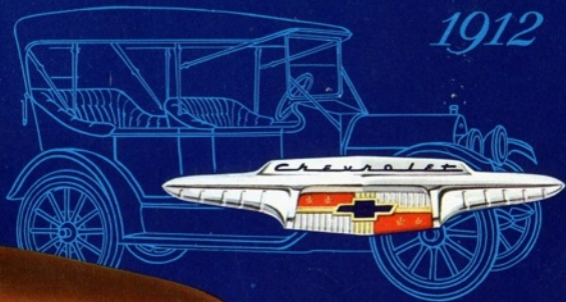


1912



1953



THE

# Chevrolet Story



### COMMUNITY DEVELOPMENT

The importance of industry to community development is vividly illustrated by these two views of the ultra-modern Chevrolet Motor Division assembly plant near Van Nuys, Calif. The top picture was taken when the plant was dedicated in 1948. Today, as shown by the lower picture, thousands of homes have been built on acreage that was undeveloped real estate five years ago.



## The Chevrolet Story

### CHAPTER ONE

#### The Pioneering Years



1912

THE STORY of Chevrolet provides an outstanding example of what can be accomplished by an organization which, keeping the public's approval constantly in mind, designs, manufactures and distributes a good product which it strives continually to make a better one.

It is a story that is distinctly American, for it begins in a little experimental shop in Detroit and continues with a record of steady expansion until the company entered World War II with ten manufacturing centers and eleven assembly plants located in ten different states, converted them all to war production—and embarked upon postwar production with two new assembly plants designed and under construction, with expansions planned for many of its manufacturing plants.

Such growth can surely be accepted as definite proof of the public's approval. In 1912, the first year of its manufacturing existence, Chevrolet produced 2,999 vehicles, the car being a five-passenger touring car that listed at \$2,150 at the factory. It took twelve years to produce the first million vehicles, but thereafter the demand increased to such an extent that production was soon averaging more than a million units a year.

1953



[1]



*Where first Chevrolet engine was built in 1911*

In the beginning, however, no one could have foreseen that Chevrolet would have such a phenomenal growth. In 1909, as a matter of fact, William C. Durant, a successful buggy manufacturer of Flint, Michigan, asked Louis Chevrolet, a well-known race driver, to help design an engine for a new car. Two years of experimental work followed, and in March, 1911, Louis Chevrolet and others began assembling the first Chevrolet car in a little shop at 3939 Grand River Ave., Detroit. The Chevrolet Motor Company of Michigan was organized November 3, 1911, and then a plant was leased in Detroit and production was started on cars which were introduced to the public the following year.

The prompt public acceptance of the new vehicle made necessary an almost immediate expansion of the company's production facilities. It was necessary also to expand the distribution facilities and, during the next seven years, Chevrolet developed the closely coordinated system of production and distribution upon which its success has so largely rested.

The first expansion was made in 1913, when the home plant at Flint, Michigan, was established and an assembly plant was leased in New York City. Then in 1914 the "Baby Grand" touring car and the "Royal Mail" roadster were introduced, and once again the public demand exceeded the company's ability to produce.



*An Early Model*

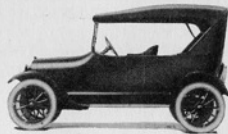


*The first Chevrolet-owned plant, at Flint*

The year 1914 marked the beginning of the far-flung wholesale selling organization which today covers the United States, with zone offices located in 37 principal cities.

The first selling organization was created that year in Oakland, California, and was followed in 1915 by similar offices in Kansas City, Missouri, and Atlanta, Georgia. 1915 also saw the establishment of additional production facilities at St. Louis, Missouri, and Oshawa, Ontario, Canada. The famous "490" model was introduced in 1916, and its production was begun in a plant purchased from the Maxwell Motor Company at Tarrytown, N. Y.

Further expansion came in 1916. A new assembly plant was erected in Flint and others were begun at Fort Worth, Texas, and Oakland, Calif. Manufacturing facilities were increased by the purchase of a plant in Bay City, Michigan, for the production of small parts and the acquisition of the Warner Gear Company at Toledo, Ohio, for the manufacture of gears and transmissions. A new axle plant was added at Flint, retail stores were opened in many of the larger cities, principally in the East—and production that year exceeded 70,000 units, a decided increase over the 1912 production of only 2,999.



*1916 through 1922: the "490"*

In 1918 Chevrolet became a part of General Motors Corporation and embarked upon another era of expansion. A new assembly plant was started in St. Louis and a new high of nearly 150,000 units was produced that year. 1918 also marked the inauguration of truck production, which thereafter expanded along with the passenger car line.

### CHEVROLET CHRONOLOGY, 1911-1920

**March, 1911**—Louis Chevrolet started work on first Chevrolet car in shop over garage at 3939 Grand River Avenue, Detroit.

**Nov. 3, 1911**—Chevrolet Motor Co., of Michigan incorporated; first Chevrolet factory opened at 1145 W. Grand Blvd., Detroit.

**1912**—Chevrolet bought Little Motor Co., and Flint Wagon Works; moved manufacturing to Flint; production 2,999.

**1913**—Valve-in-head engine introduced; Chevrolet leased assembly plant in New York City; "Baby Grand" touring car and "Royal Mail" roadster introduced; production 5,987.

