

Just as Faultless as It Looks

ADVANCE ANNOUNCEMENT 1909

NATIONAL MOTOR VEHICLE CO. INDIANAPOLIS, IND.

The National Line 1909

Model 9-35, 4-cylinder, 4¾ x 4¾, 5-passenger Touring Car, \$2,750

Model 9-40, 4-cylinder, 5 x 5, 7-passenger Touring Car, \$3,700

Model 9-50, 6-cylinder, 4½ x 4¾, 7-passenger Touring Car, \$4,200

Model 9-60, 6-cylinder, 5 x 5, 7-passenger Touring Car, \$5,000

Each of these chasses furnished with Baby Tonneau, Roadster or Limousine body

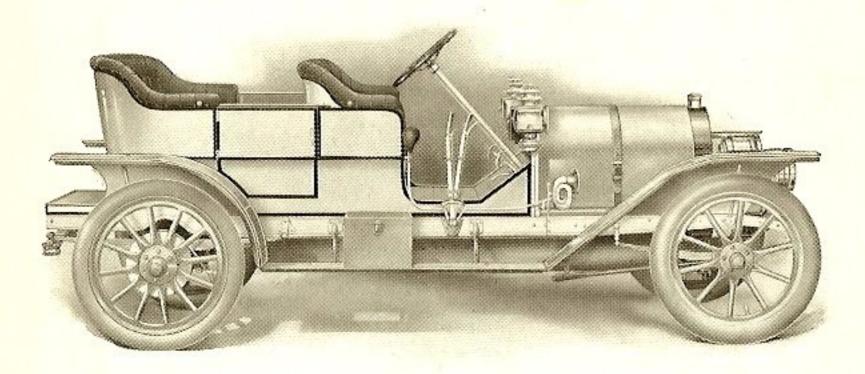
NATIONAL MOTOR VEHICLE CO. INDIANAPOLIS, IND.

The National

N THE eight years that this company has been building motor cars the development of its product from year to year has accurately gauged the progress of the automobile industry. It advanced to the four-cylinder type with a few other leaders; it developed the six-cylinder car a little before the others. In the adoption of other features of the best-accepted practice of the day it has been sometimes a little in advance and sometimes merely abreast of the front rank—never behind.

It has been a development without radical change. The essential principles were right in the beginning; the changes from year to year have been improvements and refinements along the lines first adopted. And these improvements have looked not only to the correct working out of the mechanical and electrical problems involved, nor yet only to determining the best materials for the various purposes of construction, but also to the innumerable little niceties of workmanship that make for perfection.

We make each year, of course, many and costly experiments—but we do not market them. Following our usual custom we announce the 1909 line only after it has been perfected several months, with every detail proven not merely by test, but by long service.



Model 9-35-Four Cylinders, 434 x 434-\$2,750, F. O. B. Indianapolis.

STURDY in construction, stylish in appearance, the "Little Four" develops power away beyond its rating, and is marked by a refinement of detail unsurpassed by any car in the world.

SPECIFICATIONS - MODEL 9-35

Moror—Four cylinder, 434x434 inches vertical, cast in pairs, mounted on main frame. Mechanical valves, exhaust and admission on opposite sides and interchangeable. Ball-bearing crank shaft and ball-bearing cam shafts. Two separate sets of spark plugs. Tapered nipples used on intake, exhaust and water pipes in place of packing. Extra long Parsons white bronze bearings on connecting rods. Gear-driven distributor. Divided aluminum crank case. Interchangeable parts.

CLUTCH—Self - contained, aluminum cone, leather faced, spring cushioned.

Transmission—Sliding gear selective type. Three speeds forward and one reverse, direct on high. Self-contained annular type ball-bearings on main and counter shafts. Gears run in oil.

WHEEL BASE-115 inches.

GAUGE-561/2 inches.

DRIVE—Bevel gear through ball-bearing propeller shaft and flexible joint to rear axle of improved design.

Bearings—Annular type ball bearings throughout.

Wheels-Wood, artillery pattern, 10 11/2-inch spokes front and 12 rear.

OILING—Crank case, constant level force feed oiler, oiling all working parts of motor.

