U.S.-China Automotive Parts Industry Overview

China's Local Industry

China's automotive industry is relatively young and many of China's domestic auto parts suppliers are still not globally competitive. Prior to China's accession to the WTO in 2001, localization policies and the dependency of affiliated suppliers on a single automaker hampered China's domestic original equipment industry's growth, efficiency, and competitiveness. Having more than 100 automakers in China, all with relatively small output, compounded the situation. China's centralized planning system required domestic automakers to purchase over 80 percent of their parts and components from their local affiliated suppliers, resulting in a fragmented, inefficient industry. Many of these small-scale domestic Chinese companies, not having much capital, are also weak in research and development and are unable to develop any sophisticated systems. This inefficient structure impeded the development of not only the parts industry but China's vehicle industry as well.

China's WTO accession in 2001 and its market-opening steps, including tariff reductions and eliminating local content requirements, rapidly advanced the growth of China's automotive market. China is hoping that the automotive industry will serve as an impetus for growth throughout the entire economy and will positively affect a variety of basic and service-related Chinese industries, such as machinery, rubber, petrochemicals, electronics, textiles, auto financing, aftermarket distribution channels, and automotive repair services. Given China's weak domestic supplier industry, a large part of China's vehicle production growth in the past couple of years has been assembling imported parts and components, as well as purchasing from the increasing number of foreign suppliers who have made investments in China. The majority of auto parts imports is original equipment parts, rather than for the aftermarket. In 2003, China imported a total of $3 billion worth of key components and $6.2 billion worth of other parts and accessories. Increased local competition and sourcing from competitive, international suppliers is helping to improve the local automakers' quality. Shanghai GM went from receiving parts with 2,197 problems per million in 1999 to an estimated 23 per million on average in 2003. Although China is seen as a "low-cost center," it has been estimated that total vehicle production costs in China are currently 15-20 percent higher in China than in Europe or the United States. Costs are expected to decrease as economies of scale develop, the industry restructures and consolidates, and the automakers become leaner. Some domestic raw materials do not have the quality level required for the automotive industry, so it is necessary to import raw materials or subcomponents, which increases the cost of Chinese-made parts.

KPMG estimates that China's automotive parts aftermarket was $2.54 billion in 2002 and would be $3.04 billion in 2003. China has many domestic aftermarket parts manufacturers, but they lack brand recognition and domestic counterfeiting remains a problem. Automakers in China are developing outlets for distributing genuine aftermarket auto parts as well as automobile maintenance, which will be a big threat to small domestic auto repair companies. To compete, these small companies often resort to using cheap and counterfeit parts for repairs and maintenance. Non-genuine parts are distributed through traditional wholesale channels, and secondary wholesalers and independent garages.

U.S. Auto Parts Trade with China

Since China joined the WTO in November 2001, U.S. exports of auto parts to China have grown almost 98% -- from $258 million in 2001 to $510 million in 2003. From 2002 to 2003, they increased 48%. The top categories of U.S. auto parts exports to China in 2003 were: seats, airbags, seat parts, gear boxes and parts, car bodies and their parts, and "miscellaneous parts." China was the seventh largest market of U.S. auto parts exports in 2003, $510 million behind U.S. shipments to Austria. Total imports of imports of key components into China were $3 billion and the imports of other parts and accessories were $6.2 billion. Germany was the biggest exporter of parts to China, followed by Japan.

In compliance with its WTO accession, tariffs on auto parts and components imported into China will be reduced from the current average of 23.4% to an average of 10% by 2006. These reductions should help the price competitiveness of U.S. automotive parts, which already have a good reputation in China for high quality. In addition, the tariff reductions will also help decrease the automakers' costs in China since they are importing essential components that cannot currently be found domestically at a lower cost. Approximately 40 percent of the components used in GM's Chinese assembly plants are imported from North America, including electronics, axles, and exhaust systems. However, it is unclear how long these types of parts will continue to be imported. GM's chairman recently stated that China is a great opportunity for the auto industry to develop a new supplier base and that auto electronics, in particular, is a growth area. In fact, GM's largest electronics supplier already is producing in China, and several international automotive electronics makers have established international purchasing offices in China. Other labor-intensive components, such as wiring harnesses and brake parts also will be price-competitive items produced in China.

As part of the U.S. export-related announcements made in November 2003, GM said it signed agreements with its flagship Chinese joint venture, Shanghai General Motors, to supply $400 million worth of U.S. components and assemblies for approximately 13,000 vehicles, including Cadillacs. GM also signed an agreement to supply $700 million worth of component kits for the Buick Regal sedan and the Pontiac Montana-based Buick GL8 wagon.