**1914**—Oakland, California, branch opened . . . forerunner of nationwide wholesale selling organization; production 5,005.

**1915**—Chevrolet licensed Gardner Buggy Co., of St. Louis for manufacturing; bought Maxwell Motor Co. plant at Tarrytown, N. Y., and started Canadian plant at Oshawa Ont.; production 13,605.

**1916**—Chevrolet enters low-price field with "490" model; Durant claimed, "A little child can sell it"; production 70,701; Warner Gear Plant, Toledo purchased and became Chevrolet-Toledo Manufacturing plant.

**1917**—Mason Motor Company of Flint merged with Chevrolet as Chevrolet Engine Division; new axle plant added in Flint; production 125,882.

**1918**—Chevrolet became division of General Motors May 2, 1918, added trucks to its line; production 95,660.

**1919**—Production 149,904.

**1920**—Chevrolet introduced closed car bodies; opened Chevrolet-Oakland (Calif.) assembly plant Jan. 1, 1920; production 150,226.

## The Chevrolet Story

### CHAPTER TWO

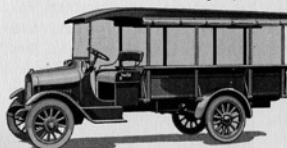
#### Growing to Leadership

It seems impossible today, but in 1921, when its sales were cut almost in half, Chevrolet came within an "executive nod" of being scrapped. Units of General Motors Corporation were loosely knit, disorganized, and someone suggested a thorough survey of all divisions. The job was entrusted to a firm of industrial engineers of high standing.

They recommended that Chevrolet be scrapped, but Alfred P. Sloan, Jr., urged giving Chevrolet another chance, and the company was saved.

In April 1921 the executive offices of the company were moved from New York to the General Motors Building in Detroit; and in March 1922 a new impetus was given to Chevrolet by the appointment of William S. Knudsen as vice-president in charge of operations.

During Mr. Knudsen's first year in office Chevrolet took over from General Motors the former Central Products group, made up of the gear, axle and forge plants located in Detroit. The Janesville, Wisconsin, plant of the Samson Tractor Company was also acquired and converted into another assembly plant.



1918 Truck with Covered Body

Cincinnati. With the introduction of the "Superior" models, Chevrolet production meanwhile achieved new heights, production for 1922 being just a little less than one-quarter of a million units.

Assembly of vehicles was started the following year at Janesville, Buffalo and Norwood, and a total of 480,737 units



1922: the "Superior"

was built. A sheet metal plant was completed at Flint and placed in operation in June 1923.

In 1924 Mr. Knudsen was named president and general manager of Chevrolet, and the following year, with production amounting to more than half a million vehicles for the first time in the company's history, manufacturing facilities were increased by the acquisition of a plant at Bloomfield, New Jersey, which was devoted to export operations.

The following year, 1926, recorded another expansion, when the Detroit plant of the General Motors Truck Corporation was taken over for the manufacture of Chevrolet front and rear axles. The Chevrolet grey iron foundry at Saginaw, Michigan, was added the following year.

Production for 1927 established another record, passing the million mark for the first time with the production of 1,001,880 cars and trucks. And public approval of Chevrolet products pushed production up again

in 1928, to reach a total of 1,193,212. During this year production was started in another assembly plant, located at Atlanta, Georgia, and construction of still another assembly plant was begun at Kansas City, Missouri.

Late in 1928 Chevrolet discontinued its four-cylinder cars and began production of its six-cylinder "International" models, which were introduced to the public in January 1929. The new model, powered by the famed valve-in-head engine, won instant approval, and the output for 1929 set another all-time high with the production of 1,328,605 cars and trucks.

Nor did expansion stop with the arrival of a depression. In 1930 a new spring plant was erected in Detroit, and production facilities were further increased by the purchase of the Martin-Parry Corporation body plant at Indianapolis for the production of commercial and truck bodies,



The 1927 Model



1929: the "International"

and in 1931 a new bumper plant was put in operation in Detroit.

Thus, in 10 years from the 1921 crisis, Chevrolet had made a comeback from a "hopeless" competitive outlook to a position of leadership, able to keep on growing in spite of a crippling depression, and in 1932 Chevrolet was the biggest auto maker in the world.

### CHEVROLET CHRONOLOGY, 1921-1932

**1921**—Chevrolet crisis; recommendation to liquidate overruled; production 76,370.

**1922**—March 25, 1922, William S. Knudsen hired as production vice-president; Chevrolet expanding in Detroit, Janesville, Wis., Buffalo, N. Y. and Norwood, O.; production 243,479.

**1923**—Production 480,737; assembly started in Janesville, Buffalo and Norwood; pressed metal plant in Flint completed and placed in operation in June.

**1924**—Mr. Knudsen made president and general manager of Chevrolet; production 243,479.

**1925**—Production 519,229; Bloomfield, N. J. plant acquired for export operation.

**1926**—Production 732,147; Detroit plant of General Motors Truck Corp. taken over to manufacture Chevrolet front and rear axles.

**1927**—Chevrolet attained First Place in industry; production of 1,001,880 made this the first of million-vehicle years. Grey Iron Foundry added in Saginaw.

**1928**—First place again; production 1,193,212; new assembly plant in Atlanta, Ga., placed in operation; and new assembly plant started in Kansas City, Mo. This year saw the last of Chevrolet four-cylinder models.