IGNITION—Two separate, complete systems. One a gear-driven high-tension Bosch magneto. The other a storage battery, single coil and distributor. Each system has a separate set of spark plugs.

GASOLINE CAPACITY-15 gallons.

WATER CAPACITY-5 gallons.

Tires-34x4. Diamond, G & J or Michelin.

Brakes—Two systems. Two internal expanding metal to metal hub brakes and two band brakes on outside of rear wheel drums. Hand lever applies one set. Foot push pedal applies the second set.

GUARDS—Continuous enclosed metal guards, front and rear. Metal dust shield between frame and running board.

FRAME—Pressed steel 4½-inch channel section firmly riveted and braced and curved up over rear axle. No subframe.

FRONT AXLE—Seamless, cold drawn steel tubing, heavy gauge, forged yokes or I beam steel forging.

REAR AXLE—Compound construction; inner axle used only as a driver; wheels turn upon double annular type ball-bearings on hollow axle which carries all weight.

Dust Pan-Metal dust pan under all working parts.

Body Finish—Coach carmine or National red, black stripes.

GEAR FINISH-Coach carmine or National red, black stripes.

Body—Straight line sheet metal, side entrances. Divided front seats. Carrying capacity, 5 passengers.

UPHOISTERING — Luxuriously upholstered in black leather. Special spring mattress cushions.

Steering System—Eighteen-inch hand wheel, inclined post. Worm and gear, non-reversible chuck. Ball joint connection to steering knuckle.

COOLING SYSTEM—Special straight line cooler, ball-bearing fan attached to engine base. Circulation by direct driven gear pump.

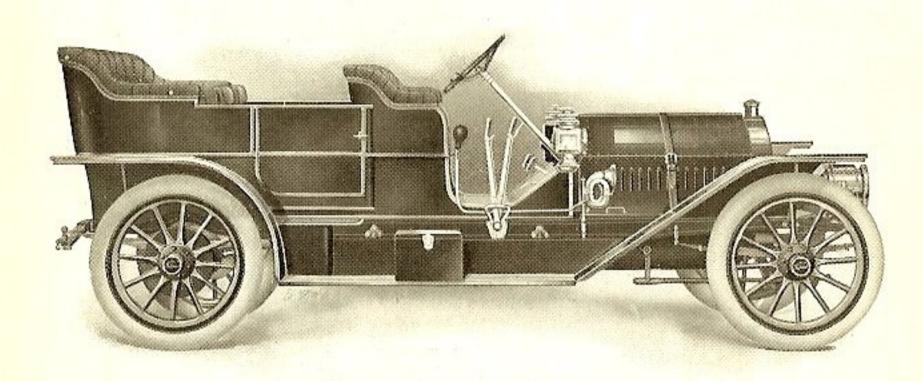
CONTROL—Single lever at driver's right controls all speeds. Three forward and one reverse.

Springs—Half-elliptic, 40-inch front, under frame, 48-inch rear, outside of frame, 37-inch cross on rear.

Tool-Boxes-Under tonneau seat and metal box on running board.

EQUIPMENT—Two 8 inch Rushmore search-lights with Prestolite gas tank; side and tail lamps. Storm aprons, horn and tools.

PRICE-\$2,750.00, F. O. B. Indianapolis.



Model 9-40-Four Cylinders, 5 x 5-\$3,700, F. O. B. Indianapolis.

A S faultless in service as it is in appearance, the mechanical perfection of the "Big Four" measures up fully to the expectation created by its superb beauty of outline.

SPECIFICATIONS - MODEL 9-40

Motor—Four cylinder, 5x5 inches vertical, individually mounted on subframe. Mechanical valves, exhaust and admission on opposite sides and interchangeable. Ball-bearing crank shaft and ball-bearing cam shafts. Two separate sets of spark plugs. Tapered nipples used on intake, exhaust and water pipes in place of packing. Extra long Parsons white bronze bearings on connecting rods. Gear-driven distributor. Divided aluminum crank case. Interchangeable parts.

CLUTCH—Self - contained, aluminum cone, leather faced, spring cushioned.

Transmission—Sliding gear selective type. Three speeds forward and one reverse, direct on high. Self-contained annular type D. W. F. ball bearings on main and counter shafts. Gears run in oil.