China exported $630 million worth of key components and $3.68 billion worth of other components in 2003. China plans to increase its annual exports of automobiles and components from $4.7 billion in 2003 to $15 to $20 billion by 2005, and as much as $100 billion by 2010. Auto parts imports into the United States from China increased from $1.8 billion in 2001 to $2.8 billion in 2003, an increase of 59%. The percent change from 2002 to 2003 was 24.4%. China was the fifth largest exporter of auto parts to the United States in 2003, following Mexico, Canada, Japan, and Germany. The most popular U.S. auto parts imports from China in 2003 included: motor vehicle radio/CD players or recorders, brake drums and rotors, aluminum wheels, the miscellaneous parts category, ignition wiring sets, and child safety seats, body parts, and radial tires. Additional import items from China which saw exceptional growth over the past year include wheel covers and hubcaps, CB radio transceivers (except hand-held), brake linings and pads, seat belts, windshield wipers, seats, ignition coils, air conditioner parts, and radial tires. The export of counterfeit automotive products from China to world markets, including the United States, is of growing concern (for additional information see below).

U.S.-China Automotive Parts Trade
(in millions of dollars)

	1997	1998	1999	2000	2001	2002	2003	% Change 2002-2003
U.S. Auto Parts Exports	311	132	251	225	258	344	510	48.0%
U.S. Auto Parts Imports	795	1,037	1,284	1,635	1,758	2,242	2,788	24.4%
Balance	(484)	(905)	(1,033)	(1,410)	(1,501)	(1,898)	(2,278)	20%

U.S. Exports of Major Categories of Automotive Parts to China
(in 1,000 dollars)

	2000	2001	2002	2003	% Change 2002-2003
Bodies & Parts	45,283	46,705	59,888	65,991	10.2%
Chassis & Drivetrain Parts	28,191	31,955	47,810	75,718	58.4%
Electrical & Electronic Parts	48,509	40,750	70,741	65,410	-7.5%
Engines & Parts	15,085	20,157	28,460	43,664	53.4%
Miscellaneous Parts	86,660	117,441	136,604	258,617	89.3%
Tires & Tubes	1,111	616	326	751	130.5%

U.S. Imports of Major Categories of Automotive Parts from China
(in 1,000 dollars)

	2000	2001	2002	2003	% Change 2002-2003
Bodies & Parts	207,463	237,891	272,222	365,333	34.2%
Chassis & Drivetrain Parts	359,795	441,759	603,828	784,054	29.8%
Electrical & Electronic Parts	663,925	602,758	707,785	795,609	12.4%
Engines & Parts	53,978	65,907	77,255	96,783	25.3%
Miscellaneous Parts	150,455	200,096	267,598	327,580	22.4%
Tires & Tubes	199,671	210,082	313,120	418,841	33.8%

Source: U.S. Department of Commerce, Bureau of the Census

Top 10 Categories of U.S. Exports to China in 2003
in 1,000 Dollars

HTS Number	2000	2001	2002	2003	% Change 2002-2003
8708998075 Parts & Accessories, for motor vehicles of Headings 8701 to 8705, Nesoi	81,538	108,546	128,932	247,833	92.2%
9401200000 Seats of a kind used for motor vehicles	1,798	7,691	15,981	17,392	8.8%
8708996100 Airbags for motor vehicles of headings 8701 to 8705	55	894	5,926	16,521	178.8%
9401901080 Seat parts of a kind used for motor vehicles, nesoi	27,651	20,731	19,966	14,636	-26.7%
8708402000 Gear boxes & parts for vehicles of heading 8703	583	8,132	1,450	12,795	782.6%
8708295070 Parts & accessories, nesoi, of bodies (including cabs) of heading 8701 to 8705	8,469	9,054	12,074	11,837	-2.0%
8707100020 Bodies (including cabs) for passenger automobiles of headings 8703	879	3,687	4,079	11,217	176.3%
8511500000 Internal combustion engine generators, nesoi	5,088	11,317	13,093	10,383	-20.7%
8708500050 Drive axles w/differential for vehicles, nesoi, whether or not provided with other transmission components of headings 8701 to 8705	3,660	5,732	13,061	9,176	-29.7%
8544300000 Insulated ignition wiring sets & wiring sets for vehicles, aircraft and ships	12,999	4,081	14,371	8,450	-41.2%

