## - CLASSIC SOVIET CARS

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The USSR produced not so much models of cars. There were big and small cars, limos and vans, and lots of other. At that time nobody cared much about copyright stuff that's why some Soviet cars are copies of some foreign Western cars. When adapting to domestic operating conditions, the car was thoroughly reworked by Soviet specialists. This article shows examples of how Soviet cars were copied from the foreign ones.

For example, GAZ A was a close copy of the Ford A. However, it was a licensed copy, and Ford Motors knew about its Russian cousin's existence. The government's limo ZIS 110 was copied from the Packard 180, Moskvich 400 from the Opel Kadett K38, and Chaika reminded the Packard Carribean. And that's only a few examples. Reading the article you will learn much more information about classic Soviet cars.

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## SOVIET CARS

Almost all cars created in the USSR were copies of foreign models. It all started with the first samples produced under Ford license. Time was passing, copying became a habit. The scientific and research automobile institute of the USSR bought in the West samples for study and after a while produced a Soviet analog. True, by the time of release the original was no longer produced.



1. GAZ A (1932) GAZ A is the first mass passenger car of the USSR, it is a licensed copy of the American Ford-A. The USSR bought equipment and documents from the American firm for production in 1929, two years later the release of the Ford-A was discontinued. A year later, in 1932, the first GAZ-A cars were released.



GAZ-A (1932-1936)

Ford Model A (1927-1931)

After 1936, the outdated GAZ-A was forbidden. The car owners were ordered to turn over the car to the state and purchase a new GAZ-M1 with an additional payment.

2. GAZ-M-1 Emka (1936-1943) GAZ-M1 was also a copy of one of the Ford models - Model B (Model 40A) of 1934.



GAZ-M-1 Emka (1936-1943)

Ford Model B (1934-1935)

When adapting to domestic operating conditions, the car was thoroughly reworked by Soviet specialists. The model over some positions surpassed the later production of Ford.

**3.** L1 "Red Putilovets" (1933) and ZIS-101 (1936-1941) L1 was an experimental passenger car, it represented an almost exact copy of the Buick-32-90, which by Western standards belonged to the upper-middle class.



Ll "Red Putilovets" (1933)



Buick-32-90 (1931-1933)

Initially, the plant "Red Putilovets" produced Fordson tractors. As an experiment, 6 copies of L1 were released in 1933. Most cars were unable to get to Moscow independently and without breakages. The modification of L1 was transferred to the Moscow ZIS. Due to the fact that the "Buick" body no longer fit the fashion of the mid-1930s, ZIS designed it anew. American coach Budd Company on the basis of Soviet sketches has prepared a modern for those years sketch of the body. It cost the country half a million dollars and took months. **4.** KIM-10 (1940-1941) The first Soviet compact car which design was taken by the "Ford Prefect".



Stamps were manufactured and designs of the body were developed in the United States according to the models of the Soviet artist-designer. In 1940 the production of this model began. KIM-10 was supposed to be the first "people's" car of the USSR, but the Great Patriotic War prevented the plans of the USSR leadership.

**5.** "Moskvich" 400,401 (1946-1956) Soviet compact car - it is a complete analogue of the German Opel Kadett K38, which was produced in 1937-1940 in Germany at the German factory Opel American concern General Motors. The basis was the samples and documentation that survived the war.



Moskvich 400, 401 (1946-1956)

Opel Kadett K38 (1937-1940)

Equipment for the release of the car was partly exported from the American occupation zone and installed in the USSR. Most of the documentation and equipment for production was recreated, and the work was carried out in Germany by order of the Soviet military administration by the forces of mixed labor collectives (Soviet and civilian German specialists) who worked in the design bureaus created after the war.

**6.** "Moskvich-402" (1956-1964) Model 402 repeated Opel Olympia Rekord (1947-1953) - successor of Opel Kadett K38. Participation of specialists from GAZ, where the development of the Volga was at full speed, the GAZ-21 made a great influence on the projected car.



**7.** Moskvich-408 (1964-1975) The basis for the third generation of "Moskvich" cars was Opel Kadett A (1962).



In comparison with its predecessors, the length and width of the car have grown, while the height of the car has decreased significantly. The spaciousness and comfort of the saloon have increased tremendously. Produced in Moscow at the plant MZMA (AZLK). From 1964 to 1967 it was the main model of the plant, after which it was replaced by "Moskvich-412", although after that they were released for a long time in parallel. It was also produced in Izhevsk from 1966 to 1967, only about 4000 cars of this model were assembled there, after which the Izhevsk plant, unlike MZMA-AZLK, completely switched to the production of the modernized model Moskvich-412.