**1929**—Chevrolet introduced its now famous valve-in-head six; production 1,328,605.

**1930**—Despite depression, Chevrolet expanded in Indianapolis and erected new Spring plant in Detroit; production 864,243.

**1931**—Chevrolet first in industry for third time; new bumper plant placed in operation in Detroit; production 792,967.

**1932**—As auto industry was leading way out of depression, Chevrolet led the industry again with production of 394,000. This was depression low for company, start of a turn.

# The Chevrolet Story

## CHAPTER THREE

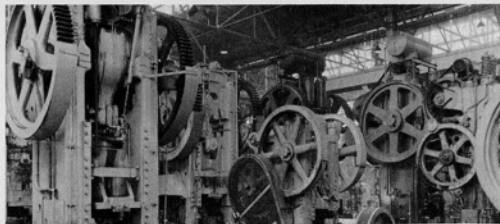
### Volume Production for Victory

When the next management of the Chevrolet Division, General Motors Corporation, assumed direction of the company's affairs in October 1933, something over nine million Chevrolets had been built in the 22 years of the company's history.

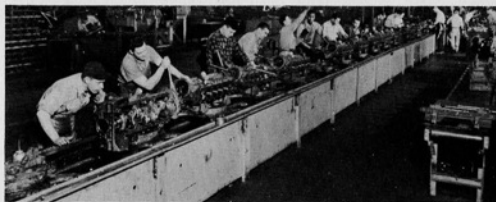


*Ten million cars in 23 years*

lowered production period brought about by the depression, and two years later, its output once more passed the million mark.



*The Wheels of Industry. At Gear and Axle Plant, Detroit*



*Assembling motors at the Tonawanda plant*

Meanwhile the company celebrated the production of its ten millionth Chevrolet on its twenty-third birthday—November 3, 1934.

And, in the spring of 1935, a new assembly plant at Baltimore, Maryland, was opened and manufacturing plants were added at Saginaw, Michigan, and Muncie, Indiana.

Other expansion moves had been in progress, and December 1936 saw the dedication of a brand-new commercial body plant at Indianapolis, which replaced the old building acquired in 1930. The new plant was regarded as the largest and most modern commercial body plant in the world, having been designed to give maximum convenience and safety to the workers, together with increased production efficiency.

During this year the construction of a new plant in Tonawanda, New



*The 25 millionth General Motors vehicle—a Chevrolet*

York, was begun. It was designed to produce 1200 motors and 1200 axles per day and was completed and placed in operation the following year, to become the pride of New York state as the most modern and efficient plant within its boundaries.

The year 1936 recorded another achieve-

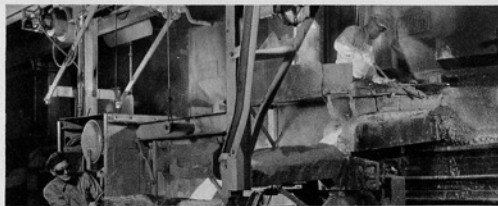
ment in domestic production, when Chevrolet captured the leadership of the entire industry for the seventh time in ten years. This was repeated in 1937, when, despite terrific handicaps early in the year, Chevrolet led all other makes in passenger car sales. It was the sixth year since the beginning of the company that more than a million cars and trucks were built—and the company celebrated its twenty-fifth birthday in November 1936.

In 1938 Chevrolet led the industry in sales for the eighth time in nine years, and in 1939 it secured an even greater margin, becoming leader for the ninth time in a decade. Again in 1940 Chevrolet maintained its leading position in the industry.

In the peacetime production period during which Mr. Coyle headed the Chevrolet organization, the company, therefore, averaged more than a million cars a year. On January 11, 1940, General Motors celebrated the completion of its twenty-five millionth vehicle, a Chevrolet, and the event focused attention upon the fact that, of General Motors' huge production, more than 60% were Chevrolets.

In September 1940 Chevrolet observed a sales anniversary—seven years of sales leadership with an average of a million units per year. At the same time it celebrated the sale of 11 million used cars during the same period.

But even before the celebration took place, many months before war became a fact, Chevrolet was negotiating for the production of a military item—the beginning of a war production effort which eventually was to absorb all the energies and all the facilities of the organization.



*Pouring molten iron at the Saginaw Foundry*



*Conversion: tearing down fixtures and machines—typical of the change-over from peace to war production*

CHEVROLET'S first contract with the War Department was signed in April, 1940. It called for the forging and machining of 75-millimeter high explosive shells and the task was assigned to the Forge and the Gear and Axle plants in Detroit.