Source: U.S. Department of Commerce, Bureau of the Census

Top 10 Categories of U.S. Imports from China in 2003
in 1,000 Dollars

HTS Number	2000	2001	2002	2003	% Change 2002-2003
8527214040 Motor vehicle radio-combinations (incorporating optical disc) players or recorders, nesoi	253,332	237,341	317,525	348,327	9.7%
8708395010 Brake drums and rotors (discs) of vehicles, nesoi, of headings 8701 to 8705	126,684	136,416	154,814	199,567	28.9%
8708704545 Road wheels, of aluminum, for vehicles, nesoi	30,120	74,626	129,726	196,533	51.5%
8708998080 Parts, nesoi, of motor vehicles, nesoi, of headings 8701 to 8705	62,817	94,794	125,800	151,229	20.2%
8544300000 Insulated ignition wiring sets & wiring sets for vehicles, aircraft and ships	133,739	103,172	119,731	126,034	5.3%
9401200010 Child safety seats for motor vehicles	40,969	45,818	56,757	122,839	116.4%
8708295060 Other parts & accessories, nesoi, of bodies (including cabs) of heading 8701 to 8705	78,535	81,473	83,055	91,091	9.7%
4011201015 New pneumatic tires, of rubber, radial, used on bus/truck, on highway, except light truck	69,935	48,504	68,838	80,632	17.1%
4011101030 Radial tires with rim diameter >14" but <15"	0	28,261	48,653	74,450	53.0%
4011201005 Radial tires, on the highway, of a kind used on light trucks	1,868	12,941	35,480	64,236	81.0%

Source: U.S. Department of Commerce, Bureau of the Census

Auto Parts Companies' Investment in China

Most of the world's largest Tier 1 suppliers have facilities in China located near their customer(s), to expand their sales in China's growing automotive market, and to take advantage of China's low wages. FOURIN estimates that there are approximately 616 foreign-funded automotive parts production projects established in China between 1983 and the first half of 2003, primarily by Japanese, U.S., and European suppliers. The majority of the projects are joint ventures. A profile of twenty-four U.S. parts manufacturers known to be active in China is included in an appendix to this report.

Seventy-five percent of GM purchases in China are made from international joint ventures and the remaining twenty-five percent are from domestic Chinese suppliers. Many suppliers have been encouraged to located in China by the vehicle manufacturers, especially since the majority of China's traditional domestic suppliers are not competitive. Foreign suppliers continue to announce plans to open or expand their Chinese operations to meet the anticipated demand of the growing Chinese automotive market. In 2003, China became the world's fourth-largest automotive producer and moved into the number three position for sales. Between August 2002 and August 2003 alone, FOURIN estimated that more than twenty U.S., European, and Japanese parts manufacturers announced new projects or expansions in China. The majority of suppliers set up operations primarily to sell to the growing Chinese market, and do not currently have the capacity to devote to exports. However, Delphi China, which has had a presence in the Chinese market since 1993, has exports from China that account for approximately 20 percent of its total revenues generated in China.

Regional protectionism still exists in China and has been another reason for automakers to pressure suppliers to set up plants near their facilities, especially if there are not any local competitive parts companies nearby. This protectionism has been encouraged by the foreign automakers' Chinese partners, whose key shareholder is the local municipal government. According to GM China, the pressure for automakers in China to buy locally has diminished greatly, but it will always exist. When deciding whether or not to set up an operation near a single customer, a supplier needs to determine if economies of scale can be achieved and if they will be able to source from reliable lower-tier suppliers or import subcomponents at a competitive price. In China, that may be difficult to determine.

Suppliers around the world are under constant pressure from the automakers to reduce their costs. With wages as low as fifty cents an hour in China, compared to $21 an hour in the United States and $2 an hour in Mexico, low labor costs are also a draw for U.S. suppliers to set up facilities in China, especially for certain labor intensive products. China's low tooling costs, low energy costs and its currency rate are additional incentives for producing and exporting from there.

The increase in sales of China's privately-owned cars is also helping to develop an automotive maintenance and repair business sector in China, especially in large cities such as Shanghai, Beijing, and Guangzhou. Foreign automotive service companies, such as AC Delco, Germany's Bosch, and Japan's Autobacs and YellowHat are entering China's automotive service and repair market. By 2006, international automotive companies should have full distribution rights for vehicles and parts.

U.S. Companies' Automotive Parts Activities in China
based on news articles and company web-sites

ACDelco
ACDelco offers 14 different maintenance product lines in China with plans to continue to launch more products. Their current products include batteries, fluids, car care chemicals, shock absorbers and struts, non-asbestos brake pads and shoes, filters, spark plugs, wiper blades, air conditioning compressors, condensors, belts, alternators and starters, new water pumps, bulbs, and clutch discs and covers. In addition, ACDelco's warehouse distributor network in China services more than 100 ACDelco branded Service Centers and the independent aftermarket.

ArvinMeritor:
ArvinMeritor has a manufacturing facility in Xuzhou of the Jiangsu Province manufacturing specialty axles with approximately 1,000 employees; a facility in Shanghai that manufactures bus axles and brakes; and, a facility in Zhenjiang which manufactures door locks, window regulators, commutator boxes, wire harnesses, actuators, and exhaust systems.

Borg-Warner
Borg-Warner, a manufacturer of components and systems for vehicle powertrain applications, has two joint ventures in China, one in Beijing and one outside of Shanghai. The company entered China in the 1990's. The Shanghai venture supplies the Chinese market as well as exports to other countries.

