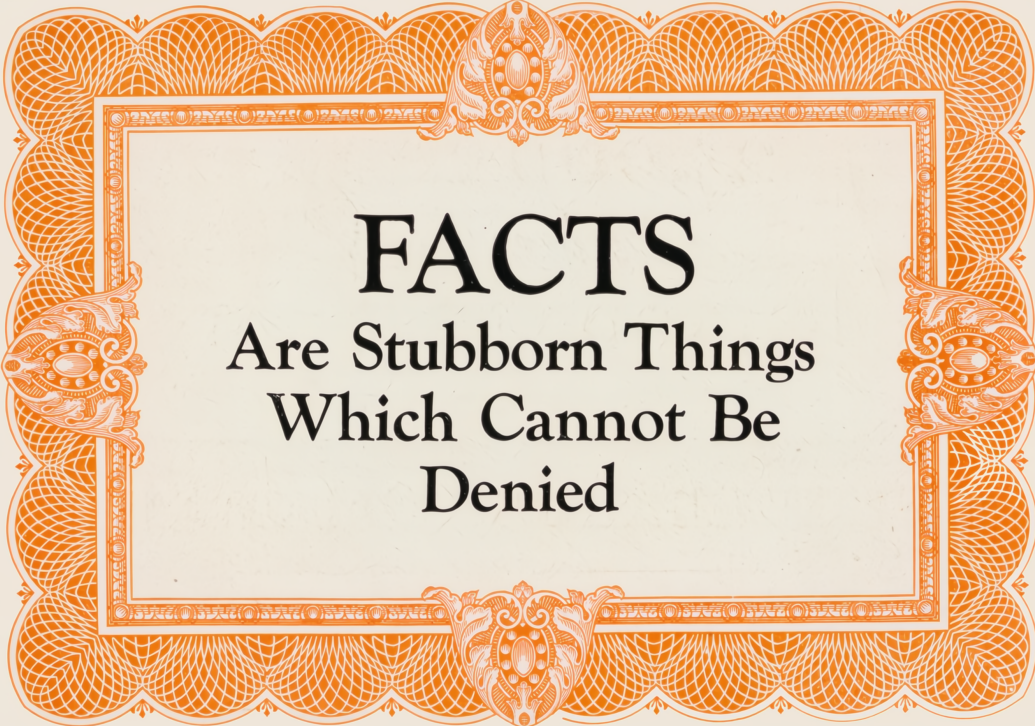




25,000 MILES
in less than
23,000 MINUTES!

The **STUDEBAKER COMMANDER**

World's Champion Car



FACTS

Are Stubborn Things Which Cannot Be Denied

An Official Statement from Studebaker's President

SOUTH BEND, INDIANA

January 2, 1928

TO THE PUBLIC:

As a result of hundreds of engineering and proving ground tests and comparisons of competitive cars made during the first eight months of 1927 Studebaker engineers convinced themselves that Studebaker cars were superior in endurance and speed to any competitive cars on the American market. To demonstrate and prove publicly the truth of their convictions was most desirable and, consequently, numerous test runs and races resulted. The Commander made two spectacular records. In September it established a new cross-continental record from New York City to San Francisco Bay of 77 hours and 40 minutes, beating the previous record held by a much higher priced six by 2 hours and 20 minutes. In October-November it established a *World's record for automobiles of any kind* at the Atlantic City Speedway by running 25,000 miles in 22,968 minutes. These marvelous perform-

ances proved conclusively the strength, dependability and speed of The Commander, which stands unrivaled as "The World's Champion Car."

Other records made in 1927 by The Commander, gave Studebaker official title to all endurance and speed records for fully equipped stock cars regardless of power, size or price. No other automobile manufacturer has ever held all of these records at one time.

The details of the World's record performance of The Commander at Atlantic City are related in this booklet. Its other records and those of The Dictator and The Erskine are described in other printed matter which will be furnished upon application to any Studebaker dealer.

The name "Studebaker" is a household word. The broad principle upon which Studebaker business is conducted, and upon which it has prospered for seventy-six years, now grounded upon tradition, insures satisfaction to everybody who deals with the House of Studebaker.

A. R. ERSKINE, *President*



The Story of MOTORDOM'S Greatest Achievement

**25,000 MILES IN LESS THAN
23,000 CONSECUTIVE MINUTES**

TWENTY-FIVE thousand miles is a vast distance. Travel 'round the world from New York to New York and you would still have to go again to the heart of Turkey to equal that distance. The Twentieth Century Limited, using 4 engines to a trip, does not equal the distance in more than 26 trips. Lindbergh would have to make his trans-Atlantic hop eight times to equal the distance.

Yet The Studebaker Commander traveled 25,000 miles in less than 23,000 minutes!

No automobile, no ship, no airplane, nothing made by man ever traveled so far so fast. As 1928 opens, all records for endurance and speed for fully equipped stock cars, regardless of price or power, are now held by The Commander.

And every Commander record is official—certified by the American Automobile Association.



The Start

Rain was drizzling steadily on the morning of October 18, 1927. But rain could not dampen the enthusiasm of the group of men at the Atlantic City Speedway, Hammonton, New Jersey. Rain made the grease-soaked boards of the steeply-banked track as slippery as a soapy bathtub but rain could not drown the eagerness of

I One shift of American Automobile Association officials in front of judge's stand. The entire Studebaker 25,000-mile test was under official supervision **I**

the drivers, impatiently waiting for the starter's flag that would send them away on an attempt to break all existing stock-car records for speed and endurance—and set new records for distances no other car had ever dared to attempt.

