

000 Nash Motors Co.

# NASH TRUCKS



ONE AND TWO TON  
REAR DRIVE TRUCKS  
AND THE FAMOUS  
NASH QUAD FOR  
HEAVY DUTY SERVICE

# The Nash Truck Line

---

**A** ONE ton capacity, rear driven truck, a two ton capacity rear driven truck and the famous Nash Quad, which drives, brakes and steers on all four wheels, for heavy duty hauling, compose the Nash truck line.

The Quad, which has a world-wide reputation for heavy duty work made in successful service over a period of years, has been Nash refined and Nash perfected, until today it stands without a superior in its field.

The one and two ton capacity, rear driven trucks are as reliable and as efficient in their respective fields as is the Quad in the performance of its extraordinarily difficult work.

All three Nash trucks have many mechanical features which have been tried out over a number of years in the hardest kind of truck service, and have proved their worth beyond question.

Every other high-grade truck on the market has at least one of these good features.

The powerful motors in the Nash rear driven trucks are most strongly built, with extra heavy crankshafts and bearings and unusually light yet strong connecting rods. They are built for satisfactory, enduring and economical truck service.

The predominant feature of these two trucks and that which buyers appreciate most, however, is the automatically locking differential, told of in detail on another page.

Their heavy strong channel frames are so designed and built as to stand up for the longest possible time. No weakening angles are in these frames. They are as strong over the front axle as over the rear. There are no rivet holes in the bottom of the side members of the frame except at the extreme ends where no stress occurs. This is an important feature because the absence of the rivet holes adds much to the strength and long life in service of the frame.

Both these rear driven trucks are equipped with internal gear driven rear axles. So each has a solid, "dead" rear axle under its load. Nash engineers believe this type of axle much stronger and more satisfactory as a load carrier than the axle composed of several different working parts. Besides this advantage, the internal gear driven axle is economical of power and thus economical of fuel.

Another big advantage these trucks possess is the Hotchkiss type of drive which makes the use of torque arms and radius rods unnecessary, without in the least taking away from the strength of the trucks. The Hotchkiss drive, by applying the power through the rear springs, protects the working parts of the truck from the first shock of power as the clutch is thrown in, and is a saver of tires and of fuel.

The copper fin and tube type radiator of these two trucks is protected by a rigid cast channel shell with cast top and bottom tanks. So strong and such a good protection to the radiator's core is this shell that Nash engineers have been able to mount the radiator on the frame of the truck, thus dispensing with the usual troublesome radiator spring suspension.

Nash rear driven trucks are equipped with electric lights and starters. They can work at night as well as by day. The driver of a Nash truck does not waste fuel. He shuts off the motor when he leaves the truck standing.

Also, both these trucks are equipped with an automatic governor which prevents abuse at the hands of careless or indifferent drivers, and which, by automatically regulating the speed of the trucks and the flow of gasoline necessary to maintain that speed, is a big saver of fuel.

There are many other good features of Nash trucks which you will appreciate best when you have given the trucks a thorough tryout in actual service.

# Automatic Locking Differential

**T**HE satisfactory performance of Nash rear driven trucks in daily service and their unusually low cost to operate is due in no small measure to the fact that they are equipped with the M. & S. type of automatic locking differential.

Briefly, this differential prevents the spinning of either rear wheel no matter what resistance its mate may be encountering. It thus gives the wheel with traction adequate power to pull the truck out of trouble.

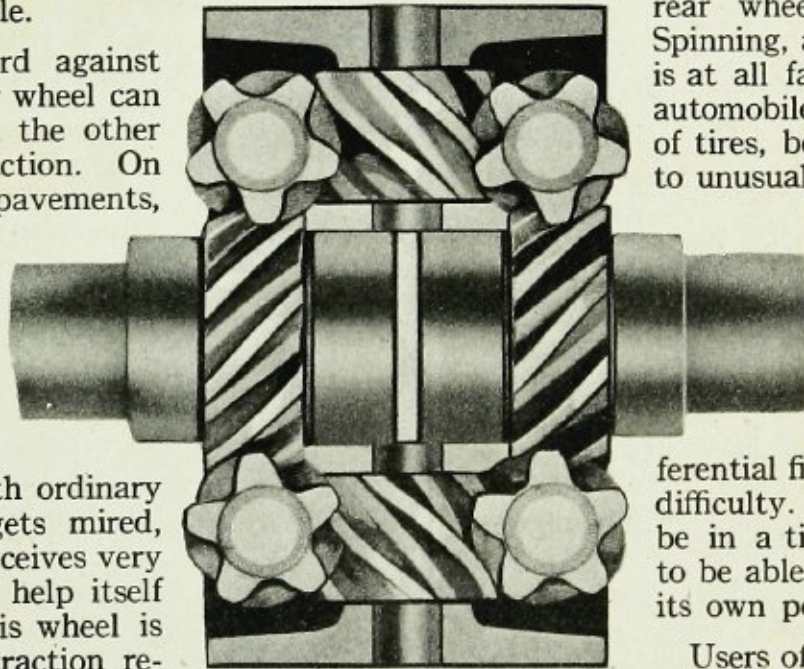
It is also a safeguard against skidding. Neither rear wheel can ever turn faster than the other because it has lost traction. On slippery roads or pavements, where momentarily one wheel loses traction, the truck is never thrust sideways by the power of the other wheel.