Cooper Tire & Rubber Co:
Cooper Tire & Rubber Company announced in December 2003 that it is planning a joint venture with Taiwan's Kenda Rubber Industrial Co., Ltd. to build a plant in the Jiangsu Province to produce radial passenger and light truck tires. Construction will begin in mid-2004 and tires should be available in late 2005. Initial production will be for export from China for Cooper Tire.

CTS
CTS, a producer of automotive electronic sensors and components, has a new automotive facility in Dongguan. The company was just awarded a $10 million contract to supply advanced integrated electronic pedal technology.

Cummins Inc
Cummins entered the China market in 1975. The company has a 50-50 joint venture, Dongfeng Cummins Engine Company (DCEC), with Dongfeng Automobile Company Limited (DFAC), a subsidiary of Dongeng Motor Company (DFM). The joint venture, which has registered capital of $100 million, will have access to the most advanced Cummins full-electronic diesel engine platforms. DCEC will produce Cummins B, C and L Series four- to nine-liter mechanical and full-electronic diesel engines, covering a comprehensive power range from 100 to 370 horsepower. Dongfeng Cummins annual production capacity will eventually exceed 130,000 units. All of the three major plants of the joint venture are located on the same site in the Xiangfan Auto Industry Development Zone.

Dana Corporation
Dana Corporation announced in May 2003 that its Victor Reinz sealing products group signed a five-year cooperation agreement with Dong Feng Gaskets Co. Ltd, the Chinese automotive gasket manufacturer of Dong Feng Motor Company. Dana will support Dong Feng for the next five years in developing its production process for aramid-fiber-based cylinder-head gaskets. The agreement also includes the co-development of new production concepts, advisory services regarding the purchase of new production equipment, staff training, and the introduction of Dana's state-of-the-art process for surface coating of soft-material gaskets. In October 2003, Dana announced that it signed a formal letter of intent to form a 50/50 joint venture company with Dongfeng Motor Co., Ltd. The planned joint venture will be the largest commercial-vehicle axles and components manufacturer in China. It will also have a research and technical center for manufacturing, materials, and systems development for medium- and heavy-duty axle products. Dana expects the global commercial-vehicle markets to grow significantly, especially in China, which has a growing transportation infrastructure. Dana also has operations in China which make filters and drive shafts.

Delphi Corporation
Delphi's sales in China were $650 million in 2003, excluding its exports from China and its two joint ventures in China with minority stakes. Delphi, which has had a presence in China since 1993, has invested more than $450 million in China. It operates 11 manufacturing facilities, including eight joint ventures with local partners and three wholly owned affliliates. Delphi China also has three customer service centers in Beijing, Shanghai and Changchun, a technical service center, and one training center. In 2002, Delphi China exported products worth $147 million to major OEMs in Europe and North America, and imported approximately $125 million and $35 million worth of components respectively from the U.S. and Europe. In June 2005, Delphi Corporation plans to open the Delphi China Technical Center Co., Ltd. in the Wqigaoqiao Free Trade Zone in Pudong District of Shanghai to develop components and support application and systems engineering for several local customers and transplant automakers in addition to global customers. Delphi also is investing $50 million in a new R&D technical center in Shanghai and $40.5 million to build two new manufacturing modules for Delphi Electronics & Safety Division.

DuPont:
DuPont, which supplies automotive coatings to the Chinese automotive industry, has a 76% share in its joint venture DuPont Red Lion (Beijing) Co. Ltd. The venture was originally formed in 1992. DuPont also recently took full ownership of its joint venture initially formed in 1995 with DuPont Red Lion in Changchun and renamed the company DuPont Performance Coatings Changchun. DuPont will upgrade the facilities to meet international standards and will increase its capacity. DuPont's subsidiary INVISTA, a global supplier of fiber used in airbags, is also increasing its capacity at its facility in Qing Dao, China.

Eaton
In January 2004, Eaton announced it agreed to a joint venture with Changzhou Senstar Automobile Air Conditioner Co. Ltd. to be established in early 2004. The joint venture, which will be called Eaton Senstar Automotive Fluid Connector (Shanghai) Co., Ltd., will be located in

Eaton's existing truck transmission and hydraulics facility in Shanghai's Waigaoqiao Free Trade Zone. The venture will produce automotive air conditioning hose and tube assemblies and power steering hose and tube assemblies for Volkwagen's China operations. In 2002, Eaton signed an exclusive distributorship agreement with Dandong Shuguang Axle Co. Ltd., the largest independent axle manufacturer in China and one of the few publicly traded companies in the Chinese automotive sector. The partnership establishes a structure for Eaton mechanical locking differentials to be sold as part of Dandong Shuguang Axle assemblies within China. Eaton also has a joint venture agreement with China's Torch Investment Co. (22% stake) and Shaanxi Fast Gear Co. (23% stake) to produce heavy-duty truck transmissions in the western city of Xi'an. Eaton (China) Investment will invest $8.8 million for a 55% stake in the $16 million joint venture. Production is scheduled to begin in the fourth quarter of 2004.

