Charles Kettering invented the electric ignition and starter motor. Cars could now start themselves. (See Figure 1-9)

Kettering later introduced independent suspension, and four-wheel brakes. And By 1930, most of the technology used in automobiles today had already been invented.

1911 年: 重大进步

Charles Kettering 在为凯迪拉克设计与发展部门工作期间, 发明了电点火和起动机。现在汽车能自己启动了。(参见图 1-9)

后来 Kettering 又引进了独立悬架和四轮制动器。到 1930 年, 大部分现代汽车的技术几乎都被发明了。

1965: Emissions regulations introduced

Controls on harmful emissions initially introduced in California, the rest of the world soon followed suit.

Safety devices also became mandatory—before this, manufacturers only included seat belts (See Figure 1-10) as optional extras.

1965 年: 排放物管理规定发布

加利福尼亚州最先发布了对有害排放物的控制规定, 世界其他地方随即纷纷效仿。

安装安全设备也成了强制性的。在这之前, 汽车制造商只将安全带(参见图 1-10)作为可选附件。

1997: Car Manufacturers get green (See Figure 1-11)

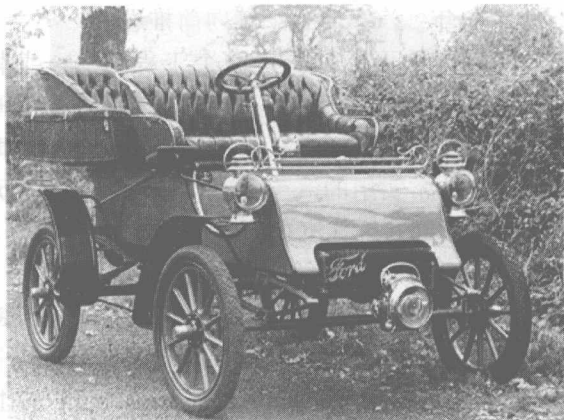


Figure 1-8



Figure 1-9

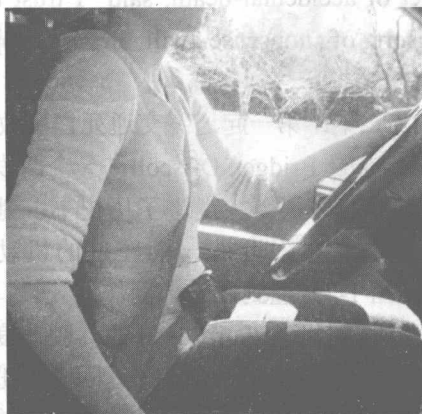


Figure 1-10



Manufacturers have acknowledged that oil reserves will dry up in the future. They're now developing engines that use more than one fuel source—hybrid engines.

1997 年：制造环保汽车（参见图 1-11）

汽车制造商承认，未来石油储备会枯竭。现在他们已经在研发可用多种燃料的发动机——混合动力发动机。

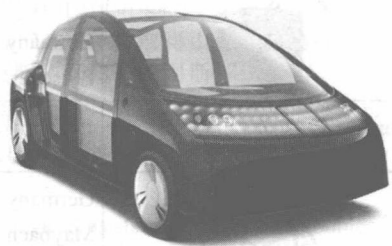


Figure 1-11

Section Two Famous Auto Brands and Automakers

著名汽车品牌 and 制造商

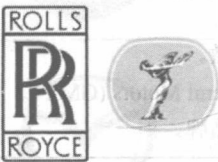
European Series 欧洲车系

Logo 车标	Brand 品牌	Note 注解
 Mercedes-Benz	Germany Mercedes-Benz (德) 奔驰	The three-pointed star represents the growth of the business into transport on land, sea and air. 三叉星象征着公司业务要向水上、陆地、空中的运输业发展。
	Germany BMW (德) 宝马	BMW is the acronym for Bavaran Motor Works. BMW 是 Bavaran Motor Works (巴伐利亚发动机制造厂) 的缩写。
	Germany Volkswagen (德) 大众	Volkswagen means “people’s car” in German. Letters “V” & “W” are the letters represented in Volkswagon logo, where the letter “V” is sitting above the letter “W”. Volkswagen 在德文中意为“大众使用的汽车”。商标中以字母“V”和“W”代表 Volkswagen，字母 V 在 W 之上。
	Germany Audi (德) 奥迪	The company got named after its creator, Augush Horch. The word Audi is based on a latin translation of the word “Horch”.公司名字来自其创始人 Augush Horsh。Horsh 在拉丁文中的对应词为 Audi。 The four rings of Audi represent the four companies of the Auto-Union consortium of 1932—DKW, Horch, Wanderer, and Audi. 四个圆环表示公司前身——汽车联合公司是由 DKW、霍希、旺德诺和奥迪 4 家公司在 1932 年合并而成的。