WHEEL BASE-125 inches.

GAUGE-561/2 inches.

DRIVE—Bevel gear through ball-bearing propeller shaft and flexible joint to rear axle of improved design.

Bearings—Annular type D. W. F. ball bearings throughout.

WHEELS—Wood, artillery pattern, twelve 11/2-inch spokes front and rear.

OILING—Crank case, constant level force feed oiler, oiling all working parts of motor.

IGNITION—Two separate, complete systems. One a gear-driven, high-tension Bosch magneto. The other a storage battery, single coil and distributor. Each system has a separate set of spark plugs.

GASOLINE CAPACITY-17 gallons.

WATER CAPACITY-6 gallons.

Tirks-36x41/2. Diamond, G & J or Michelin.

Brakes—Two systems. Four dustproof internal expanding metal to metal hub brakes. Hand lever applies one set. Foot push pedal applies the second set.

GUARDS-Continuous enclosed metal

guards, front and rear. Metal dust shield between frame and running board.

FRAME—Pressed steel 4½ inch channel section firmly riveted and braced and curved up over rear axle; sub-frame.

FRONT AXLE—Seamless, cold drawn steel tubing, lieavy gauged, forged yokes or I beam steel forging.

REAR AXLE—Compound construction; inner axle used only as a driver; wheels turn upon double annular type D. W. F. ball bearings on hollow axle which carries all weight.

Dust Pan-Metal dust pan under all working parts.

Bony Finish—Coach carmine or National red, black stripes.

GEAR FINISH—Coach carmine or National red, black stripes.

Body—Curved line cast or straight line sheet aluminum, side entrances. Divided front seats. Carrying capacity, seven passengers. (Two on folding seats in tonneau.)

UPHOLSTERING — Luxuriously upholstered in black leather. Special spring mattress cushions.

STEERING SYSTEM — 18 - inch hand wheel, inclined post. Worm and gear, non-reversible chuck. Ball joint connection to steering knuckle.

Cooling—Special straight-line cooler, ball-bearing fan attached to engine base. Circulation by direct driven gear pump.

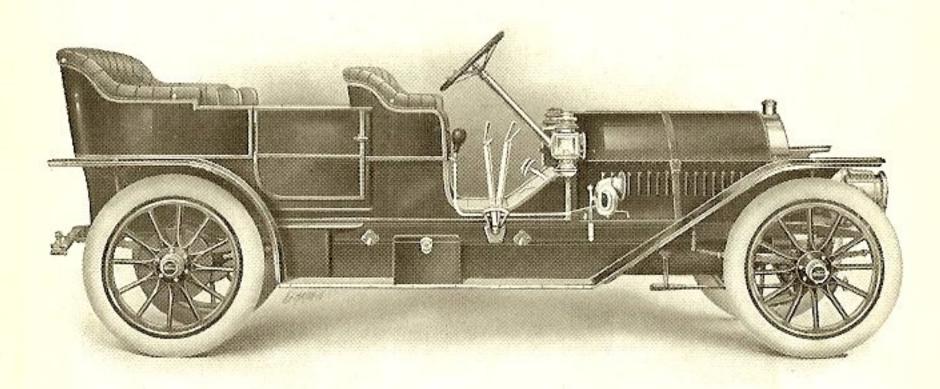
Control.—Single lever at driver's right controls all speeds. Three forward and one reverse.

Springs—Half elliptic, 40-inch front, under frame, 50-inch rear, outside of frame, 39-inch cross on rear.

Tool Boxes-Under tonneau seat and metal box on running board.

EQUIPMENT—Two 9 - inch Rushmore search-lights with Prestolite gas tank; side and tail lamps. Storm aprons, horn and tools.

Price-\$3,700.00, F. O. B. Indianapolis.



MODEL 9-50-SIX CYLINDERS, 41/2 X 43/4-\$4,200, F. O. B. INDIANAPOLIS.

LEXIBLE, powerful, fast and luxurious in every appointment, the "Little Six" leaves nothing to be desired in the highest development of modern motor car construction and equipment.