Inside the judge's stand, facing the finish line, were officials of the American Automobile Association who would handle all records of scoring and timing. At the conclusion of the long grind these and other American Automobile Association officials would completely dis-assemble these Studebakers and compare them part for part, measurement for measurement, with cars taken from a dealer's stock, to make absolutely certain that these three Studebakers were strictly stock models.

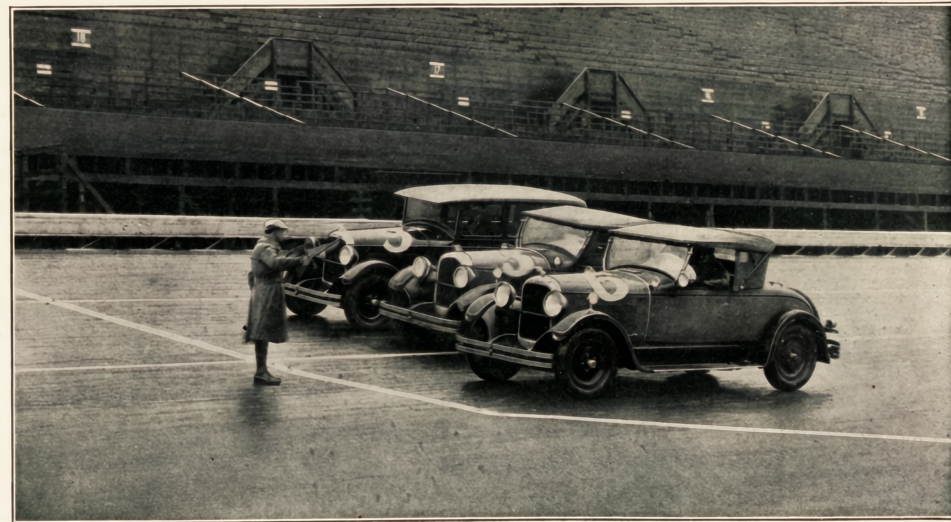
At 2:49 P.M. the official starter snaps down his red flag and the three Commanders spurt away in a group. As the flag dips down the electric timing device begins relentlessly to click off the seconds, never to pause until the cars have finished their wearying task. A wire stretched across the track at the finish line is pressed down by the front wheels of each flying car. Thus the timing device automatically prints the time each lap is completed in *hundredth parts of a second!*

This timing device is checked by a chronometer which, in turn, has been checked by the United States Bureau of Standards to be accurate to within *one-tenth of a second* in twenty-four hours.

The three Commanders are speeding silently around the huge oval—being stock models the mufflers cannot be disconnected. Hours and days and weeks these three cars will forge steadily ahead—proving to the world that American motor cars are the best in the world—and that a Studebaker will out-perform any other car regardless of power or price.

Bucking Wind, Rain and Fog

So through day and night for two long weeks. The rain pauses for a while, but at night a dense fog rolls in from the salt sea marshes. Fog so wet that windshield wipers must be used continuously. Fog that makes the greasy track slippery as an icy boulevard. Several nights in



Waiting for the word "Go!" Note the rain-coated official starter, the water-soaked track, and the slant at the flattest part of the straightaway



Four of the thirty-five American Automobile Association officials who timed and supervised this latest Studebaker achievement. View inside the judge's stand showing calculating machine and electric timing device. The judge's stand was occupied by four A.A.A. men at all times—day and night

November the weather-grayed track was transformed into a fairy-like spectacle by glistening white frost. A beautiful sight in the headlights of three speeding cars—unless you had to guide a car at seventy miles an hour around a track banked at a forty-three degree angle!

Total Elapsed Time Is Counted

After an hour or so, watching those beetle-like cars hum around the giant bowl becomes monotonous, but pit stops are always exciting. From the instant the official starter whips his red flag at the beginning until he flashes the welcome checkered flag at the finish, each second is recorded. So the Studebakers which averaged more than 65 miles per hour were forced to travel more than 70 much of the time to make up for necessary stops for oil, gasoline and change of drivers.

At regular intervals a Studebaker pit boss

sings out, "Get ready to gas!" and there is the sudden rushing action of a fire alarm. Mechanics who have been huddling around a smoking oil stove and listening to a squawking radio spring to life.

The word "GAS" is scrawled on a black-board large as a table top and held up so the driver can read it. A blast of the horn acknowledges it as the car swishes past. In another minute the car has completed the mile and a half lap and swings in sight 'round the steeply-banked curve, scoots down onto the less steeply-banked apron and pulls up to the pits.

"Quick Service" at the Pits

Stiff after four hours of steady driving in the chilling wind, the driver stands up and climbs out. The car is surrounded by a feverishly working crew. One man checks the water in the radiator. Another wipes the fog from the wind-



Three Commanders speeding into a banked turn. Imagine the concentrated wear of driving over this steep, slippery surface at 60-70 miles per hour for sixteen consecutive days and nights!

shield. A third checks the oil level. Several others are greasing the car. Two men are putting gasoline into the tank. The relief driver steps in. The pit chief stands beside the windshield and watches for the O. K. signal from each of his men. He calls "All clear!", the car rolls ahead, turns onto the track and speeds away. The chief looks at his stop watch, "Thirty-eight seconds. Not so bad."