8. Moskvich-412 (1967-1976) It came to replace the outdated model M-408 and became the result of a profound modernization of its predecessor under the inspiration of Opel Kadett B (1965).



Moskvich-412 (1967-1976)

**Opel Kadett B (1965-1973)** 

Moskvich-412 became a more prestigious version of M-408: engine power and maximum speed increased, passive safety improved, which complied with the UNECE standards, which was confirmed by crash tests in France.

9. "Moskvich" 2141 (1986–1998) Thr replacement of Moskvich-412 was managed to design only in the 1980s, and it was already a completely different car - Moskvich-2141, a frontdrive hatchback created on the basis of the body of the French Simka and the already outdated by that time engine UZAM. Export name was Aleko, from the Automobile Plant of the Lenin Komsomol. As the best prototype for speeding up the design of the new car, the recently appeared Franco-American model Simca 1308 from the European branch of the Chrysler corporation was seen by the Ministry of Motor Industry. Designers were ordered to copy the car right up to the "iron".



Moskvich-2141 (1986-1998)

Simca-Chraysler 1308 (1975-1980)

However, in the process of development, the body of "Moskvich" was designed anew, due to this the exterior of the car was significantly different from the French model and, although with some stretch, but corresponded to the level of the mid-eighties.

**10.** The design of the body of the first Soviet post-war luxury passenger car almost completely mimicked the American "Packard" of the "senior" series of pre-war production. Up to the smallest detail, ZIS-110 was similar to Packard 180 with the Touring Sedan body of the last pre-war model of 1942. Independent Soviet development was specially made similar to the American Packard in accordance with the taste preferences of the country's top leadership and, mainly, of Stalin personally.



It is unlikely that the American firm liked such a creative development of its ideas in the design of a Soviet car, but no claims followed from its side at that time, especially since the production of "big" Packards was not resumed after the war.

## **11.** GAZ-12 (GAZ-M-12, ZIM, ZIM-12) 1950-1959

The six-seven seater large-class passenger car with a "six-window long-base sedan" body was developed on the basis of Buick Super, it was serially produced at the Gorky Automobile Plant (Plant named after Molotov) from 1950 to 1959 (some modifications until 1960).



The plant was strongly recommended to completely copy the Buick of the 1948 model, but engineers according to the proposed model designed the car, which is based on the units and technologies already mastered in production. ZIM was not a copy of any particular foreign car, either in terms of design or, in particular, in technical terms - in the latter, plant designers even managed in some way to say a new word within the framework of world auto industry. 12. Volga GAZ-21 (1956-1972) A middle-class passenger car was technically created by Russian engineers and designers from scratch, but outwardly copied mostly American models of the early 1950s. The design of foreign cars was studied during the development: Ford Mainline (1954), Chevrolet 210 (1953), Plymouth Savoy (1953), Henry J (Kaiser-Frazer) (1952), Standard Vanguard (1952) and Opel Kapitän (1951).



Ford Mainline (1952-1956)

GAZ-21 was serially produced at the Gorky Automobile Plant from 1956 to 1970. The factory index of the model is initially GAZ-M-21, later (from 1965) - GAZ-21. By the time the mass production began, the design of Volga has already become at least ordinary according to world standards, and already did not stand out against the background of the serial foreign cars of those years. By 1960, Volga was a car with a hopelessly outdated design.

13. Volga GAZ-24 (1969-1992) The middle class passenger car became a hybrid of the North American Ford Falcon (1962) and Plymouth Valiant (1962).



Serially produced at the Gorky Automobile Plant from 1969 to 1992. The exterior and design of the car were quite standard for this direction; the specifications were also approximately at the average level. Most of the "Volga" cars were not intended for sale for personal use and was operated in taxis and other government organizations).

14. GAZ-13 "Chaika" (1959-1981) The representative passenger car of the big class, created under obvious influence of the newest models of the American company Packard, which in those years were studied at NAMI (the Cabriolet Packard Caribbean and the sedan Packard Patrician, both 1956 model of the year). "Chaika" was created with a clear orientation on the trends of the American style, like all GAZ products of those years, but it was not a 100% "stylistic copy" or the modernization of Packard.