SPECIFICATIONS - MODEL 9-50

Moror—Six cylinder, 4½x4¾ inches, vertical, in pairs, mounted on sub-frame. Mechanical valves, exhaust and admission on opposite sides and interchangeable. Ball-bearing crank shaft and ball-bearing cam shafts. Two separate set of spark plugs. Tapered nipples used on intake, exhaust and water pipes in place of packing. Extra long Parsons white bronze bearings on connecting rods. Gear-driven distributor. Divided aluminum crank case. Interchangeable parts.

CLUTCH—Self - contained, aluminum cone, leather faced, spring cushioned.

Transmission—Sliding gear selective type. Three speeds forward and one reverse, direct on high. Self-contained annular type D. W. F. ball bearings on main and counter shafts. Gears run in oil.

WHEEL BASE-130 inches.

GAUGE-561/2 inches.

Drive—Bevel gear through ball-bearing propeller shaft and flexible joint to rear axle of improved design.

IGNITION—Two separate, complete systems. One a gear-driven high-tension Bosch magneto. The other a storage battery, single coil and distributor. Each system has a separate set of spark plugs.

OILING—Crank case, constant level force feed oiler, oiling all working parts of motor.

GASOLINE CAPACITY-17 gallons.

WATER CAPACITY-7 gallons.

Wheels-Wood, artillery pattern, twelve 15%-inch spokes front and rear.

Tires-36x41/2. Diamond, G & J or Michelin.

Brakes—Two systems. Four dust proof internal expanding metal to metal hub brakes. Hand lever applies one set. Foot push pedal applies the second set.

Guards front and rear. Metal dust shield between frame and running board.

FRAME Pressed steel 4½-inch channel section firmly riveted and braced and curved up over rear axle; sub-frame. FRONT AXLE—Seamless, cold drawn steel tubing, heavy gauged, forged yokes or I beam steel forging.

REAR AXLE—Compound construction; inner axle used only as a driver; wheels turn upon double annular type D. W. F. ball bearings on hollow axle which carries all weight.

Dust Pan-Metal dust pan under all working parts.

Body—Curved line east or straight line sheet aluminum, side entrances. Divided front seats. Carrying capacity, seven passengers. (Two on folding seats in tonneau.)

Body Finish—Coach carmine or National red, black stripes.

GEAR FINISH—Coach carmine or National red, black stripes.

UPHOLSTERING — Luxuriously upholstered in black leather. Special spring mattress cushions.

Bearings—Annular type D. W. F. ball-bearings throughout.

Steering System—18-inch hand wheel, inclined post. Worm and gear, non-reversible chuck. Ball joint connections to steering knuckle.

COOLING SYSTEM—Special straight line cooler, ball-bearing fan attached to engine base. Circulation by centrifugal pump.

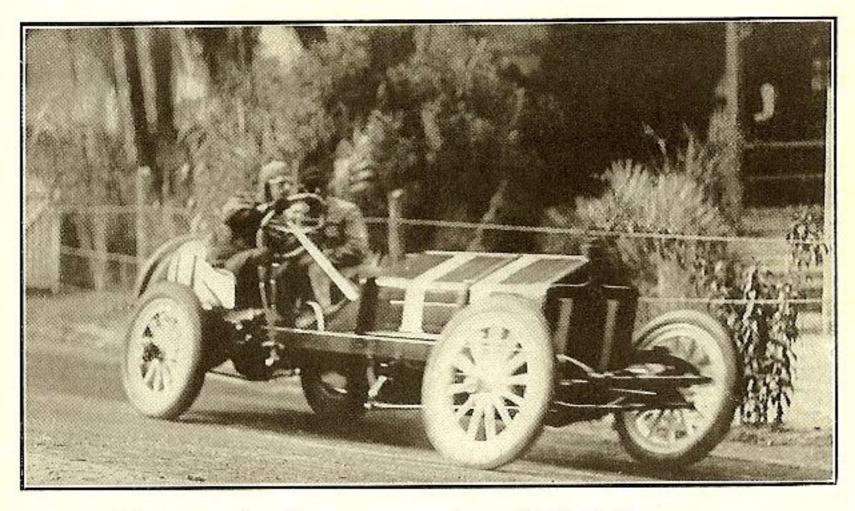
CONTROL—Single lever at driver's right controls all speeds. Three forward and one reverse.