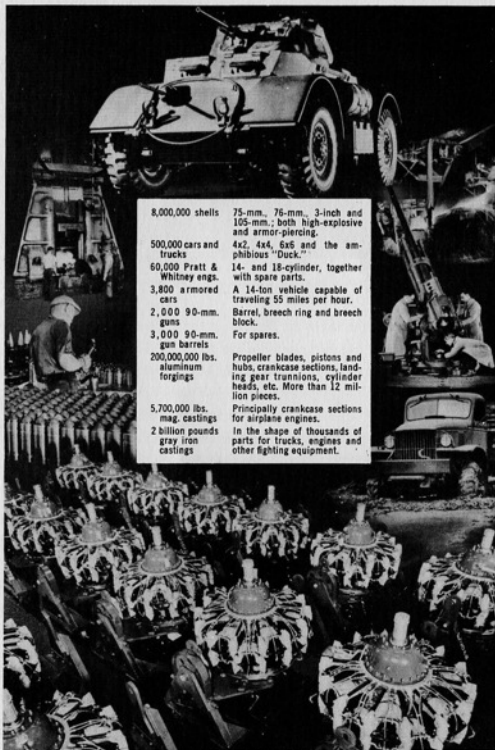
Before this contract was completed, however, an order was received for military trucks, called 4x4's because

power was transmitted to all four wheels. In rapid order, then, came contracts for the production of parts for the 90-millimeter anti-aircraft gun, more shells and an armored car—all this while arrangements were being carried forward for the manufacture of 14-cylinder Pratt & Whitney aircraft engines. Thus, months before Pearl Harbor and the declaration of war, Chevrolet was plunging into a war effort that was to carry it through the next four years.

The new activity was destined to eliminate all passenger car production and reduce the output of civilian trucks to a trickle. The last passenger car left an assembly line on February 6, 1942 and the assembly plants were converted to war work. Some of them were leased to other divisions of General Motors, some were leased to the Government. All manufacturing plants were completely converted to war work. Production of civilian trucks continued in a modest way for a time, then was cut off, not to be resumed until 1944, when it became apparent to Government officials that a menacing shortage



*Assembling P & W engines*



8,000,000 shells  
500,000 cars and trucks  
60,000 Pratt & Whitney engs.  
3,800 armored cars  
2,000 90-mm. guns  
3,000 90-mm. gun barrels  
200,000,000 lbs. aluminum forgings  
5,700,000 lbs. mag. castings  
2 billion pounds gray iron castings

75-mm., 76-mm., 3-inch and 105-mm., both high-explosive and armor-piercing.  
4x2, 4x4, 6x6 and the amphibious "Duck."  
14- and 18-cylinder, together with spare parts.  
A 14-ton vehicle capable of traveling 55 miles per hour.  
Barrel, breech ring and breech block.  
For spares.  
Propeller blades, pistons and hubs, crankcase sections, landing gear transoms, cylinder heads, etc. More than 12 million pieces.  
Principally crankcase sections for airplane engines.  
In the shape of thousands of parts for trucks, engines and other fighting equipment.

of these work vehicles might seriously hamper the transportation phase of war production.

The only plant not entirely given over to war production was one in Saginaw, which with Government approval continued to manufacture, in addition to war products, millions of service parts in order that the millions of Chevrolet cars and trucks on the roads of America could serve their owners until new vehicles could be produced.

On the facing page is shown a partial list of the war products manufactured by Chevrolet during the four years. Some of them, including the aluminum forgings, were produced in Government-built plants, but all were produced under Chevrolet management with "Volume Production for Victory" the slogan. And more than one of the plants received the coveted Army-Navy "E" for excellence in production.

As a result, Chevrolet's return to peacetime production was not comparable with its plunge into the war effort, for it took place by slow degrees.

The 1944 return to a limited production of civilian trucks (at the Norwood assembly plant) made it possible to expand this output when the defeat of Germany



*Shipping service parts for aging cars and trucks*



*Trucks for peace and war on the same assembly line*



on May 5, 1945 brought about some terminations of war contracts. But it was not until after the defeat of Japan, on August 14 of the same year, that an all-out drive for complete conversion to peacetime operations could be made.



*Moving out war production machine tools to make a place for peacetime tools*

It was a comparatively easy task to swing into increased truck production, for parts for civilian trucks were already being manufactured—subject to shortages of materials and supplies which were the inevitable result of the nationwide readjustment. In the St. Louis plant, for instance, a contract for military trucks was terminated on Friday, August 17 and all military trucks on the assembly line were immediately taken apart and removed. On the following Monday, August 20, the first civilian truck was assembled on the same line, and production was increased daily thereafter.

But the manufacture of passenger cars was different. Since practically all passenger car assembly lines had been torn out, it was necessary to rebuild them before assembly could begin. It was also necessary to reconvert the manufacturing plants before passenger car parts could be produced.