Engelhard Corporation
Engelhard, a world-leading provider of technologies for environmental, process, appearance and performance applications, has a catalytic converter joint venture in Shanghai Engelhard Sinopec Environmental Technologies, Ltd. Engelhard's other operations in China include a specialty minerals company in the Shanxi Province, representative offices in Beijing and Guangzho; a sales and trading office in Shanghai; and, sales, marketing, shipping and warehousing facilities in Hong Kong.

Federal-Mogul
Federal-Mogul's Sealing Systems Company is located close to Nanchang City in China. The 5,000 square meter factory building houses a complete set of imported manufacturing facilities of European design for a full range of gaskets. It was founded in 1996 as a joint venture between Nanchang Cylinder Head Gasket and T&N (who became part of Federal-Mogul in 1998). The company's range of sealing systems are sold under the Payen brand to all OE manufacturers and to the aftermarket. Anging TP Goetz Piston Rings is the premier manufacturer of piston rings in China. Founded in 1996, the company is a joint venture between the Anging Piston Ring Company, Teikoku Piston Ring Sompany and Federal-Mogul Corporation. It is one of the 500 largest engineering enterprises in China and is a member of the Aeolus Group and First Automobile Group Corporation of China. The company has 295 employees and manufactures cast iron rings, steel rings, and metal strip rings. Customers include: Audi, Wuxi Diesel, Dalian Diesel, VW, GM, Shanghai Automobile Industry Co., Cummins, Citroen, Iveco, Mitsubishi, Toyota, Honda, Yuling Dielsel, and Chaoyang Diesel. Federal-Mogul Quigdao Pistons operates from a new factory occupying 8000 square meters which could expand to 24,000 square meters. The facility includes a foundry and all of the pistons are die cast on automated machinery imported from Italy. Federal-Mogul Friction Products was originally formed in 1996, as a joint venture between Ferodo UK Ltd. And Hubel Friction & Sealing Materials. In 1998, Ferodo became a part of Federal-Mogul. Investment has included a newly built factory in the heart of Wuhan Economic Technological Development Zone. It covers 7,000 square meters and is able to produce in excess of 4 million brake pads, and 2.4 million sets of brake shoes. Technical support is provided by the Ferodo center in Europe. Federal-Mogul Shanghai Bearings Company is a joint venture between Federal-Mogul Corporation and SAIC's long established Shanghai He Zhong Bearing Company. The company employs 500 people and has the capacity to produce 20 million pieces annually. Federal-Mogul's Guangzhou Champion Spark Plugs plant is located in

Taoyuan Town, about 50 miles from Guangzhou City, where the sales office is located. The company was founded in 1995 as a majority joint venture, and became a wholly owned subsidiary in June 2000 when Federal-Mogul acquired the remaining shares. The plant covers 8,658 square meters and has the capacity to produce 1.5 million spark plugs for the local market and 5 million for export.

Goodyear
Goodyear established a presence in China in 1994. Goodyear has a tire plant in Dalian and a hose products facility in Qingdao.

GST AutoLeather:
GST AutoLeather (formerly Garden State Tanning) announced a partnership in late 2003 with two Chinese companies, the Shanghai Richina Leather and Shanghai Light Industry Holdings. to build an automotive leather finishing plant in Shanghai. The plant will produce automotive seating leather for China and other world markets, and should reach its capacity of 50 million square feet of leather per year by 2006, increasing GST's current output by 50 percent. GST also has a cutting plant in Zhongshan, China.

Honeywell
Honeywell has invested more than $500 million and set up 22 wholly foreign owned or joint ventures in China. In 2002, Honeywell China had over $570 million in sales revenues. Honeywell's Friction Materials, LLC, which has operations in Guanzhou, is a major global supplier of brake pads, linings and other brake products. The products are installed as original equipment as well as aftermarket replacement under the Bendix brand. Also, Honeywell's GARRETT Turbo-charging system has over 50 percent of the market share in the diesel engine market in China. In December 2003, it was announced that Honeywell's Prestone-brand auto maintenance products will be marketed by Beijing North American Shine Co. Ltd., which plans to invest in China's auto maintenance chain stores.

Johnson Controls
Johnson Controls operate 11 joint venture manufacturing plants in four cities in China providing interior systems for vehicles produced in China, including the GM Blazer, Regal, and Sail, Kia Accent, Ford Mondeo, Jeep Cherokee, Mitsubishi P45 Pajero and Hyundai Sonata. Its automotive sales in China, most of which are not consolidated, exceeded $800 million in 2003. Johnson Controls' joint-venture operation with Shanghai Yanfeng Visteon Automotive Trim Systems, Ltd. of China was founded in 1997. Shanghai Yanfeng Johnson Controls Seating Company Ltd. manufactures seat systems, trim covers, foam seat pads and seat mechanisms for General Motors, Volkswagen, Ford, Nissan, and Kia models at six plants in China. In April 2003, the company was one of 70 suppliers awarded for its excellence during 2002 by GM.

