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Automotive Diagnostic Products

US Industry Study with Forecasts for **2011 & 2016**

Study #2290 | January 2008 | \$4400 | 207 pages



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INDUSTRY STRUCTURE

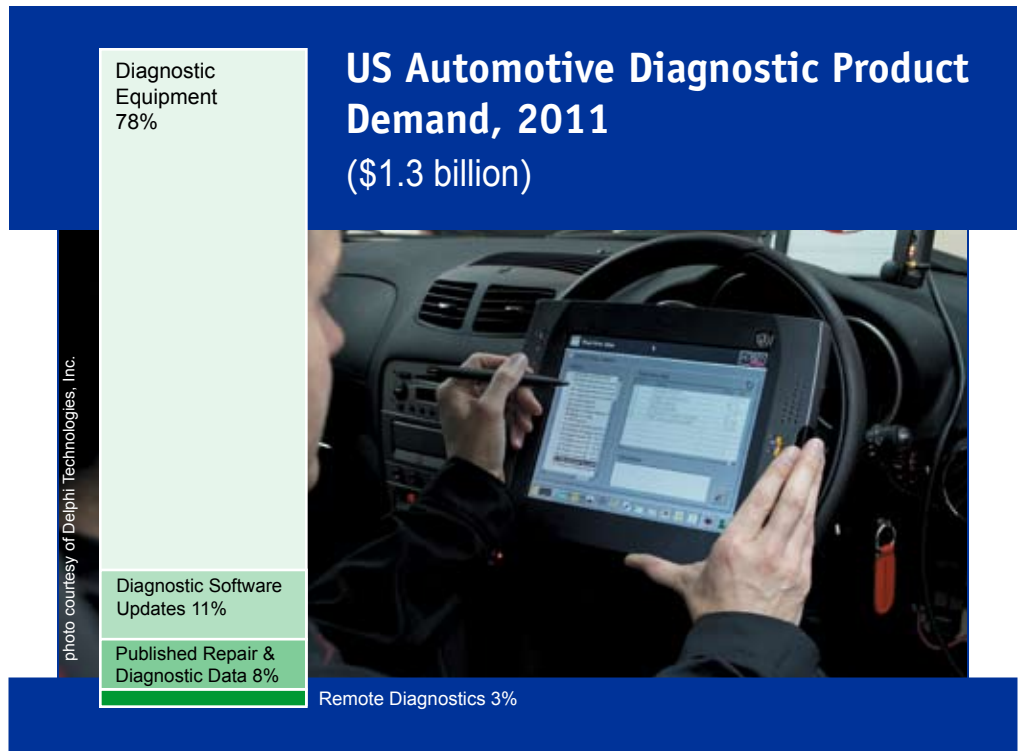
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Gains will be driven in part by more electronic/electrical systems in automobiles and heightened awareness of vehicle fuel efficiency that can be improved by regular engine tune-ups.

US demand to grow 5.9% annually through 2011

US demand for automotive diagnostic equipment, software, services and data will grow 5.9 percent per year to \$1.3 billion in 2011. Despite the vehicle-quality-driven slowdown experienced in overall aftermarket parts and service sales in the US, diagnostic equipment demand should remain healthy for a number of reasons. Perhaps most importantly, demand for these products is driven by the expanding role played by electronic/electrical systems in automobiles -- these systems should comprise over 40 percent of vehicle value by 2016; up significantly from the 22 percent they represented in 2000. The heightened awareness among car owners of vehicle fuel efficiency, as noted in a number of recent surveys, will also likely stimulate diagnostic equipment demand, since regular engine tune-ups, which require the use of diagnostic equipment, can improve vehicle fuel economy by 10 percent or more. A similar phenomenon occurred during the 1970 fuel crises.

Other demand drivers include the continued rollout of new vehicle regulations; the increased need for vehicle electronic system reprogramming at the service level; and the abilities of equipment manufacturers to maintain innovation-based pricing levels. The increasing prevalence of in-vehicle wireline and wireless networks, such as the Controller Area Network (CAN), BLUETOOTH



wireless systems and vehicle telematics systems, will require more advanced diagnostic equipment going forward.

Technician-owned handheld systems, software to become more important

There have also been two ongoing shifts within the diagnostic equipment industry that will affect future market demand. The first involves the transition from highly expensive shop-owned "big box" devices toward technician-owned handheld systems. Today, rather than rely on the shop's big box analyzer, more technicians are purchasing their own scanners and other electronic tools, which has supported demand for these

tools. The other, and newer, trend involves the shift away from a primary focus on hardware to the rising influence of software. Some diagnostic equipment manufacturers see software becoming the dominant source of the value for the industry in the future, as hardware becomes more commodity-like in nature. In fact, the introduction of less-expensive PC/Windows-based operating systems opens the door to the total commoditization of hardware, with software becoming the most valuable part of the business. As a result, diagnostic software will experience rapid annual growth as the introduction of new, more powerful diagnostic hardware allows the use of more sophisticated (and more expensive) software.