*After nearly four years—the first Chevrolets*



*Plant layout men at work*

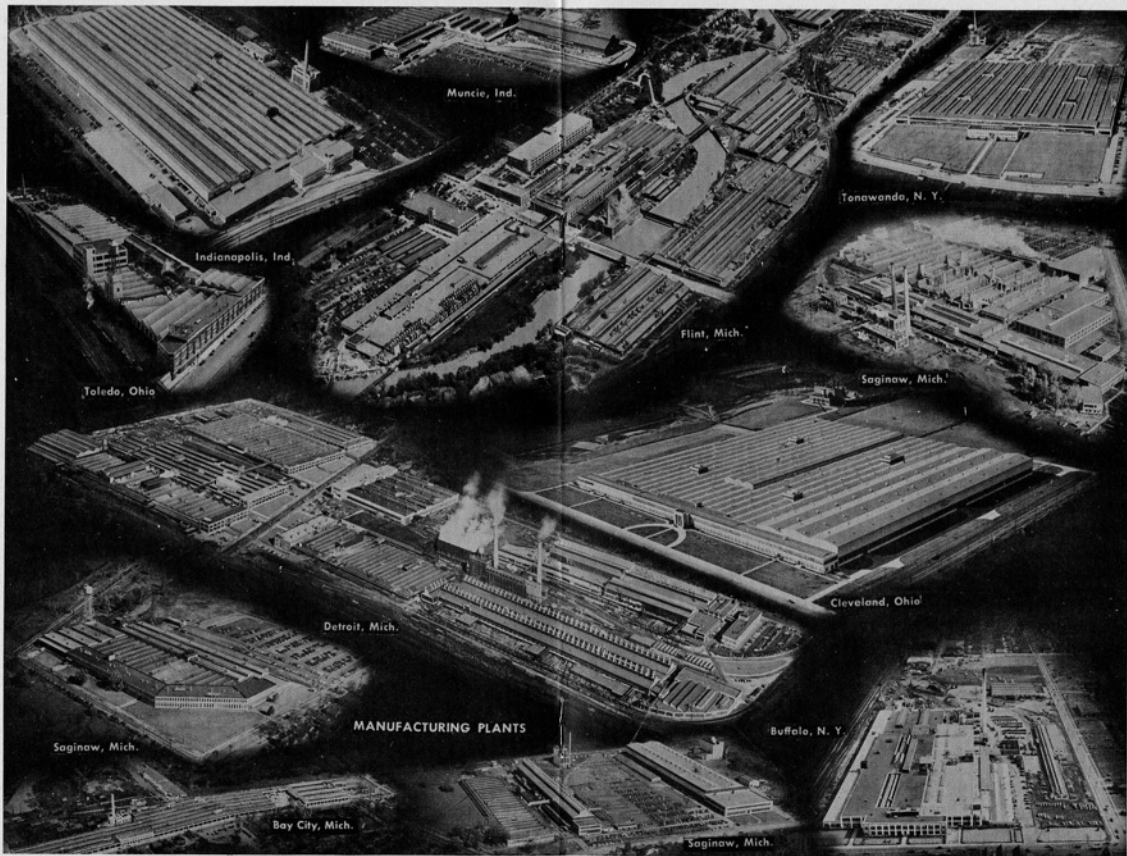
The long-awaited return to full peacetime production was consequently delayed. It was not until October 3, 1945 that the first passenger car came off the line at Kansas City—a plant, which, during the war, had been leased to the Oldsmobile Division for the manufacture of shells and which had to be cleared

of all the special wartime production equipment before it could be used.

But following that event, the trickle of cars began to swell into a stream—delayed from time to time by recurring shortages of materials—as one assembly plant after another was cleaned out, then re-established in its prewar condition with improvements added in practically every place.

#### CHEVROLET CHRONOLOGY, 1933-1945

- 1933**—M. E. Coyle made head of Chevrolet.
- 1935**—Million car years resumed; output 1,066,197.
- 1938**—Effects of recession felt; production 694,039.
- 1940**—Chevrolet, under Mr. Coyle's leadership, averaged a million units a year for seven years; Chevrolet dealers sold 11 million used cars in same period; first Chevrolet contract with War Department signed April, 1940.
- 1941**—Chevrolet rapidly added other War Department contracts; ranks first in civilian production for 12th time; buying rush anticipates Pearl Harbor; production 1,399,952.
- 1942**—Civilian car production halted; last passenger car left assembly line Feb. 6, 1942; plants ripped up and converted to war production.
- 1944**—"Volume Production for Victory" was slogan as Chevrolet management directed manufacture of long list of war goods in own and Government plants.
- 1945**—Defeat of Germany (V-E Day, May 5, 1945) started termination of war contracts and expansion of critically needed truck production; defeat of Japan (V-J Day, Aug. 14, 1945) started all-out drive for complete conversion to peacetime output.



Muncie, Ind.

Tonawanda, N. Y.

Indianapolis, Ind.

Flint, Mich.

Toledo, Ohio

Saginaw, Mich.

Detroit, Mich.

Cleveland, Ohio

MANUFACTURING PLANTS

Buffalo, N. Y.


Saginaw, Mich.

Bay City, Mich.

Saginaw, Mich.



Flint, Mich.



Tarrytown, N. Y.




Bloomfield, N. J.



Baltimore, Md.



Oakland, Cal.



Kansas City, Mo.



St. Louis, Mo.



Norwood, Ohio




Oakland, Cal.

ASSEMBLY PLANTS



Janesville, Wis.



Los Angeles, Cal.

## The Chevrolet Story

### CHAPTER FOUR

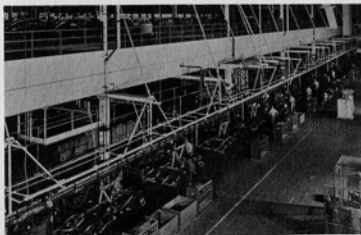
#### The Greatest Production Years

In any story of the automobile business, the current chapter so far has invariably been the greatest, and such is certainly true of the postwar years of Chevrolet, from 1946 to date.

It was a time of great expansion of facilities, and of bringing up new executive leadership, for in June, 1946, Mr. Coyle, who had been with Chevrolet since 1917, and general manager since 1933, was made an executive vice president of General Motors.

To replace him, the directors of General Motors selected Nicholas Dreystadt, who had been with Cadillac since 1916, and its general manager since 1934. Under Mr. Dreystadt began a drive for production leadership that could not keep up with the demand that had been accumulating through the war years when no cars were built.