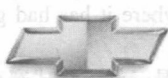
 PORSCHE	Germany Porsche (德) 保时捷	Porsche got its name from the original designer Ferdinand Porsche. 保时捷的名字来自于其最初的设计师南德·保时捷。
	Germany Maybach (德) 迈巴赫	founded in 1909 by Wilhelm Maybach and his son. 由威廉·迈巴赫和他的儿子在 1909 年创立
 RENAULT	France Renault (法) 雷诺	named after its founders Marcel, Louis and Fernand Renault 以雷诺三兄弟的姓氏命名
 CITROËN	France Citroën (法) 雪铁龙	founded in 1919 by French industrialist André-Gustave Citroën 1919 年由法国工业家安德烈·雪铁龙创建
 PEUGEOT	France Peugeot (法) 标致	The family business that precedes the current Peugeot company was founded in 1810, and manufactured coffee mills and bicycles. In 1858, Emile Peugeot applied for the lion trademark. 标致公司是一个家族企业, 1810 年成立, 曾经生产咖啡磨和自行车。1858 年 Emile Peugeot 采用“狮子”作为商标。
	Sweden Volvo (瑞典) 沃尔沃	Volvo is Latin and means "I roll". Volvo 是拉丁文, 意为“滚滚向前”。
 JAGUAR	Britain Jaguar (英) 捷豹	The leaping Jaguar is possibly built to represent the speed, power and quickness of the car. 跳跃的美洲豹似乎象征着车的速度、力量和敏捷。
 BENTLEY	Britain Bentley (英) 宾利	The company was founded on 18 January 1919 by Walter Owen Bentley known as W.O. 沃尔特·欧文·本特利(即人们熟知的 W.O. 先生)于 1919 年 1 月 18 日成立了本公司。
	Britain Lotus (英) 莲花	The letters at the top are "A-C-B-C". They are the initials of Anthony Colin Bruce Chapman, the designer, builder, and founder of LOTUS. 上面的字母是 A-C-B-C, 是莲花汽车设计者、构建者和创立者 Anthony Colin Bruce Chapman 的首字母的缩写。
 ASTON MARTIN	Britain Aston Martin (英) 阿斯顿·马丁	Aston Martin is a British manufacturer of luxury sports cars that was founded by Lionel Martin and Robert Bamford in 1913. The company's name was derived in 1914 from Lionel Martin's name and his racing success at the Aston Hill Climb course in Aston Clinton in Buckinghamshire. 阿斯顿·马丁是英国豪华跑车生产商, 由莱昂内尔·马



		丁和罗伯特·班福德在 1913 年创立。公司名字源自莱昂内尔·马丁的名字和 1914 年他取得山地汽车赛胜利的地方——白金汉郡阿斯顿克林顿的阿斯顿山。
	Britain Rolls-Royce (英) 劳斯莱斯	The company is named after its founders Charles Rolls and Henry Royce. 公司以其创立者查理·劳斯和亨利·莱斯的名字命名。 The Rolls Royce logo consists of two 'R's or doubles 'R' which apparently stands for Rolls and Royce. 劳斯莱斯商标由两个 R 组成，很显然，R 代表劳斯和莱斯。
	Italy Maserati (意) 玛莎拉蒂	The Maserati logo is a trident, the traditional symbol of the city of Bologna, where Maserati cars were built. 玛莎拉蒂的车标是三叉戟，这是车厂所在地意大利博洛尼亚市的传统标志。
	Italy Ferrari (意) 法拉利	The company has been noted for its continued participation in racing, especially in Formula One, where it has had great success. 公司因其持续参与赛车比赛（特别是一级方程式赛车）并取得巨大胜利而闻名于世。
	Italy Lamborghini (意) 兰博基尼	The company was founded by manufacturing magnate Ferruccio Lamborghini in 1963. 公司由制造业巨头费鲁齐欧·兰博基尼于 1963 年创立。 Ferruccio Lamborghini's passion for the bullfighting sport is reflected in the logo. Most of the Lamborghini car models are named after famous bulls. 兰博基尼对斗牛运动很热衷，这在车标上有所反映。大多数兰博基尼的车型也是以著名公牛命名。
	Italy Fiat (意) 菲亚特	The name was spelled FIAT because it is an acronym standing for Fabbrica Italiana Automobili Torino. 公司名字被拼写为 FIAT，这是公司全名的首字母缩略词。

