



U.S. Imports of Fasteners and the Auto Industry

by Sabrina Rodriguez

Data note: The data for this article is derived from the US Census trade statistics. US Import and Export Census trade statistics is based on all modes of transportation. That value is calculated in USD by CIF (imports). In this article fasteners are defined as any product under HS Code 7318 [screws, bolts, nuts, coach screws, rivets, cotters, cotter pins, washers and similar articles of iron or steel], 7318110000 [coach screws, threaded, of iron or steel] and 7616101000 [aluminum, tacks and staples, not in 83.05].

An analysis on U.S imports of fastener and the impacts on auto manufacturers. Has there been an increase in demand by U.S auto makers on certain lightweight fasteners? Have there been any significant trends in U.S imports of fasteners?

Global trade took a dramatic turn earlier this year due to COVID 19. Every country around the world felt the impacts for months, and others continue to face the challenging aftermath. The U.S is a nation with one of the largest consumer markets and arguably one of the largest global importers. During the first half of 2020, the U.S. imported over one trillion dollars' worth of goods, and that is considering the drop in imports due to COVID 19. One of the bigger U.S markets that continue to demand supply of parts is the auto industry, which continues to have large manufacturing and assembly plants in many parts of the Midwest. The U.S has not made any progressive steps towards massive public transportation (with the exception of a few metropolitan cities), and the Department of Transportation has not reached decisions on whether or not it will be investing in the manufacturing of high-speed trains. For these reasons, the Americans continue to make investments in cars out of pure necessity.

U.S. Imports of Fasteners: Significant Trends on the Demand for Fasteners

The demand for fasteners is seen across a multitude of industries, but one of the most prominent demands is from the automobile industry. Fastener imports of 7318 have remained very consistent over the few years, and the trends show many countries increasing their exports. China is one exception – trend analysis will show you how fastener imports dropped in 2019 due to the imposed tariffs on Chinese steel goods. Other countries such as Taiwan, Japan and Germany continue to be on the rise, increasing their yearly exports of fasteners to the U.S.

During the first half of 2020 (**Table 2**), imports of 7318 dropped a total of 16.8% by comparison to the first half of 2019. Imports from China dropped by 30.3%, India by 33.3% and Canada by 24.4%. Imports from countries like Thailand, South Korea and Germany decreased, but at less staggering percentages.

Table 1. Import of 7318 in 2017-2019

Country of Origin	2017		2018		2019	
	General Total Value CIF (USD)	%	General Total Value CIF (USD)	%	General Total Value CIF (USD)	%
Taiwan	1,695,177,002	32.80	1,935,363,130	32.10	2,017,113,212	34.53
China	1,229,973,800	23.80	1,630,859,894	27.05	1,207,846,153	20.68
Japan	648,194,818	12.55	644,506,115	10.69	648,298,263	11.10
Germany	297,601,078	5.76	344,921,221	5.73	381,542,652	6.54
Canada	277,584,037	5.38	313,533,514	5.21	315,553,400	5.41
South Korea	188,722,047	3.66	198,057,295	3.29	197,953,133	3.39
Italy	139,830,777	2.71	161,124,929	2.68	150,498,031	2.58
Mexico	110,837,933	2.15	121,771,895	2.02	132,206,656	2.27
India	99,159,729	1.92	124,494,325	2.07	155,067,539	2.66
France	88,195,580	1.71	87,583,105	1.46	89,293,822	1.53
Total	5,168,791,299	100.00	6,029,489,521	100.00	5,841,885,221	100.00

Table 2. Import of 7318 in 2019H1 and 2020H1

Country of Origin	2019 - H1		2020 - H1		Volume Change	
	General Total Value CIF (USD)	%	General Total Value CIF (USD)	%	General Total Value CIF (USD)	%
Taiwan	1,055,338,649	34.83	912,146,687	36.20	-143,191,962	-13.57
China	649,858,422	21.45	452,473,142	17.96	-197,385,280	-30.38
Japan	325,670,729	10.75	267,600,275	10.62	-58,070,454	-17.84
Germany	190,532,141	6.29	180,746,644	7.18	-9,785,497	-5.14
Canada	169,723,769	5.60	128,257,854	5.09	-41,465,915	-24.44
South Korea	98,379,148	3.25	91,755,761	3.65	-6,623,387	-6.74
India	78,792,238	2.60	52,546,697	2.09	-26,245,541	-33.31
Italy	78,084,788	2.58	68,748,155	2.73	-9,336,633	-11.96
Mexico	66,344,872	2.19	56,081,818	2.23	-10,263,054	-15.47
Thailand	47,488,829	1.57	43,347,509	1.72	-4,141,320	-8.73
Total	3,030,833,645	100.00	2,520,267,702	100.00	-510,565,943	-16.85