Additions to manufacturing plants in this period included an enlargement of the Grey Iron Foundry at Saginaw and the commercial body plant at Indianapolis. The Buffalo assembly plant, erected in 1922



*"Suspended assembly" at the new Flint plant*

and converted into manufacture of Pratt & Whitney aircraft engines by Chevrolet during the war, was returned to peacetime work as the manufacturer of front and rear axles for passenger and commercial cars, while the Tonawanda plant confined its efforts to the production of motors.

Two new Chevrolet assembly plants were projected. One was at Flint, the other at Van Nuys, a part of Los Angeles. These went forward under the new management.

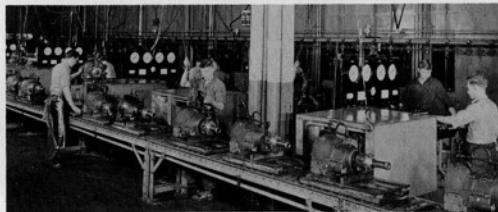
The 19 millionth Chevrolet vehicle was produced Dec. 5, 1946 and at the conclusion of the year production figures showed that a total of 707,975 passenger cars and trucks had been built by the company to continue Chevrolet leadership in the industry.

Six months later, in June, 1947, the new Flint Assembly plant went into production, using a new type of "suspended assembly" operation.

On November 10, 1947, the Indianapolis plant celebrated the completion of its 50 per cent expansion, consolidating its position as the largest



*End of truck assembly line at Los Angeles*



*Final test of Powerglide transmission at Cleveland*



*Night view of "okay lot" at Flint Assembly*

exclusive commercial body plant in the world.

The same year, 1947, recorded the return of Chevrolet to its formerly well-established custom of turning out a million vehicles a year. The 20 millionth Chevrolet left the new assembly line at Flint on November 13, and when the year closed the total production was recorded as 1,031,338 passenger cars and trucks—another year in the long record of established leadership.

During the latter part of the year 1947 the new Los Angeles assembly plant at Van Nuys went into production. The new plant embodies the same type of suspended assembly operation as that installed at Flint, and its construction was distinguished by the installation of Brazilian type sunshades—vertical concrete slats so positioned that they exclude the direct rays of the sun but admit plenty of daylight to both office and plant. It was said to be the first such installation in North America and served to reduce the inside temperature to a marked degree. The plant was formally



*1953 Stake Truck*

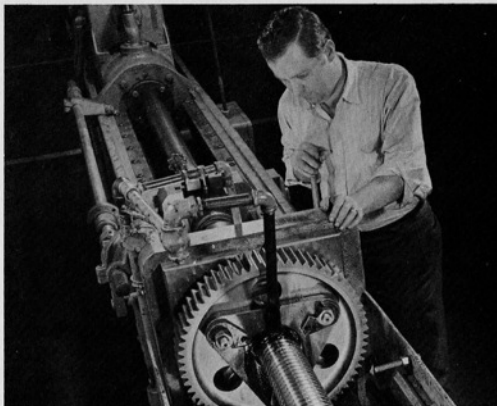


*Production of Powerglide transmissions at the Chevrolet-Cleveland plant*

dedicated February 18, 1948, and during the three-day open house that followed more than 60,000 Los Angeles citizens inspected its construction and operation.

During the same period the Chevrolet management planned another addition to manufacturing facilities in the shape of a plant which would be devoted to the manufacture of Chevrolet parts, not only for service but for new cars and trucks. A site was therefore selected at Parma, Ohio, a suburb of Cleveland, and by 1949 it was completed, enclosing almost 30 acres of floor space, a portion of which was set aside for the production of the new automatic transmission.

Production, meanwhile, was maintained at the highest level possible under the existing conditions. Shortages of material, a problem which had persisted since the beginning of postwar production, continued to present difficulties. On many occasions it was necessary to fly critical parts to the various assembly plants in order to maintain production. But always the



*Giant broach for Tank final drive production at Cleveland*

battle cry—"the highest quality at the lowest possible price" actuated the entire organization.

The 21 millionth Chevrolet vehicle was produced August 30, and the millionth 1948 vehicle was turned out November 2, one month earlier than the preceding year. Production in 1948 passed the record made the year before, to total 1,165,672 passenger cars and trucks.

It was during this period that plans were put in effect for the production of a completely new line of Chevrolet passenger cars. The new Advance-Design trucks had been announced in 1947, a complete departure from the models produced theretofore, while only slight modifications had been made in the passenger car line. New designs for cars had been on the drawing boards for some time, however, and in 1947 it was decided to prepare for a new line in 1949.

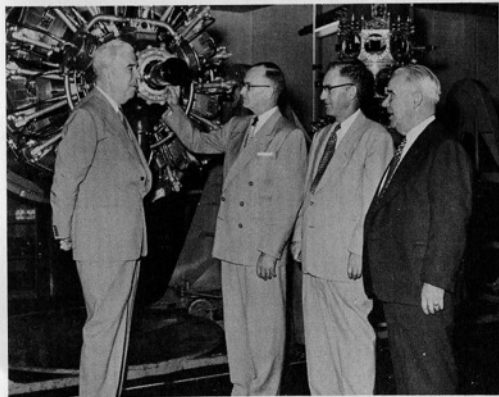
The work of converting the plants for the new production was accord-



*Forming front fenders at Flint Manufacturing*

ingly started in the fall of 1947, and even as some of the production lines worked on the production of 1948 parts, other lines were set up and organized for the production of 1949 parts. Hundreds of machine tools were moved in this fashion. New dies and tools were fabricated and tried out and prepared for production. The net result was that, instead of closing down plants for a long period of time while re-arrangements were made, the only time lost by production men was that required to take the annual inventory.