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Sample Text, Table & Chart

DIAGNOSTIC PRODUCTS

Diagnostic Equipment

The US market for automotive electronic diagnostic equipment is forecast to grow from \$1.2 billion in 2006 to \$1.8 billion in 2011, representing a 50% increase. This growth is driven by expected increases in tune-up activity, vehicle drivetrains, and content found in electronic-control systems. The expanding vehicle fleet and the continued increases in the number of vehicles equipped with electronic-control systems are driving the introduction of more sophisticated diagnostic equipment.

**SAMPLE
TEXT**

The increased diversity of engine underhood systems includes widening numbers of hybrid-electric, diesel and alternative fuel (e.g., ethanol) vehicles. At the powertrain system level, new technologies include more sophisticated emissions control equipment, advanced engine ignition, timing and valve actuation systems, complex hybrid-electric power control and management systems, and higher levels of engine/transmission/ safety/convenience integration. As vehicles with these systems enter the vehicle park and begin to grow in numbers, the need for more sophisticated diagnostic equipment will continue to grow. Beyond system integration complexity, the number of standalone electronics systems also continue to grow in interior, safety and entertainment/information systems, increasing the need for more advanced diagnostic equipment in these areas as well.

Another factor driving growth is the increasing expense of high-level diagnostic equipment. Equipment costs, despite the tendency of computer-related equipment to increase in power and decrease in cost, will likely continue to grow in order for new systems to attain the needed flexibility to work with an ever-increasing variety of light vehicles in the vehicle park. Trends in new vehicle marketing have put a premium on the introduction of new product lines in new segments, which does not appear to be slowing down. The number of new models in the marketplace has continued to grow in recent years, as automakers introduce

TABLE VI-2

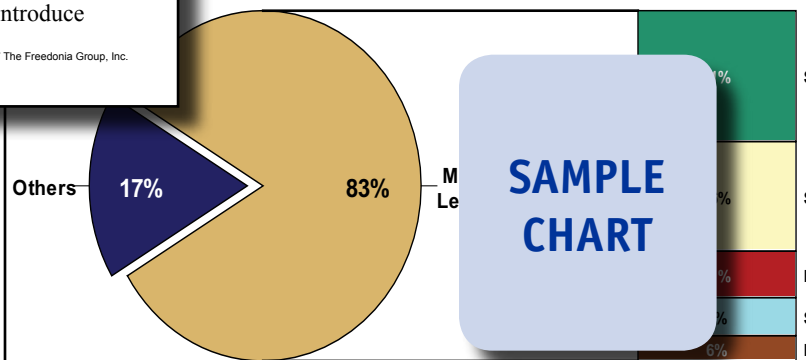
PROFESSIONAL DEMAND FOR AUTOMOTIVE DIAGNOSTIC PRODUCTS (million dollars)

Item	1996	2001	2006	2011	2016
Professional Outlets (000)	2	2	2	2	2
\$/professional outlet					
Professional Aftermarket Demand					
Garages & Service Stations					
Automobile Dealerships					
Specialists					
Others					
% professional					
Total Diagnostics Market					

**SAMPLE
TABLE**

CHART VII-2

DIAGNOSTIC EQUIPMENT & SERVICES MARKET SHARE BY COMPANY, 2006 (US \$975 million)



**SAMPLE
CHART**

Sample Profile, Table & Chart

TABLE IV-6

**AUTOMOTIVE ELECTRICAL PRODUCT
AFTERMARKET DEMAND
(million dollars)**

Item	1996	2001	2006	2011	2016
Light Vehicles in Use (million)	200	200	200	200	200
\$ aftermarket/vehicle	200	200	200	200	200
Electrical Product Demand	500	500	500	500	500
Batteries	200	200	200	200	200
Ignition Systems & Parts	200	200	200	200	200
Charging Equipment	200	200	200	200	200
Spark Plugs	200	200	200	200	200
Other	200	200	200	200	200
% electrical	100	100	100	100	100
Total Automotive Aftermarket	38850	44500	51800	60650	71300