Try to round a slippery corner at 65-70-mile speed and you'll frown, too! At the rear of left running board, ahead of fender, is a colored riding light which distinguished the cars as they flashed past the judge's stand in black night or in fog

The Thrill of Airplane Speed

Whirling around a banked track in a closed car is a strange sensation. Even on the straight-aways the car is tilted at an angle. At the right, up above your eyes, is a swift-flowing ribbon of gray—the top edge of the track. Be-





These men had good reason to smile happily. Val Haresnape, former secretary of the American Automobile Association Contest Board; Delmar G. Roos, Studebaker Chief Engineer; Harold S. Vance, Studebaker vice-president in charge of production and Paul G. Hoffman, Studebaker vice-president in charge of sales; photographed after the completion of Commander's triple 25,000-mile victory

low, on the left, is a rushing yellow border, the sandy infield. Ahead through the windshield is a turn banked at an angle of forty-three degrees—it looks as flat as the side of a battleship. The white painted line appears to go straight up. The driver smiles and jokes as you brace yourself for the turn—but before you are fixed you are around the corner and racing toward the next one.

After a few laps you lose the idea you are traveling at high speed. Windows keep out the rush of wind. There is little vibration, no undue noise, even though the speedometer dial rolls lazily back and forth across 70.

Riding in an open car with the top down is an entirely different story. The roar of howling wind muffles all sound of the car. Clawing fingers of wind tug at your goggles, your close-fitting helmet. The driver grins as you hold your ears, while the car continues its circuitous course!

Far through the long night these three stock model Studebakers rush around the course faster than the speed of crack limited trains—but without the help of steel flanges to keep them on the track. Dawn finally comes, but brings no rest for the speeding cars. More days, more weeks must roll swiftly beneath these sturdy cars before they reach their 25,000-mile goal.

A Sixteen-Day Wonder

American Automobile Association officials and Studebaker men marvel at such endurance. Drivers, despite long reliefs, begin to wear under the strain of continuous high-speed driving. How much more of a strain on the three cars which get no relief! Men speak of number "6" or "9" or "5" with all the enthusiasm due a champion. The mechanism of a medium-priced stock motor car standing up so perfectly under such gruelling punishment!

15,000 Miles and 10,000 More!

From 15,000 miles onward, these three Commanders do not break records—they make new ones! But still tirelessly as ever they roll on—10,000 miles beyond the greatest distance ever attempted by any automobile in continuous driving.

As the end draws near tight-stretched nerves jangle with excitement. Only a few more laps to go! Interested outsiders have driven from Philadelphia, thirty miles away, and fifty other Eastern cities where newspaper advertisements invited the public to witness this test. Factory officials and newspaper men are present. In the judge's stand, feverish activity. "Three more laps!" someone calls out the window. The starter climbs the guard rail and walks up to the top edge of the still rain-slippery track.



Where every second counted. A hurried pit stop for gasoline, oil and change of pilot. Total elapsed time from start to finish was counted so the Studebaker Commanders which averaged 65.31 miles actually traveled nearly 70 miles per hour for 25,000 miles

All eyes are strained on the three Commanders as they spurt around toward the finish. Here come the two roadsters. At 1:37 P.M., November 3, the checkered flag is cracked down as they speed by almost nose and nose. A few extra laps at seventy-five-mile speed to show that these Studebakers are still in A-No-1 condition even though they have gone farther than man or machine ever traveled before in such short time.

The two stock model Studebaker Commander roadsters, fully equipped as you see them on the street, averaged 65.31 miles per hour for 15 days, 22 hours and 48 minutes—or a total of 22,968 minutes.

A Studebaker Commander *sedan* averaged 61.98 miles per hour for the 25,000-mile grind! It finished on November 4th at 10:09 A.M., which made the total elapsed time 16 days, 19 hours and 20 minutes—or 24,200 minutes. Supreme proof of Studebaker dependability and endurance.

They Did It!

No wonder the crowd shouted and cheered. The Commanders did it! Each traveled that dangerous mile and one-half lap 16,667 times. Not one Commander, but *three*, had proved their metal and mettle by traveling 25,000 miles in less than 25,000 minutes.

Studebaker had demonstrated its speed and endurance by positive proof. Truly a world champion car!

Certified As Stock Cars by A.A.A.

After the conclusion of this triple 25,000-mile test the cars were immediately turned over to the American Automobile Association. A. A. A. officials dis-assembled these three cars. Their own mechanics and engineers checked each part, each measurement, against other Studebaker cars taken from dealers' stocks as

well as against advertised specifications. All of this was done to make certain these three cars were exact duplicates of The Commanders sold by dealers.

Why Studebaker Made This Test

Why all this effort? Because Studebaker spends over \$1,000,000 each year in testing and proving its products. Because in 25,000 miles of high-speed driving, Studebaker engineers can see before their eyes in a few days the cumulative effect of years of normal driving. Through the magnifying glass of this brutal test Studebaker materials and manufacturing methods were put under a searching X-ray.

Proof . . . Not Claims

No more need you invest your motoring money on mere claims of performance. Studebaker refers you to the official records of the

American Automobile Association for proof of endurance and speed.