American Series 美国车系

Logo 车标	Brand 品牌	Note 注解
	USA Cadillac (美) 凯迪拉克	Cadillac was founded in 1902 by Henry Leland, a master mechanic and entrepreneur, who named the company after his ancestor, Antoine de la Mothe Cadillac, the founder of the city of Detroit. 凯迪拉克由亨利·利兰德在 1902 年创立，他是一名熟练的技工兼企业家。公司的名字以他的祖先——建立底特律城的安托万·德拉莫特·凯迪拉克——命名。

	USA Buick (美) 别克	Buick is named after its Scottish founder David Dunbar Buick. 别克以其创始人苏格兰人戴维·邓巴·别克的姓氏命名。 Buick's logo originated from the coat of arms of the Buick family. 别克的车标源自别克家族的家徽。 Buick is a premium brand of General Motors (GM). 别克是通用汽车下的一个豪华品牌。
	USA Ford (美) 福特	The company is named after its founder Henry Ford. 公司取名于其创始人亨利·福特。
	USA Chevrolet (美) 雪佛兰	William Durant, the founder of General Motors, asked Louis Chevrolet, a well known car racer, to help him design a car for the general public. Chevrolet got named after its designer because Durant liked the sound of the name and because Chevrolet was a prominent name in motor sports. 通用汽车公司的创始人威廉姆·杜兰特先生邀请声誉卓著的赛车手路易斯·雪佛兰帮助他设计一款面向大众的汽车。后因杜兰特喜欢“雪佛兰”的发音，而设计者雪佛兰又是汽车运动界的名人，便取了“雪佛兰”这个名字。
	USA Chrysler (美) 克莱斯勒	On June 6, 1925, Chrysler was founded by Walter Chrysler from the Maxwell Motor Company. 公司为沃尔特·克莱斯勒于1925年6月6日利用马克斯韦尔汽车公司剩下的资产所创建的。
	USA Lincoln (美) 林肯	The company was founded in 1917 by Henry Leland. Leland, one of the founders of Cadillac, left the Cadillac division of General Motors during World War I and formed the Lincoln Motor Company incoln Motor Company, named after Abraham Lincoln, his longtime hero, to build Liberty aircraft engines 公司1917年由亨利·林兰德(凯迪拉克创始人之一)创立。他在第一次世界大战期间离开通用汽车的凯迪拉克分部，成立一家生产飞机发动机的林肯汽车公司。公司以他长期的偶像亚伯拉罕·林肯的名字命名。

Asian Series 亚洲车系

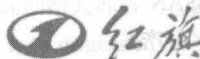
Logo 车标	Brand 品牌	Logo 车标	Brand 品牌
	Japan LEXUS 日(雷克萨斯)		Japan ISUZU 日(五十铃)



	Japan NISSAN 日(日产)		Japan Toyota 日(丰田)
	Japan MAZDA 日(马自达)		Japan Honda 日(本田)
	Japan SUBARU 日(斯巴鲁)		Japan SUZUKI 日(铃木)
	Japan MITSUBISHI 日(三菱)		Korea HYUNDAI 韩(现代)
	Korea Kia 韩(起亚)		Korea SSANG YONG 韩(双龙)

Homemade Series 国产车系

Logo 车标	Brand 品牌	Logo 车标	Brand 品牌
	奇瑞		吉利
	长城		比亚迪

	 长安	 红旗	 红旗
	 哈飞		 金杯

Section Three Automobile Overall Structure 汽车总体结构

Modern automobile is made up of four basic sections: engine, chassis, body and electrical equipment. The engine acts as the power unit located normally at the front of the car, followed immediately by a clutch, gear box, propeller shaft, universal joint, differential, back axle, etc. The engine is the heart of an automobile. It burns fuel to produce power. When the power from the engine continues to be transmitted to the chassis, it begins with power train or transmission system,, goes on to the suspension system, steering system and braking system. These individual system interact with each other closely to make the wheels run and the car move safely and smoothly under the control of the driver. The automobile body provides a protective covering for the passengers and cargo. It is designed to keep the occupants safe and comfortable. The electrical equipment supplies lighting and driving power for the automobile. Some parts of an aotomobile is shown as Figure 1-12.

现代汽车由发动机、底盘、车身、电器设备四大部分组成。发动机起动力单元的作用，它通常位于轿车的前部，紧随其后的是离合器、变速箱、传动轴、万向节、变速器以及后桥等。发动机是汽车的心脏，通过燃烧燃料产生动力，底盘依靠其传动系、悬架系、转向系和制动系的分工合作，将发动机的动力传递给车轮，使汽车按照驾驶员的操纵安全、平稳地行驶。车身用于装载乘客和货物，车身设计应使乘客觉得舒适、安全。电控设备为汽车提供照明和驱动电源。部分汽车部件如图 1-12 所示。