COMPANY PROFILES

Hickok Incorporated

10514 Dupont Avenue
 Cleveland, OH 44108

216-541-5000

http://www.hickok.com

Sales: \$11 million

US Sales: \$11 million

Employment: 100

Key Products: pressure test kits,

quick probes



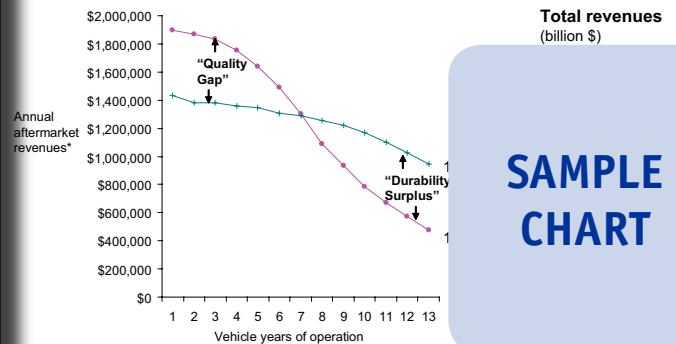
Hickok is a manufacturer of precision indicating instruments, automotive diagnostic tools and equipment, and fastening control systems. The Company is organized into two segments: Indicators and Gauges, and Automotive Diagnostic Tools and Equipment.

The Company participates in the US automotive diagnostics industry through the Automotive Diagnostic Tools and Equipment segment, which had sales of \$11 million in FY 2007. The segment designs and produces equipment, including diagnostic tools, for testing and servicing automotive systems. Among Hickok's diagnostic products are scan tools, circuit testers, brake pad pressure test kits, quick probes and cooling system pressure test kits. The automotive aftermarket accounted for 26 percent, or about \$3 million, of the segment's sales in FY 2007.

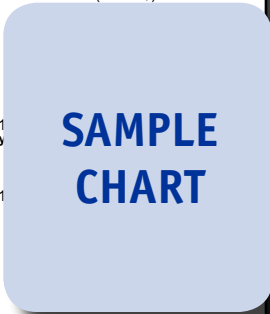
Scan tools are manufactured and marketed under the NEXT GENERATION STAR (NGS) brand name. NGS tools are designed primarily for use on vehicles manufactured by Ford Motor Company

CHART III-8

AFTERMARKET VALUE OF INCREASED DURABILITY



1990-era vehicle at consistent 75% lower aftermarket revenues per year compared to 1970 vehicle (i.e., \$220 per vehicle for 1970 vs. \$165 per vehicle for 1990)



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OTHER STUDIES

Automotive Aftermarket in China

The aftermarket for light vehicle components and parts in China will grow 17.9% annually through 2011. Gains will be driven by the dramatic increase in the light vehicle park and increasing aftermarket spending per vehicle. Mechanical products will remain the largest segment while electronics grow the fastest. This study analyzes the ¥33.7 billion automotive aftermarket in China, with forecasts for 2011 and 2016 by product and service performer. It also evaluates market share and profiles major players.

#2262 12/2007..... \$4900

World Motorcycles

Global motorcycle demand will grow 6% yearly through 2011. Gains will be led by developing markets based on rising incomes and the introduction of higher quality machines with newer technologies. In developed markets, fuel prices and car restrictions will make motorcycles more attractive as transportation. This study analyzes the 44.3 million unit world motorcycle industry, with forecasts for 2011 and 2016 by type, world region and for 18 countries. It also details market share and profiles major players.

#2251 11/2007..... \$5400

World OEM Automotive Electronics

Global demand for OEM automotive electronics will grow 7.5% yearly through 2011. Gains will be driven by more electronics use per vehicle and faster technology transfer from developed to developing countries. The best prospects are emerging in safety, entertainment and power electronics. This study analyzes the \$106 billion world OEM automotive electronic industry, with forecasts for 2011 and 2016 by product, world region and for 23 countries. It also evaluates market share and profiles major players.

#2230 09/2007..... \$5500

Automotive Repair & Maintenance Services

The US automotive repair and maintenance services market will grow 4% annually. Mechanical services will remain the largest segment while electronics will grow the fastest. New light vehicle dealers will continue as the dominant service provider while quick lubes, tire stores and repair chains will lead gains. This study analyzes the \$86.2 billion US automotive repair and maintenance service industry for 2010 and 2015 by type and provider. It also evaluates company market share and profiles industry players.

#2146 01/2007..... \$4400

Automotive Aftermarket in North America

The North American aftermarket for light vehicle parts will grow 3.2% annually through 2010 as more vehicles reach prime service age. Mechanical products will remain dominant while electronics will lead gains. Professional service performers will strengthen their dominance over consumer/DIY performers. This study analyzes the \$50.2 billion North American automotive aftermarket parts industry for 2010 and 2015 by product, service performer and country. It also evaluates market share and profiles major firms.

#2121 11/2006..... \$4400

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