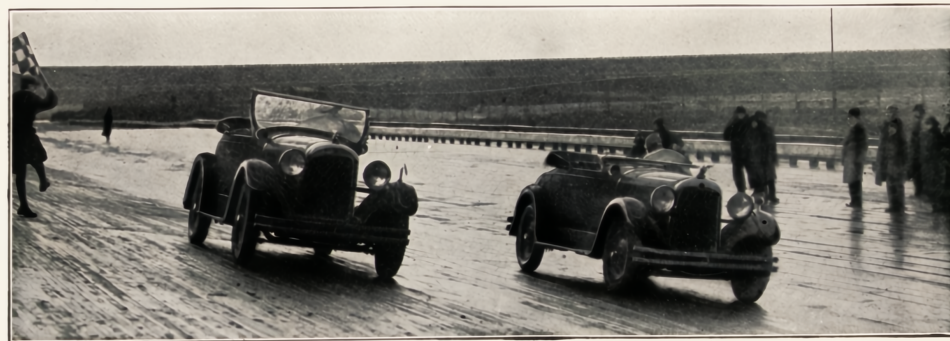
No more need you invest your motoring money on mere claims of long service. Studebaker refers you to nearly a thousand owners who have driven their Studebakers 100,000 to 500,000 miles.

Low upkeep? Studebaker factory sales of replacement parts during 1927 averaged only \$10 per car in operation.

World Champion Performance —plus Economy!

Because of its thrilling power and performance, people who are not acquainted with Studebaker engineering, design, and precision manufacture may feel The Commander must be an expensive car to operate. The Commander actually costs less to run than scores of cars.

Here is proof: In sixty-one tests in sixty-one cities from Jacksonville to Seattle, from Boston



Above—Flashing checkered flag at end of Studebaker's world record 25,000-mile run. Two Commander roadsters finished neck and neck, averaging 65.31 miles per hour for 22,968 minutes. Note the rain-soaked track



At left—Sedan completes its 25,000-mile task in 24,200 minutes with an average speed of 61.98 miles per hour!

Official Records for Fully Equipped Stock Cars Held by Studebaker

—including those made by the Studebaker Commander, World's Champion Car

OFFICIAL A.A.A. RECORDS HELD BY THE COMMANDER

Miles	Studebaker Commander Miles per Hour	Previous Record Miles per Hour	Miles	Studebaker Commander Miles per Hour	Previous Record Miles per Hour	Hours	Studebaker Commander Miles per Hour	Previous Record Miles per Hour
5	80.454	73.977	11000	65.87	62.720	1	81.101	75.747
10	80.694	74.452	12000	65.89	63.058	3	80.391	75.444
50	80.652	75.427	13000	65.83	62.958	6	79.409	74.803
100	81.103	76.111	14000	65.81	61.661	12	75.136	69.95
500	79.614	75.138	15000	65.73	61.377	24	75.623	71.329
1000	75.365	70.310	16000	65.75	*	48	65.97	65.735
2000	73.349	70.084	17000	65.75	*	72	65.79	64.247
3000	65.92	65.523	18000	65.74	*	96	65.94	63.043
4000	65.77	64.391	19000	65.57	*	120	65.87	63.363
5000	65.79	63.695	20000	65.48	*	144	65.80	62.934
6000	65.90	63.004	21000	65.52	*	168	65.88	62.550
7000	65.87	63.272	22000	65.51	*	192	65.84	63.039
8000	65.86	63.415	23000	65.44	*	216	65.81	61.917
9000	65.81	62.896	24000	65.44	*	240	65.74	61.416
10000	65.82	63.302	25000	65.31	*	264	65.74	*
						288	65.56	*
						312	65.51	*
					*No previous record.	336	65.51	*
						360	65.48	*
						384	61.98	*

Official Records Held by
The Studebaker Dictator—
Unequaled by Any Stock Car Selling
for Less Than \$1400

Miles	Studebaker Dictator Miles per Hour
5	59.543
10	60.140
50	61.497
100	61.831
500	61.687
1000	61.498
Hours	Studebaker Dictator Miles per Hour
1	61.656
3	61.582
6	61.458
12	61.989
24	61.795

**Official Records Held by the New
American Edition of The Erskine Six
—Unequaled by Any Stock Car
Selling for Less Than \$1000**

Miles	Erschine Six Miles per Hour
5	57.307
10	57.207
50	56.168
100	55.590
500	51.383
1000	53.227

Hours	Erschine Six Miles per Hour
1	56.194
3	53.759
6	53.056
12	52.970
24	54.104

to San Francisco, The Commander averaged 17¼ miles per gallon of gasoline! These tests were observed by local motor club officials or newspaper men.

Economy of First Cost, Too!

To equal The Commander's *rated* horsepower you must pay two to five times more than Studebaker's low One-Profit price.

Studebaker is the world's largest independent automobile manufacturer—with one exception. Studebaker builds within its own plants all bodies, engines, gear sets, differentials, axles, springs, gray iron castings, and drop forgings—thus reducing the profits of outside parts makers to a minimum.

Savings so effected are passed on to you in extra quality materials and finer workmanship without commensurate additions in price.