Upon the death of Mr. Dreystadt in



*Chevrolet officials see first R-3350-26W aviation engine off line July 29, 1952 at Tonawanda*



*In the government-owned plant at Chevrolet-Saginaw Transmission, planet carriers for the Walker Bulldog tank transmission are being produced at the scheduled rate. Almost completed, these parts are having two holes bored and reamed while burring operations progress in the background.*

August, 1948, W. F. Armstrong, a General Motors vice-president, was named general manager of the company, Mr. Armstrong served until receiving a new assignment from the corporation. To succeed him, directors of the corporation picked T. H. Keating, a 33-year veteran of Chevrolet, as general manager of Chevrolet, and a vice-president of General Motors.

The year 1949 saw other important developments. The engineering staff designed an automatic transmission of the torque converter type.

Called Powerglide, it was introduced as optional equipment on 1950 deluxe models—the first automatic transmission in the low-price field.

The Bel Air, a new hard-top convertible, likewise was introduced in 1950.

Chevrolet production in 1950 broke industry records that had stood since 1923. It became the first single company to manufacture more than 2,000,000 vehicles in U. S. plants in a year . . . at a peak rate of more than 12 vehicles a minute, in all plants taken together.

In 1951 Chevrolet set up an integrated defense operation to separate defense from civilian production, and took on a defense contract for mass production of two Wright R-3350 piston type aviation engines for the Air Force and Navy. These were the R-3350-26W, of 2700 horsepower, and the R-3350-85, a turbo compound engine of 3500 horsepower.

Chevrolet established a new Aviation Engine Division, which was assigned the Government-owned plant at Tonawanda, N. Y. in which it produced aviation engines in World War II, and was authorized to build two million square feet of additional defense plants, approximately half



*By October 15, 1952, Chevrolet had produced 7,000,000 artillery shells in St. Louis plant.*

in Flint, Mich. and half at Tonawanda, where the expansion included a new Forge and a new Foundry group of buildings, in addition to enlargement of the Chevrolet-Tonawanda Manufacturing plant.

Other defense contracts were for artillery ammunition in the St. Louis Shell Division; gear assemblies for CD-500 automatic transmission for tanks at Saginaw and Buffalo; final drive assemblies for other tanks at Cleveland; axles and other components for 6 x 6 military trucks at Detroit, Cleveland and Indianapolis, and staff cars for all the services. Several other Chevrolet plants were assigned parts production for the aviation engine program.

So, "The Chevrolet Story" is far from finished. By the end of 1952 Chevrolet had produced more than 27,500,000 cars and trucks, and the total of vehicles in use included approximately 12,000,000 Chevrolets, a volume never before achieved by any manufacturer.

"Quality first to last" is the slogan to be seen everywhere in the organization, which year after year has steadfastly maintained a policy of highest quality at lowest cost. And this same creed is maintained by the nationwide body of independent businessmen who sell and service Chevrolet cars and trucks—a continuing effort to provide improved safety, increased convenience and more lasting motoring pleasure for the approval of the public.

## CHEVROLET CHRONOLOGY, 1946-1952

**1946**—Postwar expansion begun; reconversion speeded; production 707,975; Nicholas Dreystadt named Chevrolet general manager as M. E. Coyle moved up to executive vice-president of General Motors.

**1947**—Production 1,031,338; new postwar line of Chevrolet Advance-Design trucks introduced; Indianapolis commercial body plant enlarged 50 per cent; new Assembly plant in Flint completed and in production.

**1948**—New Los Angeles Assembly plant dedicated Feb. 18, 1948; W. F. Armstrong, a General Motors vice-president, named Chevrolet general manager following death of Mr. Dreystadt in August, 1948; production 1,165,672.

**1949**—T. H. Keating, Chevrolet general sales manager, named general manager to succeed Mr. Armstrong, who was given another assignment by General Motors; new manufacturing plant opened in Cleveland; new line of Chevrolet cars introduced; production 1,493,501.

**1950**—Chevrolet broke industry-wide production records, becoming first firm to make more than 2,000,000 units in U. S. plants in year; Powerglide first automatic transmission in low-price field introduced; record year included 521,011 Chevrolet trucks.

**1951**—Civilian production cut back as Chevrolet signs contracts for defense work in many plants; CD-500 tank transmission gear assemblies, R-3350-26W and R-3350-85 aviation engines for Air Force and Navy; 105 mm. artillery shell; M-48 tank final drive units, and many components for 6 x 6 military trucks.

**1952**—Defense expansion under way, with two million square feet of new plants building. First R-3350-26W aviation engine built July 29, 1952. Shell production passed 7,000,000 units Oct. 15, 1952. One Millionth Powerglide unit built Oct. 25, 1952. Chevrolet in first place in production and sales for 19th year.



## CHEVROLET FIRSTS IN THE LOW-PRICE FIELD

Chevrolet over its more than 40-year history has pioneered many major improvements in low-priced cars—of which the following are only a few.