The car was produced in a small series at the Gorky Automobile Plant from 1959 to 1981. In total, 3,189 vehicles of this model were manufactured. "Chaika" cars were used as a personal transport of the highest nomenclature (mainly ministers, first secretaries of regional committees), which was issued as an integral part of the "package" of privileges. Both sedans and cabriolets "Chaika" were used in parades, served at meetings of foreign leaders, eminent personalities and heroes, were used as escort vehicles. Also, the "Seagulls" entered Intourist, where, in turn, they could be ordered by all those wishing to use them as wedding limousines.

Copying of American design in different Soviet plants led to the fact that the appearance of the ZIL-111 was created using the same models as Chaika. As a result, similar cars were produced in the country at the same time. ZIL-111 is often mistaken for the more common "Chaika".

**15.** Copying of American design in different Soviet plants led to the fact that the appearance of the ZIL-III was created using the same models as Chaika. As a result, similar cars were produced in the country at the same time. ZIL-III is often mistaken for the more common "Chaika".



A passenger car of the high class stylistically represented a compilation of various elements of American cars of the middle and high class of the first half of the 1950s - mostly reminded Cadillac, Packard and Buick. The basis for the external design of ZIL-111, like "Chaika", was the design of the models of the American firm Packard 1955-56. But in comparison with the Packard models, ZIL was larger in all dimensions, looked much stricter and squarer, with straight lines, had a more complex and detailed decor. From 1959 to 1967, only 112 copies of this car were collected.

**16.** Volga GAZ-24 (1969-1992) The middle class passenger car became a hybrid of the North American Ford Falcon (1962) and Plymouth Valiant (1962).



ZIL-114 (1967-1978)

Lincoln Continental (1964-1970)

In total, 113 copies of the government limousine were collected.

**17.** ZIL-115 (ZIL 4104) (1978-1983) In 1978 ZIL-114 was replaced by a new car under the factory index "115", which later received the official name ZIL-4104. The initiator of the development of the model was Leonid Brezhnev, who loved high-quality cars and was tired of the ten-year operation of ZIL-114. For creative rethinking our designers were provided with Cadillac Fleetwood 75, domestic car manufacturers were helped by the British from Carso. As a result of the joint work of British and Soviet designers in 1978, ZIL 115 was created. It was also classified according to new GDSTs as ZIL 4104.



Interior was created taking into account the targeted use of cars - for high-ranking government officials. The end of the 1970s was the height of the Cold War, which could not but affect the car carrying the country's top officials. ZIL-115 could become a safe haven in the event of an atomic war. Direct hit, of course, he could not stand, but there was protection on the car from a strong radiation background. In addition, it was possible to install a hinged armor.

18. ZAZ-965 (1960-1969) The main prototype of the compact car was Fiat 600.



ZAZ-965 (1960-1969)

Fiat 600 Seicento (1955-1969)

The car was designed by AZLK ("Moskvich") in conjunction with the Automotive Institute of NAMI. The first samples received the designation "Moskvich-444", and were already significantly different from the Italian prototype. Later the designation was changed to "Moskvich-560". From the Italian model the car already at the earliest stage of designing differed absolutely other front suspension - as on the first sports cars of Porsche and Volkswagen - Beetle.

**19.** ZAZ-966 (1966-1974) The passenger car of an especially small class demonstrates a considerable similarity of design with the German compact car NSU Prinz IV (Germany, 1961), which in turn repeats the copied American Chevrolet Corvair, presented in late 1959.



**20.** VAZ-2101 (1970-1988) VAZ-2101 "Zhiguli" - rear-wheel drive passenger car with a body type sedan is an analogue of the model Fiat 124, which received in 1967 the title "Car of the Year."



Under the agreement of the Soviet Foreign Trade and Fiat Company, the Italians created the Volga Automobile Plant in Togliatti with a full production cycle. The concern was entrusted with the technological equipment of the plant, training of specialists. VAZ-2101 was subjected to serious changes. In total, more than 800 changes were made to the Fiat 124 design, after which it was named Fiat 124R. "Russification" of Fiat 124 was extremely useful for FIAT Company itself, which accumulated unique information about the reliability of its vehicles under extreme operating conditions.

**21.** VAZ-2103 (1972-1984) Rear-wheel drive passenger car with a body like sedan. It was developed in cooperation with the Italian firm Fiat on the basis of models Fiat 124 and Fiat 125.



VAZ-2103 (1972-1984)

Fiat 125 (1967-1983)

Later, on the basis of VAZ-2103, a "project 21031" was developed, in a consequence renamed to VAZ-2106.