Lear Corporation
Nearly 2000 people are employed at Lear Corporation's nine China factories, which are located in Shanghai, Chongqing, Nanjing, Nanchang, Shenyang and Wuhan. Lear produces wire harnesses, seats systems, overhead systems, door panels, carpets and interior trims for local vehicles as well as for export to Europe, Japan, Korea, and North America. Lear's facilities,

which include joint ventures, include: Nanjing Lear Xindi Automotive Interiors System Co., Ltd. (Lear Xindi); Lear - DCAC; Jiangling Lear Interior System Co., Ltd.; Lear Automotive Interior Trim Co., Ltd.; Songjiang Lear Automotive Carpet & Acoustics Co., Ltd.; and Lear Changan Automotive Interiors Trim Co., Ltd.; Lear was expecting to have $150 million in Chinese sales in 2003.

Metaldyne:
In early 2003, Metaldyne opened an office in Shanghai as a prelude to establishing a manufacturing presence in the country. The office will support the development of the company's sales, technical and manufacturing capability in the country, as well as a purchasing activity to support Metaldyne's global material requirements.

PPG
PPG, a global supplier of coatings, glass, fiber glass and chemicals, has an automotive coatings facility in Tianjin.

Tenneco Automotive
Tenneco Automotive established its first joint venture in China in 1995 and is currently the largest exhaust manufacturer in China. Sales from China were $120 million in 2003, up from $20 million in 1999. In addition to supplying the major automakers in China, the company also produces ride and emission control products for the replacement market in China. In early 2003, the company announced that its exhaust manufacturing joint venture in Dalian expanded its operations with a new just-in-time manufacturing plant in Changchun, China. Tenneco Automotive also has majority ownership in joint venture manufacturing operations in Beijing and Shanghai. The Dalian and Shanghai operations manufacture exhaust components and systems and the Beijing joint venture produces shock absorbers and struts. Tenneco imports 25-60 percent of its components (i.e. rubber seals, oil for the shocks, steel, base assemblies for struts) into China, which increases its costs, especially with the current tariffs. In November 2003, Tenneco Automotive announced that it will establish a joint venture in China in 2004 with Eberspacher International of Germany to manufacture emission control products and systems for BMW and Audi. The plant will operate just-in-time final assembly manufacturing operations in Dalian and Changchun, using Tenneco's existing joint venture factories. Tenneco Automotive and its Chinese units will own 55 percent of the business. Eberspacher will own 45 percent. Tenneco also signed a joint venture agreement with China-based Chengdu Lingchuan Mechanical Plant to establish Chongqing Walker Exhaust System Co. The new venture will supply emission control products and systems to Changhan Ford Co., the joint venture between Changan Automobile Group Co. and Ford. Tenneco will own 60 percent of the new joint venture, which will be based in Chongqing and supply exhaust products for the China-produced Ford Mondeo. Production is expected to begin in 2004.

Textron
In early 2003, Textron Fastening Systems established a new customer applications solutions center and a 3,900-square-meter fastener production factory in Wuxi, China to provide fastening systems for China's electronics, high technology and automotive industries.

The Timken Company:
Timken formed a joint venture to produce bearings in Yantai and in 2001, Yantai Timken Company, Ltd. became a wholly owned subsidiary of The Timken Company. The Yantai facility has become a global manufacturing operation that produces Timken single and two-row tapered roller bearings and cylindrical bearings for automotive and industrial applications. By mid-2004, production capacity will expand to 5 million bearing sets per year. In 2002, The Timken Company and NSK Ltd. formed a joint venture to build a plant near Shanghai. Production is expected to begin in the first quarter 2004. The joint venture plant will specialize in single-row tapered bearings used in medium- to high-volume automotive and industrial applications. In early 2003, The Timken Company established a distribution center in Shanghai. Timken Engineered Products Shanghai Co., Ltd. imports Timken and other manufacturing products to China from around the world and serves as an export hub for Timken and outsourced products that are sold to global markets. The facility, located in the Waigaoqiao Free Trade Area of Shanghai, distributes industrial bearings and related components, primarily for the power transmission market. The facility also offers customer service functions.