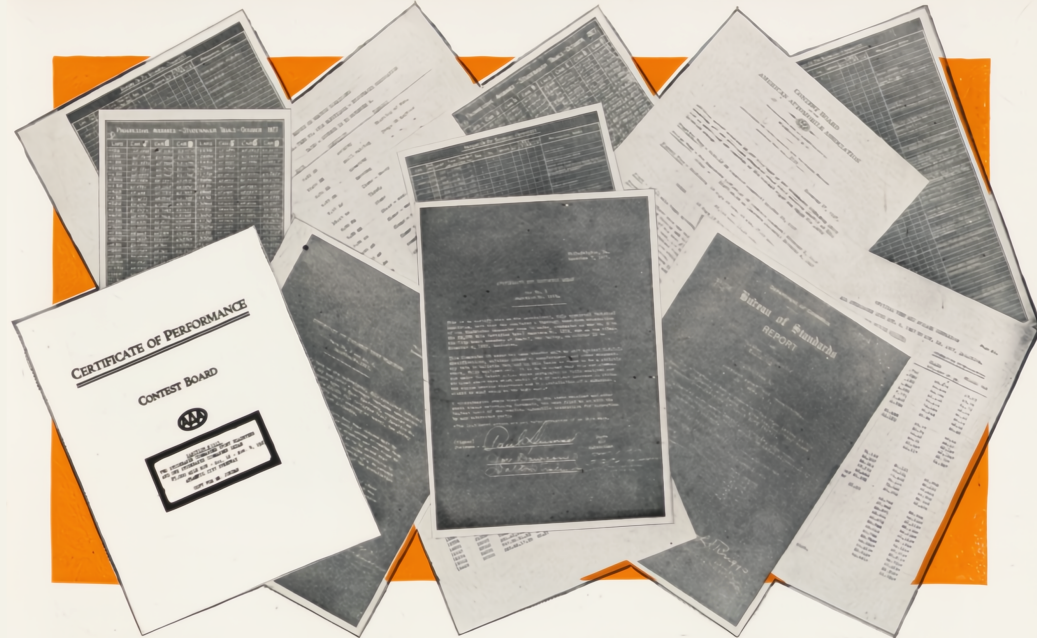
Drive This World's Champion Commander

Learn how much more Studebaker gives for your dollars—learn how much pleasure you will have driving a world champion car.

Take command of The Commander for half an hour or half a day. Feel its red-blooded eagerness in traffic. Compare its riding comfort over the roughest street or road. Test its abundant power on a steep hill or through sand or mud. Check the extra equipment Studebaker gives you. Judge the distinctive new beauty of Studebaker design. Estimate the value to you and your family of a *safe* full-vision welded steel body.

Drive The Commander—then decide.

In it the integrity of construction for which Studebaker has been famous for 76 years is combined with the most advanced engineering of 1928.



The American Automobile Association's 33-page report, containing photostatic copies of the Score and Timing Sheets and other technical data on the run, stands as indisputable and authoritative evidence of The Commander's great achievement. Members of the A.A.A. technical committee kept an accurate record of all gas, oil and water replenishments and any work done on the cars



The three record-breaking Commanders were housed in a neutral garage following the run—here they were carefully checked by the A.A.A. technical committee to establish the strictly stock status of each car

[22]



American Automobile Association engineer checking Studebaker piston. The three 25,000-mile Commanders were disassembled and checked meticulously to make certain these record-breaking cars were strictly stock models



Member of A.A.A. technical committee counting number of teeth in differential and pinion gears to prove that only stock gear ratios were used in the three Studebakers which set new world records for speed and endurance

[23]



Nothing was left to doubt. Here you see an official of the American Automobile Association checking compression ratio on Commander model selected at random from dealers' stock—to compare with 25,000-mile Commanders

Other Records Set by The Commander

Acclaimed "the greatest post-war achievement of automotive engineering," the path of The Studebaker Commander is strewn with accomplishments . . . feats which prove its speed, its endurance, its hill-climbing ability and its economy.

Read on the opposite page some of the major accomplishments of The Commander during 1927, in addition to its record-breaking run of 25,000 miles in 22,968 minutes. Then see The Commander models at their low One-Profit prices—\$1495 to \$1745, f.o.b. factory.

This World's Champion Car sets a new record for value just as it has established new records for performance!

Studebaker Commander's Champion Performance Proved by Many Feats in 1927

FEBRUARY-MARCH, 1927. Sixty-one nation-wide gasoline tests, made under supervision of motor club officials or newspaper representatives, showed an average of $17\frac{1}{4}$ miles per gallon.

APRIL 5. Finish at Culver City, California, endurance run in which Commander covered 5,000 miles in 4,909 minutes.

MAY 4. Established new record, Kansas City to St. Louis and return. Average speed, 51.35 miles per hour for 524 miles, 400 miles of which were covered in blinding rain.

MAY 12. Won Royal Automobile Club of Egypt Challenge Trophy from 12 competitors by setting best time for one kilometer from standing start; time, 46 1-5 seconds.

JULY 9. Established new record from Cordoba, Argentina, to Buenos Aires—468.7 miles through heavy mud in 15 hours, 11 minutes.

SEPT. 2. Fully-equipped Commander Sedan, driven by Ab Jenkins, sets new transcontinental road

record by traveling from New York to San Francisco Bay in 77 hours, 40 minutes. Previous best time, established by \$2,500 open car, cut down by two hours, 15 minutes.

SEPT. 5. Two Commander Sport Roadsters finish first and second in 75-mile stock-car race at Atlantic City for six-cylinder cars selling for less than \$2,000.

SEPT. 5. Commander Sport Roadster climbs to top of Pike's Peak in 22 minutes, 47 seconds—a feat never equaled by any car in its class.

OCTOBER 6-10. Commander Sport Roadster strictly stock and fully equipped, sets 11 new records in its class—a clean sweep of all performance marks from 5 miles to 24 hours.

OCT. 18-Nov. 4. 25,000 miles in less than 23,000 minutes at Atlantic City—a clean sweep of all performance marks from 3,000 miles up to 25,000 miles, and a *World's Record* for motor cars or any other kind of vehicle.