Table 3. Import of 7318110000 in 2019H1 and 2020H1

Country of Origin	2019 - H1		2020 - H1		Volume Change	
	General Total Value CIF (USD)	%	General Total Value CIF (USD)	%	General Total Value CIF (USD)	%
China	7,310,677	64.72	6,127,267	66.31	-1,183,410	-16.19
Taiwan	2,147,155	19.01	1,924,189	20.83	-222,966	-10.39
Germany	556,842	4.93	44,940	0.49	-511,902	-91.93
Thailand	540,386	4.79	984,861	10.66	444,475	82.26
Vietnam	384,039	3.40	0	0.00	-384,039	-100.00
Czech Republic	120,000	1.07	0	0.00	-120,000	-100.00
United Kingdom	110,809	0.99	13,553	0.15	-97,256	-87.77
South Korea	56,347	0.50	5,507	0.06	-50,840	-90.23
Sweden	30,216	0.27	0	0.00	-30,216	-100.00
Canada	12,416	0.11	21,464	0.24	9,048	72.88
Total	11,296,744	100.00	9,241,329	100.00	-2,055,415	-18.20

One of the subsets of fasteners well known in the auto industry is categorized as 7318110000 (Table 3). The U.S. saw a decrease of 18.2% during the first half of 2020 by comparison to the first half of 2019. Thailand increased its exports by 82.2% and Canada by 72.7%, meanwhile all other countries decreased their exports exponentially. Countries like China have decreased their exports by 16.1% and Germany by 91.9%.

Another subset of fasteners categorized as 7616101000 (Table 4) experienced similar decreases in imports to the U.S during the first half of 2020. During the first half of 2019, Greece was the 3rd largest exporter accounting for 11.8% of the total exports, but then dropped by 98.5% during the first half of 2020. China was the top exporter during the first half of 2019 and dropped by 28.1% during the first half of 2020. South Korea increased during the first half of 2020 by 49.8%, Germany by 54.3% and Taiwan by 15.1%. Overall, imports of these fasteners dropped by 25.4% during the first half of 2020.

Table 4. Import of 7616101000 in 2019H1 and 2020H1

Country of Origin	2019 - H1		2020 - H1		Volume Change	
	General Total Value CIF (USD)	%	General Total Value CIF (USD)	%	General Total Value CIF (USD)	%
China	312,057	23.58	224,209	22.73	-87,848	-28.16
Taiwan	273,968	20.70	315,411	31.97	41,443	15.13
Greece	156,866	11.85	2,217	0.23	-154,649	-98.59
South Korea	98,036	7.41	146,893	14.89	48,857	49.84
Canada	90,368	6.83	98,890	10.03	8,522	9.44
Malaysia	76,992	5.82	0	0.00	-76,992	-100.00
Bulgaria	65,972	4.99	0	0.00	-65,972	-100.00
United Kingdom	39,331	2.98	0	0.00	-39,331	-100.00
Colombia	32,294	2.44	0	0.00	-32,294	-100.00
Germany	28,626	2.17	44,183	4.48	15,557	54.35
Total	1,323,821	100.00	986,673	100.00	-337,148	-25.47

The “Big Three” and Other Top U.S Auto Manufacturers

Ford Motor reported a 33% sales decrease in their second quarter of 2020, but then saw a sharp recovery during the third quarter. Similar to Ford, Chrysler reported its sales to have plummeted during the second quarter of 2020. Chrysler reported its sales to have dropped 39% during the second quarter of 2020 by comparison to the second quarter of 2019. Much like Ford, Chrysler is a U.S based automobile manufacturer and has become increasingly popular over the last few years because of the newly introduced Fiat. While General Motors also reported a significant decrease of 34% during the second half of 2020, it has proven to be more innovative in technology than their immediate competitors. GM is using 3D printing to prototype face shields and ventilators, but also expanding the use of 3D printing for auto parts and assembly tools.

Toyota Motor North America began to see a decrease in their volumes of sales as early as March and reported a 36.9% decrease in March 2020 by comparison to March 2019. On the plus side, Toyota hybrid sales increased during the first quarter of 2020 by 58%. Hyundai and Honda also reported declines, especially during the second quarter of 2020 when U.S lockdowns went into full effect.

The largest automobile manufacturers are entering the market of electric vehicles by introducing new and innovative models. One might even wonder if the automobile industry is in constant competition with Tesla which has singlehandedly disrupted the auto industry with its consistent innovations using renewable resources. Tesla’s most recent vehicle proves that an electric vehicle can not only feel like a luxury car, but also be extremely affordable. As of July 2020, Tesla’s Model 3 made up 14% of all electric vehicle sales. Volkswagen and BMW are also leading the electric vehicle industry, each accounting for about 6% of the total sales of electric vehicles in 2020. It is no surprise that hybrid and electric vehicle demand and production is beginning to ramp up, especially with the general population’s interest in renewable resources and less frequent car maintenance. The U.S. is heading in that direction considering the looming consequences of climate change and individuals feeling accountable for making personal clean energy choices.

The Future of U.S. Imports of Fasteners and the Auto Industry

Chinese imports of fasteners decreased by 30% during the first half of 2020, largely due to the impacts of COVID 19 and the demand for manufactured goods. The U.S. is entering what most would categorize as the second wave of Covid-19 which could imply a significant impact on the economy. With high unemployment rates and an overall unsteady economy, Americans are postponing frivolous purchases which include the investment of new cars. To make matters more interesting, (at the writing of this article) the U.S was weeks away from one of the most important presidential elections of modern-day history and the outcome could greatly impact trade. Renegotiations of Chinese tariffs could be one of the first items on a new president’s agenda, or we could see a continuation of the Chinese trade wars well into 2021. It is all very unpredictable, but one thing is certain: U.S automobile plants are continuing mass production and the demand for imported auto parts from foreign manufacturers continues.