- Unisteel Body Construction
- Knee-Action Gliding Ride
- Valve-in-Head Engine
- Box-Girder Frame
- V-Type Fan Belt
- Turret Top Body Construction
- "Blue-Flame" Combustion Chambers
- Stabilized Front-End Mounting
- Complete Body Insulation
- Safety Plate Glass All Around (at no extra cost)
- Specialized 4-Way Engine Lubrication
- Tiptoe-Matic Clutch
- Duco Finish
- Concealed Safety-Steps
- Electric Starting Motor
- Foot-Controlled Headlamp Dimmer Switch
- Bonded Brake Linings
- Center-Point Steering
- Curved Windshields
- Powerglide Automatic Transmission
- Steel-Roofed Convertible Type Sport Coupe
- Power Steering

## CHEVROLET MILESTONES

- 1911**—Chevrolet Motor Company of Michigan organized November 3; first Chevrolets developed in a Detroit workshop.
- 1913**—Valve-in-head engine introduced, and period of plant expansion started with acquisition of home plant in Flint, Michigan. Plant also rented in New York City. Nearly 6,000 cars built.
- 1915**—Electric self-starter introduced, first in low-price field.
- 1918**—Chevrolet becomes a part of General Motors, and enters new period of plant expansion and sales. Closed models offered by Chevrolet for the first time.
- 1920**—Retail stores opened in various cities for direct sale of Chevrolet to the public.
- 1923**—The 1,000,000th Chevrolet built February 27. Chevrolet is on the threshold of volume operations. Assembly plants at Buffalo and Norwood, Ohio, acquired.
- 1924**—William S. Knudsen named president and general manager of Chevrolet.
- 1927**—Chevrolet sales exceeded 1,000,000 units for the first time, and for the first time Chevrolet led all other makes in sales. Total of 1,001,880 units sold. The 3,000,000th Chevrolet built.
- 1928**—New plant opened in Atlanta. The 4,000,000th and 5,000,000th Chevrolets built. Chevrolet again leads in sales.
- 1929**—Six-cylinder valve-in-head engine adopted on all cars.
- 1931**—Chevrolet starts its long run of leading the field in sales every year except one from 1931 to 1951 (except that no cars were produced for civilian use in World War II, from Feb. 6, 1942 to Oct. 3, 1945). Bumper plant acquired in Detroit.
- 1933**—Marvin E. Coyle succeeds Wm. S. Knudsen as general manager of Chevrolet.
- 1934**—Knee-Action introduced. The 10,000,000th Chevrolet built.
- 1937**—The 13,000,000th Chevrolet built. Chevrolet is first low-priced car to use Unisteel construction with Turret Top.

**1939**—The 15,000,000th Chevrolet built.

**1941-1945**—Company plants geared all-out for war production. Aircraft engines, armored cars, shells and guns among the types of materiel supplied in steadily increasing volume to the armed forces.

**1945**—First postwar passenger car off the line October 3.

**1946**—Production mounts as plant conversion is completed.

**1947**—New assembly plant dedicated at Flint, Mich. Chevrolet production returns to million class with 1,031,339 units manufactured.

**1948**—New assembly plant dedicated at Los Angeles. Production hits 21,000,000 on August 30. Millionth 1948 model completed November 2.

**1949**—Production augmented by new plants at Cleveland and Saginaw. T. H. Keating named general manager of Chevrolet.

**1950**—First year of more than 2,000,000 production in U.S. plants. Powerglide automatic transmission optional on de luxe models. Bel Air sports model introduced. Three production milestones in year:

January 11 —23 millionth Chevrolet built.

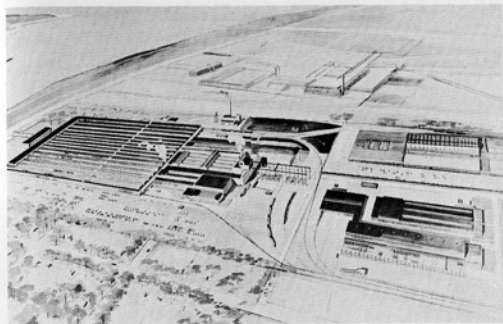
June 30 —24 millionth Chevrolet built.

December 22—25 millionth Chevrolet built.

**1951**—The 26 millionth Chevrolet built June 28; new brakes introduced.

**1952**—Millionth Powerglide produced Oct. 25, 1952—27 millionth Chevrolet built at Kansas City, March 19, 1952.

**1953**—Greater power, more economy, new beauty in three completely new lines of cars were offered by Chevrolet with such options as improved Powerglide automatic transmission and Power Steering, another First in the low-price field.



## TWO NEW CHEVROLET MANUFACTURING PLANTS

Two million square feet of new manufacturing plants were started by Chevrolet in connection with its defense contract to build Wright R-3350 Aviation Engines for the Air Force and Navy. ABOVE, is shown the Buffalo area expansion in relation to existing plants at Tonawanda, N. Y. To the left of dotted line is existing Chevrolet-Tonawanda Manufacturing plant, and at extreme upper right is Chevrolet Aviation Engine Division. Between them is addition to manufacturing plant, plus Forge and Foundry plants. BELOW, left, is shown million-square-foot new Flint, Mich. manufacturing plant.



1918



1953

THE  
*Chevrolet Story*