Remarkable Gasoline Economy of The STUDEBAKER COMMANDER

Proved by 61 Official Tests

THESE tests, sixty-one in number, were carried out under average driving conditions in every part of the country. They were conducted in the presence of official observers supplied by motor clubs or daily newspapers.

The results, which were made under widely varying conditions, showed a national average of 17¼ miles to the gallon.

Accurately Measured

The method of the test was to disconnect the regular gasoline feed line, exhaust the carburetor, and supply fuel from a measured gallon can of gasoline, which was attached to the motor by a bracket just above the carburetor.

Average of Two Tests

The car was then run at a legal rate of speed over ordinary roads until the gallon of gasoline was exhausted. The speedometer reading was then checked. Another officially-measured gallon can of gasoline took the place of the empty one, and the return trip was made. The two speedometer readings for the trip going and coming were averaged and the result accepted as the miles per gallon of gasoline delivered by The Commander.

These sixty-one official tests prove that in gasoline economy as in other phases of performance The Commander is the most remarkable automotive engineering achievement in years.

Official Results of The Studebaker Commander Gasoline Economy Tests Held in 61 Cities

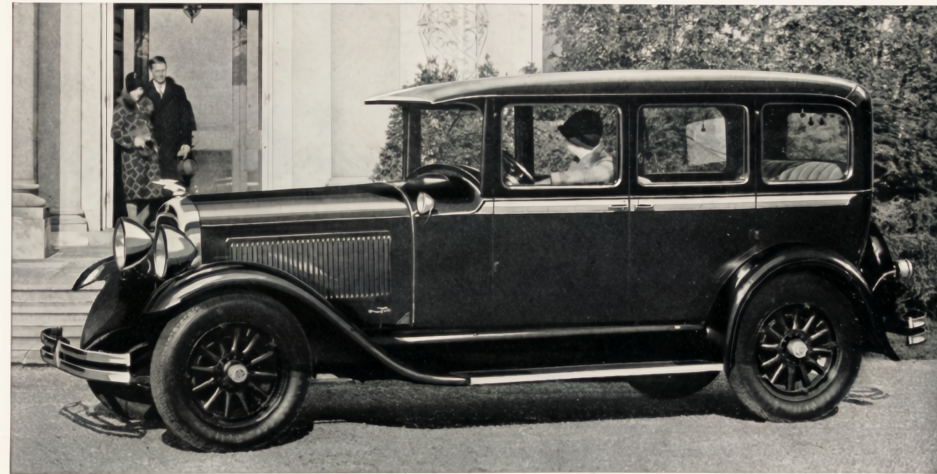
Mileage	City	Mileage	City	Mileage	City
15.3	Baltimore, Md.	17.5	Hartford, Conn.	16.8	Jacksonville, Fla.
20.95	Indianapolis, Ind.	15.8	Newark, N. J.	17.4	Detroit, Mich.
18.15	South Bend, Ind.	16.	Passaic, N. J.	17.2	Houston, Texas
16.1	Staunton, Va.	17.	Plainfield, N. J.	17.4	Dallas, Texas
16.	Washington, D. C.	17.7	Omaha, Nebr.	17.85	San Antonio, Texas
18.15	Utica, N. Y.	17.	Des Moines, Iowa	16.7	Youngstown, Ohio
16.7	Coffeyville, Kans.	19.4	Fort Dodge, Iowa	18.35	Columbus, Ohio
18.9	Tulsa, Okla.	19.4	Denver, Colo.	13.4	Cleveland, Ohio
17.4	Oklahoma City, Okla.	16.7	Philadelphia, Pa.	17.9	Dayton, Ohio
15.5	Kansas City, Mo.	17.5	Reading, Pa.	17.7	Charleston, W. Va.
17.9	Los Angeles, Calif.	16.1	Harrisburg, Pa.	17.5	Peoria, Ill.
18.7	Riverside, Calif.	16.15	Atlantic City, N. J.	17.1	Chicago, Ill.
19.8	El Paso, Texas	16.4	Trenton, N. J.	17.65	Charlotte, N. C.
16.6	Phoenix, Ariz.	17.3	Beaver Falls, Pa.	17.5	Buffalo, N. Y.
17.7	Nashville, Tenn.	15.6	Pittsburgh, Pa.	17.85	Rochester, N. Y.
18.1	New Orleans, La.	18.5	Everett, Wash.	17.6	Providence, R. I.
17.1	Memphis, Tenn.	18.	Seattle, Wash.	17.7	Boston, Mass.
14.4	Minneapolis, Minn.	20.2	Portland, Ore.	15.45	Columbus, Ga.
16.6	Mt. Vernon, N. Y.	17.4	St. Louis, Mo.	16.25	Knoxville, Tenn.
17.	Albany, N. Y.	19.2	San Francisco, Calif.	16.15	Birmingham, Ala.
17.	New York City				