TRW Automotive
TRW Automotive has nine facilities in China, including seven joint venture facilities. These ventures, which include partnerships with Shanghai Automotive Industry Corporation and FAWER Automotive Parts Co., manufacture chassis modules, steering systems, braking systems, seat belts, airgbags, steering wheels, and engine valves and switches as well as an aftermarket business. TRW FAWER Automobile Safety System Co., which represents a $38 million investment, was recently expanded to include the manufacture of airbag modules and steering wheels, in addition to chassis modules and braking systems, for the FAW group and other key customers in Northern China.

Visteon Corporation
Visteon's manufacturing facilities in China include: joint venture plants in Beijing, Nanchang and Changchun producing climate control parts; a joint venture plant in Shanghai producing parts for the interior/exterior; a joint venture plant in Shanghai which produces chassis, powertrain, and interior/exterior parts; and joint venture plant in Shanghai producing parts for electronic systems. Visteon also has an engineering liaison office in Chung-Li, Taiwan, and a business office in Shanghai. Last year, Visteon moved its Asian headquarters from Tokyo to Shanghai. In 2002, Visteon generated $550 million in sales in China.

ISSUES OF CONCERN FOR THE INDUSTRY

Increased Exports/Purchases of Parts Manufactured in China

Given the anticipated growth of the Chinese market, China's low labor costs, and anticipated improvements in quality, there have been numerous press announcements regarding plans for greatly increased Chinese parts purchasing by vehicle manufacturers and suppliers. These claims, along with China's growing competitiveness and the threat of massive parts imports from China in the future, are generating rising concern by U.S.-based suppliers, especially small manufacturers, and their employees. Ford aims to source approximately $1 billion worth of parts and components from China in 2004, most for its local production in China. GM's vice president of worldwide purchasing has estimated that by 2009, GM will buy $4 billion worth of Chinese parts annually for GM assembly plants outside of China, up from $200 million in 2003. GM plans to source an additional $6 billion in Chinese parts for its operations in China, which is more than twice its purchases in 2003. Radios and other electronic components are likely products that will be exported from China. Chinese exports of car radio/cassette/CD players to the United States grew 38% from 2000 to 2003. DaimlerChrysler is also looking for suppliers in China to make low-cost parts for its operations worldwide, as well as local parts sources for a Mercedes-Benz plant that will begin producing cars in Beijing in 2004. Delphi Corporation plans to quadruple its auto components sourcing from China to $1 billion by 2007. Delphi sourced $247 million in parts from China in 2003. Increased U.S. imports of raw, unfinished castings are also likely. For example, EaglePicher Automotive, a manufacture of machined components and rubber, metallic and paper-coated gaskets, is importing rough-machined drive line flanges, slip yolks and crank shaft dampers to the United States from China to help them lower their costs. The parts are made of Chinese raw materials and EaglePicher performs the final precision machining operations at U.S. facilities before shipping them to U.S. automakers. China's low wage rates more than offset the shipping costs making some parts less expensive, depending on their size and complexity. EaglePicher also plans to supply parts from Chinese partners directly to automakers in China. Japanese and European suppliers are also increasing their investments in China. In early 2004, Volkswagen announced plans to reduce imports of European auto parts to China in half over the next five years in order to offset the rise of the euro against the renminbi, China's currency. Volkswagen will also invest six billion Euros in new and expanded factories at its joint ventures in China, with a large portion going to parts plants.

Counterfeiting

The U.S. auto parts industry trade associations cite counterfeiting in China as one of the industry's top concerns. In October 2003, the Motor & Equipment Manufacturers Association held an all-day conference solely devoted to automotive-related counterfeiting. Counterfeit parts are estimated to cost the auto industry approximately $12 billion in sales annually, with $3 billion in the United States alone, along with thousands of jobs. Federal-Mogul estimates that counterfeiters cost the company as much as $50 million in lost sales. Counterfeiting also diminishes a brand's reputation and can become a safety issue for car owners. Parts that are the most often imitated include aftermarket parts that are low-cost and need to be replaced frequently, such as oil filters, headlamps, batteries, brake pads, fan belts, and spark plugs. Because imitators are able to replicate packaging that appears legitimate, many consumers cannot distinguish between the counterfeit parts and the genuine parts. China, along with Taiwan and several other Asian markets, has become the largest source of counterfeit auto parts. The lack of

competitive Chinese auto parts brands and a lack of R&D sources have contributed to Chinese companies resorting to imitating the parts of recognized, established foreign brands. Some small auto repair companies in China use cheap, counterfeit products in order to compete with other repair facilities with better equipment and skilled employees. The issue could also become a problem for the original equipment parts sector in China given the unusual network of joint ventures arrangements. Some Chinese partners are in JVs with more than one global automakers and they share some of the same suppliers. There are already allegations being raised in China regarding similar car designs. A pirated version of GM's Chevrolet Spark, the Chery QQ, began selling in China months before the Spark entered the market last December. In fact, the manufacturer of the Chery QQ was partially owned by GM's Chinese business partner.