Springs—Half-elliptic, 40-inch front. under frame, 50-inch rear, outside of frame, 39-inch cross on rear.

Took Boxes—Under tonneau seat and netal box on running board.

EQUIPMENT—Two 9 - inch Rushmore search-lights with Prestolite gas tank; side and tail lamps. Storm aprons, horn and tools.

Price—\$4,200.00, F. O. B. Indianapolis.



Model 9-60—Six Cylinders, 5 x 5—\$5,000, F. O. B. Indianapolis.

(As It Appeared on the Grand Prize Course at Savannah.)

BIG, roomy and luxurious in the highest degree, with a wealth of power and a remarkably wide speed range, the "Big Six" knows no superior and very few peers.

SPECIFICATIONS - MODEL 9-60

Motor—Six cylinder, 5x5 inches, vertical, individually mounted on sub-frame. Mechanical valves, exhaust and admission on opposite sides and interchangeable. Ball-bearing crank shaft and ball-bearing cam shafts. Two separate sets of spark plugs. Tapered nipples used on intake, exhaust and water pipes in place of packing. Extra long Parsons white bronze bearings on connecting rods. Gear-driven distributor. Divided aluminum crank case. Interchangeable parts.

CLUTCH — Self-contained, aluminum cone, leather faced, spring cushioned.

TRANSMISSION—Sliding gear selective type. Three speeds forward and one reverse, direct on high. Self-contained annular type D. W. F. ball-bearings on main and counter shafts. Gears run in oil.

WHEEL BASE-137 inches.

GAUGE-561/2 inches.

Drive—Bevel gear through ball-bearing propeller shaft and flexible joint to rear axle of improved design.

Bearings—Annular type D. W. F. ball-bearings throughout.

Wheels-Wood, artillery pattern, twelve 134-inch spokes front and rear.

OILING—Crank case, constant level force feed oiler, oiling all working parts of motor.

IGNITION—Two separate, complete systems. One a gear driven high tension Bosch magneto. The other a storage battery, single coil and distributor. Each system has a separate set of spark plugs.

GASOLINE CAPACITY-20 gallons.

WATER CAPACITY-8 gallons.

Tires-36x5. Diamond, G & J or Michelin.

Brakes—Two systems. Four dust proof internal expanding metal to metal hub brakes. Hand lever applies one set. Foot push pedal applies second set.

Guards — Continuous enclosed metal guards front and rear. Metal dust shield between frame and running board. FRAME—Pressed steel, 5-inch channel section firmly riveted and braced and curved up over rear axle; sub-frame.

FRONT AXLE—Seamless, cold drawn steel tubing, extra heavy gauge, forged yokes or I beam steel forging.

REAR AXLE—Compound construction; inner axle used only as a driver; wheels turn upon double annular type D. W. F. ball bearings on hollow axle which carries all weight.

Dust Pan-Metal dust pan under all working parts.

UPHOLSTERING — Luxuriously upholstered in black leather. Special spring mattress cushions.

Bony—Curved line cast aluminum, side entrances, removable tonneau, platform type. Divided front seats. Carrying capacity, seven passengers (five carried in tonneau).

Bony Finish-Coach carmine or National red, black stripes.

GEAR FINISH—Coach carmine or National red, black stripes.

STEERING SYSTEM—18-inch hand wheel, inclined post. Worm and gear, non-reversible chuck. Ball joint connections to steering knuckle.

COOLING SYSTEM—Special straight line cooler, ball-bearing fan attached to engine base. Circulation by direct driven gear pump.

Control—Single lever at driver's right controls all speeds. Three forward and one reverse.

Springs—Half-elliptic, 44-inch front, under frame; 56-inch rear, outside frame; 39-inch cross on rear.

Tool Boxes-Under tonneau seat and metal box on running board.

EQUIPMENT — Two 9-inch Rushmore search-lights with Prestolite gas tank; side and tail lamps. Storm aprons, horn and tools.

PRICE-\$5,000.00, F. O. B. Indianapolis.

ALL NATIONAL CARS ARE FULLY GUARANTEED

TIOGA AUTOMOBILE CO., Broad & Tioga Sts., Phila,