Average for 61 Cities—17¼ Miles Per Gallon



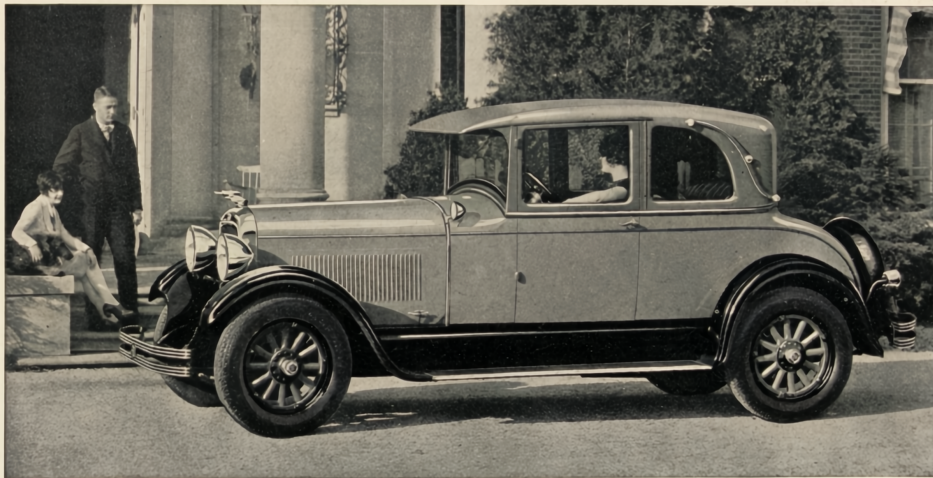
**The Commander
Sedan**
(For Five)

Beauty of design, luxury of appointment and completeness of equipment give the Studebaker Commander Sedan a custom charm in keeping with its world's champion performance. Four-wheel brakes and full-vision welded steel body insure safety; long springs, shock absorbers and big balloon tires afford utmost comfort.



De luxe equipment features this model of the world's champion car. Mohair or Broadcloth upholstery; chromium-plated bumpers, head and cowl lights; electric cigar lighter on dash; vanity case, ash receiver, arm rests, toggle grips and many other refinements are included in this car of brilliant performance and outstanding beauty.

**The Commander
Regal Sedan**
(For Five)



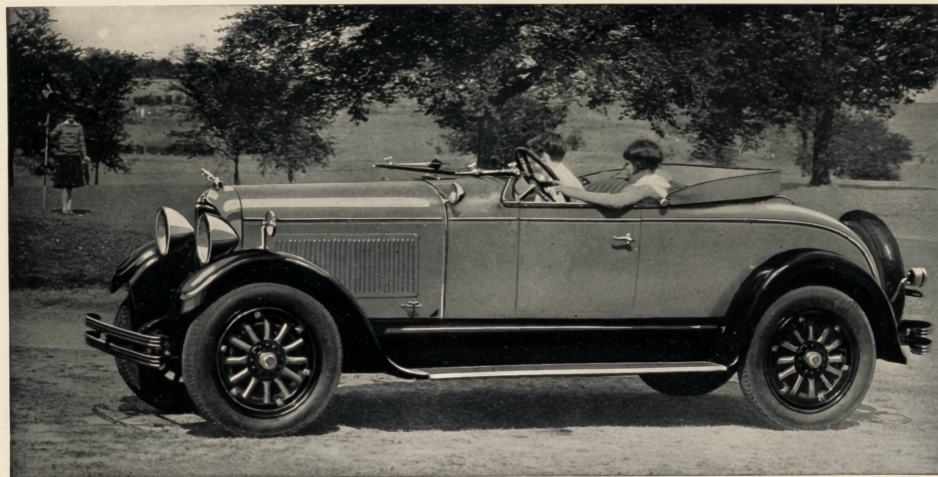
**The Commander
Victoria**
(For Four)

Amplly dimensioned for four-passenger comfort with deep, restful seats, including a high-backed easy chair for driver with seat at right which folds under dash when not in use. Wide doors give easy access to the spacious interior. Roomy package compartment behind driver and large carrying space for luggage beneath the rear deck.



The four-passenger Commander Coupe has a jaunty rumble seat, set low and dimensioned for ample leg room. It is upholstered in mohair. The window between driver's seat and rumble seat may be lowered. Also available in two-passenger Coupe, upholstered in leather. Twenty-one cubic feet of storage space beneath the rear deck.

**The Commander
Coupe**
(For Four)



**The Commander
Sport Roadster**
(For Four)

Low swung, rakish, distinctive in finish and appointments. A car of action and beauty. It has a folding windshield; chromium-plated front and rear bumpers; a folding top and trim flat boot; rear view fender mirror and shock absorbers. The rumble seat is deeply upholstered and abundant leg room is provided.

SPECIFICATIONS

The Studebaker Commander

WHEELBASE: 120 inches.

ENGINE: The powerful Big Six engine, of Studebaker design and manufacture, of the quiet L-head type, cast en bloc. Compact unit power plant, insuring perfect alignment between engine and transmission. Based on rating of Society of Automotive Engineers only seven American cars equal this engine in rated horsepower and they cost two to five times the price of The Commander. S. A. E. horsepower rating is 36.04. The bore is $3\frac{3}{4}$ inches and the stroke 5 inches. Develops full horsepower at 2,800 revolutions per minute. Removable head, with combustion chambers exactly machined to uniform size.

Precisely machined pistons, with four rings and extra long ($11\frac{1}{4}$ inches) connecting rods forged from selected steel, are weighed for perfect balance.

The connecting rod bearings are cast babbitt; the sturdy one-inch piston pins, set high in the pistons, turn in bronze.

The Studebaker crankshaft, drop-forged from steel specially made to Studebaker specifications, is fully machined on all surfaces to close limit dimensions and therefore inherently balanced. The crankshaft is extra heavy and is carried on four large, bronze-backed bearings, with a total bearing surface of $23\frac{3}{8}$ inches.

The camshaft is carried on four large bearings. Cams and bearings forged integral with the shaft. Cam surfaces are case hardened.

Large mushroom-type push rods operate the valves which are $1\frac{1}{8}$ inches in diameter with a lift of $\frac{5}{16}$ inch. The valve stems and push rods are amply lubricated by oil from the crankcase, through open passages which connect with valve chambers.