Since China's entry into the World Trade Organization, there has been some increased awareness and legal progress made regarding intellectual property rights. Additional pressure from foreign governments, industry, and consumers should help progress continue. In March 2003, three counterfeiters were sentenced at a district court in Guangzhou to nine months in jail, but fined just $121 each for producing 5,332 sets of brake pads which had a retail value of $142,000. The brake pads had the trademarks of 10 internationally known auto suppliers. The Quality Brand Protection Committee, a group in Beijing comprised of foreign companies that lobby the Chinese government to improve intellectual property protection, has a special auto industry group. Also, the increase of private car owners in China who will inevitably be concerned with the quality and safety of their cars is another impetus for Chinese authorities to increase their efforts in cracking down on counterfeiters. Nonetheless, additional effort by the U.S. Government and other WTO members is fully warranted.

Overcapacity?

The entire automotive industry is optimistic about China's outlook for growth in the automotive sector. China produced 4.44 million automobiles in 2003, and it is estimated by some analysts that it will produce 6 million annually by 2007. Almost every global automaker has announced its intention to increase its production in China. Their objective seems to be to manufacture for the Chinese market today and manufacture for the world later. However, some industry analysts are fearing future overcapacity, price wars, and China's inability to sustain its economic growth -- all which would impact auto parts suppliers. Given the cyclical nature of the industry, unpredictable economic factors, and the let-down in the past of other emerging auto markets, such as Brazil and Argentina, these fears should not be entirely ignored. KPMG predicts that overcapacity in China could reach 1.4 million units in 2010. As the market becomes more competitive and automakers reduce vehicle prices, automakers will apply added pressure on their suppliers to reduce prices and costs. To protect themselves, suppliers considering initial or additional investments in China need to determine if their customers' and/or potential customers' forecasts are realistic, if they would be capable of meeting demands for price reductions, and if they have realistically evaluated their own market position and competitiveness.

Various Chinese Policy Activities Impacting the Automotive Parts Industry

China's government continues to play a role in the automotive industry. The new national automotive policy in China, which is expected to be released in the first half of 2004, may not impact the supplier industry as negatively as originally feared. Some industry representatives

believe market forces will most likely influence the industry's future, rather than government policies. A revised draft of the policy does not include the original draft's goal of forty percent or more of sales for auto parts manufacturers in China be auto parts exports. Instead, parts manufacturers are urged to meet domestic demand and "industriously enter" the international market. The policy also encourages independent research and development and production on a large scale for key components and parts. It also reportedly urges automotive companies to promote brand awareness and develop products with independent intellectual property. The government may designate certain ports for automotive trade to discourage smuggling. The new policy also discourages the imports of knockdown kits and could require parts distributors to show component import licenses from manufacturers. The Chinese government continues to influence what types of vehicles are built in China, especially encouraging global platforms, with the apparent expectations that global components would then be built in China not only for the Chinese market, but also for export to North America, Europe and Japan. With regard to technology, the draft plan calls for vehicles with high technology that are fuel efficient, safe, and environmentally-friendly. China's auto import quotas are scheduled to end on January 1, 2005. In April 2004, China's Vice Minister of Commerce said China aims to export between $15 billion to $20 billion worth of automobile and components in 2005, and export between $70 billion to $100 billion by 2010. Along with other U.S. manufacturers, the parts industry remains concerned about China's currency policy and would like to see it more market-based.

Upcoming Automotive Parts-related Events in China

International Auto Fashion Expo, Shanghai New International Expo Center
www.autofashionexpo.com/index_en.html
April 20-23, 2004

Autologistics Asia Conference, Pudong Shangri-La Hotel, Shanghai
May 19-20, 2004

Automotive News China Congress, Beijing
www.autonews.com/files/newchina2004B.html
June 8-10, 2004

Auto China 2004, 8th Beijing International Automobile Exhibition, China International Exhibition Center & National Agricultural Exhibition Hall
www.autochina.com.cn/webjsp/autochina/english/application.htm
June 9-15, 2004

3rd Shanghai International Automotive Parts Repair, Maintenance & Inspection Technology Equipment & Related Products Exhibition, Shanghai Everbright Convention & Exhibition Center
July 14-16, 2004

2004 Shanghai International Auto Electronics and After-Sales Products Fair, Shanghai Exhibition Center
August 5-7, 2004

Automechanika Shanghai, the 1st Shanghai International Trade Fair for Automotive Parts, Equipment and Service Suppliers, Shanghai New International Expo Center
www.messefrankfurt.com.hk/AutomechanikaSH.asp
December 2-4, 2004

Automechanika China, China International Exhibition Center, Beijing
www.messefrankfurt.com.hk/AutomechanikaChina.asp
November 23-25, 2005

Auto South China, China Foreign Trade Center, Guangzhou
www.messefrankfurt.com.hk/AutoSouthChinaquickfacts.asp
December 2005