LUBRICATION: In the positive force feed lubricating system, oil, under pressure, is forced directly to the crankshaft, camshaft and connecting rod bearings. The overflow from the camshaft and crankcase forward bearings drains into the timing gear housing and lubricates the timing gears. The overflow from the connecting rod bearings is thrown into the cylinders, lubricating the wrist pins and cylinder walls. The oil, returning from the engine parts to the crankcase, passes through a special filtering device, so that the engine operates always on clean oil. Oil pressure gauge, mounted on instrument board, indicates oil pump pressure.

Chassis lubrication by Studebaker magazine high pressure system requiring refilling only every 2,500 miles. Engine oil need be changed only every 2,500 miles after first thousand miles.

CARBURETION: A one and one-half inch carburetor with hot spot intake manifold. Special heat control adjustment on dash for quick starting in cold weather. Throttle is located at head of steering post. Accelerator is conveniently located on toe board.

IGNITION: Current is supplied by generator, accessibly mounted at the right forward end of the engine, and by a storage battery. The distributor is carried at the left front of engine. Ignition system is protected against moisture.

STARTER: Compact, durable starting motor, developed and perfected from many years of use. Operated by starting switch conveniently located on toe board.

GASOLINE SYSTEM: Leak-proof gasoline tank, of 16-gallon capacity. Hydrostatic gauge on instrument board indicates, in gallons, the quantity of gasoline in tank.

COOLING SYSTEM: Water cooled with pump circulating system. Tubular type of radiator. Six-blade, 18-inch fan.

CLUTCH: Improved single-disc, dry-plate clutch. Exceedingly simple and effective, smooth in engagement.

TRANSMISSION: In unit with clutch and engine; selective type; three speeds forward and one reverse. Countershaft gears are forged integrally thus assuring perfect alignment. All shafts and gears of special alloy steel. Shifting lever mounted on housing directly over gears.

REAR AXLE: Semi-floating type, with extra large Chrome Molybdenum shafts. Spiral bevel gear drive. Load carried on large taper roller bearings at wheel hubs and differential.

SPECIFICATIONS—(continued)

The Studebaker Commander

DRIVE: Hotchkiss type. The torque and drive are taken through the extra powerful springs. The propeller shaft is a heavy steel tube, turning through two universal joints and with angle of drive reduced to minimum because of low hung chassis design. The use of Hotchkiss drive principle eliminates troublesome torque tube and radius rods.

SPRINGS: Semi-elliptic in type as adopted by 92 per cent of American automobile manufacturers. Front springs: 36 inches long, 2 inches wide. Rear: 50 inches long, 2 inches wide. The rear ends of both front and rear springs are carried on links of special steel, designed to take up wear. All spring bolts extra heavy. Studebaker manufactures its own springs from steel made according to Studebaker formula.

BRAKES: Mechanical four-wheel brakes, with oversize drums 13 $\frac{5}{8}$ x 2 inches, front and rear. Internal expanding type. Correct leverages provide powerful braking action with light pedal pressure.

LOCKS: Coincidental steering gear and ignition lock (approved by Insurance Underwriters' Laboratories), entitling Studebaker owners to lowest theft-insurance rates. Lock on spare-tire carrier and door lock operated by same key used for steering and ignition lock.

FENDERS: Made of heavy pressed steel. Extra deep oval crown design, beautiful and substantial.

STEERING GEAR: Improved cam and lever type. Specially designed for use with balloon tires. Taper roller bearings on steering pivots insure smooth, easy steering.

FRAME: Deep, rigid pressed steel channel section, narrow at the front to allow a short turning radius. Side members 6 $\frac{1}{2}$ inches deep with 1-inch flange, are secured together by five cross

members. The rigid construction of the Studebaker frame provides a large factor of safety.

WHEELS: Artillery wheels. Disc or wire at nominal extra charge.

TIRES: Full-size balloon tires, 30 x 5.50 inches, non-skid all around.

BODY: Full-vision, welded steel body has narrow, yet sturdy pillars to give utmost visibility. Wide door openings (26 inches) and wide plate-glass windows characterize the comfort built into every detail of the body.

REFINEMENTS: Mohair, broadcloth or genuine leather upholstery. Silk curtains; Butler finish hardware.

LIGHTS: Two-beam acorn lights provide two distinct and separate beams of light. One is a long range beam for country driving. The second beam is of full intensity but is used when approaching other vehicles or driving around town. Head lights and cowl lights are controlled from a switch on the steering wheel. Indirect instrument board light; dome light and rear traffic signal light.

EQUIPMENT: Automatic windshield cleaner and rear-vision mirror. The one-piece windshield is of no-draft ventilating type, exclusively Studebaker. It deflects air currents over heads of passengers, or into the driver's compartment as desired. Position controlled by convenient lever above instrument board. When tilted for cowl ventilation, water cannot enter driver's compartment as hidden troughs are provided beneath the cowl to carry it off. The advantage of this feature in rainstorms is quite obvious.

Speedometer, gasoline gauge, engine thermometer, oil pressure gauge and ammeter, set under glass, indirectly illuminated. Shock absorbers.

Studebaker reserves the right to change any of the specifications listed without obligation to subsequent purchasers or to add new designs or improvements without making similar alterations in automobiles already manufactured

STUDEBAKER

now holds every official
endurance and speed record
for fully equipped stock cars
regardless of power
or price