When one drive wheel of the truck with ordinary type of differential gets mired, or into deep snow, it receives very little if any power to help itself out. For, because this wheel is getting the greatest traction resistance, the power, taking the easiest course, is all going to the other wheel, revolving this other wheel so fast that it loses traction altogether and spins, leaving both wheels without driving power, and putting the truck out of service until it receives aid.

With the automatic locking differential on Nash trucks the wheel with the greatest traction gets the greatest power. On the straight-away, the instant one wheel starts to travel faster than the other, the differential locks automatically. The drive axle becomes for all

practical purposes a solid one and the power of the motor is distributed to the wheels in the exact proportion to the traction they are getting. Thus, when one wheel becomes mired or meets a slippery spot the other wheel with traction drives the truck forward.

Added to the fact that Nash trucks are amply powered to pull themselves out of tight places, they have the additional advantage that they are unusually economical of tires because their rear wheels can seldom spin. Spinning, as everyone knows, who is at all familiar with trucks and automobiles, is a great destroyer of tires, because it subjects them to unusually severe strains.

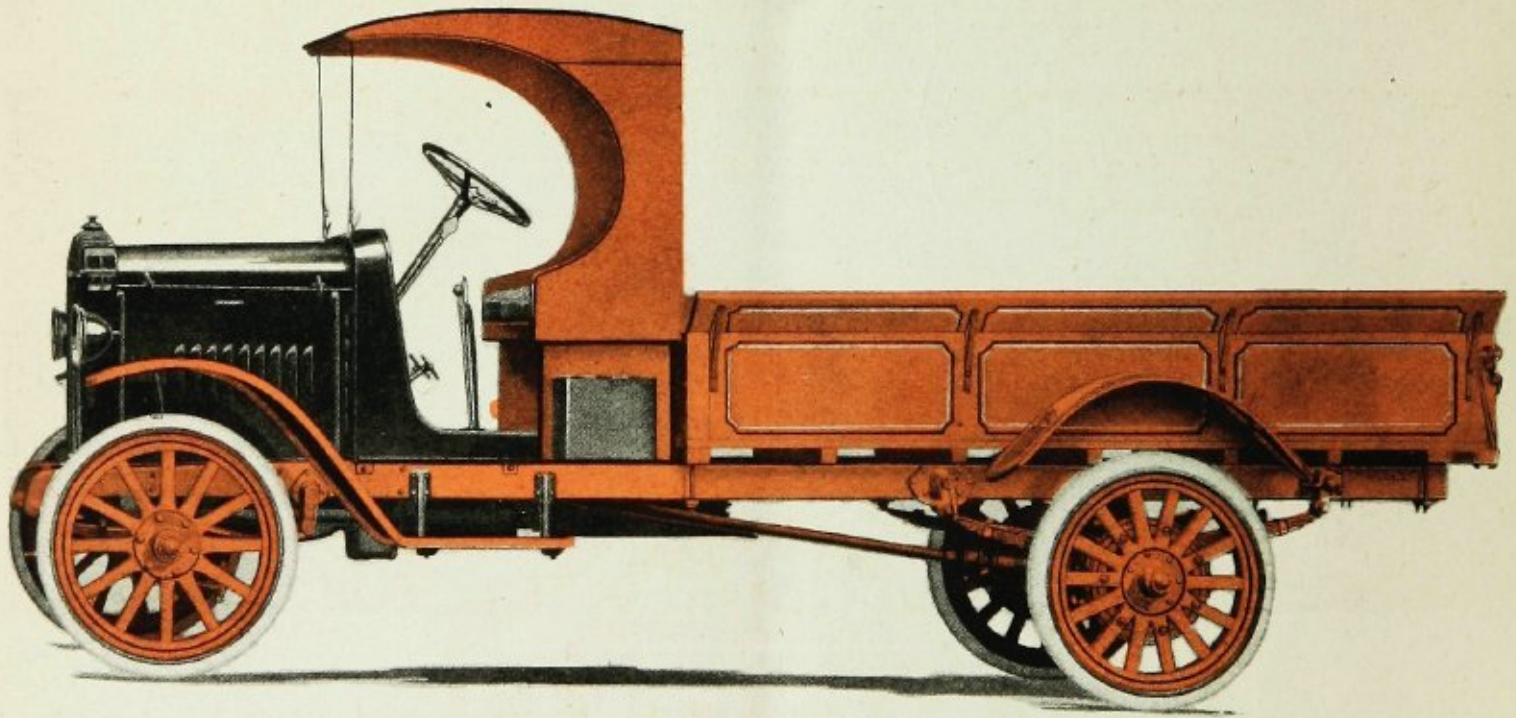


Nash trucks equipped with this type of differential, and with their powerful motors, will go where other trucks with the ordinary type of differential find themselves in much difficulty.

The Nash truck must be in a tight place, indeed, not to be able to get itself out under its own power.

Users of trucks, especially those who must have a dependable service in every season of the year, winter as well as summer, will appreciate at once what a big advantage this efficient differential gives to Nash trucks.

A demonstration of the Nash truck where road conditions are such as to give the differential a thorough test will convince you that the Nash is the truck you need to solve your hauling problem. It will show how much this differential contributes to satisfactory truck performance.



# NASH ONE TON

## SPECIFICATIONS

**RATED LOAD CAPACITY**—2000 pounds. Maximum permissible weight on chassis 2950 pounds, including body, and special equipment.

**MOTOR SPECIFICATIONS**—4-cylinder, 4-cycle, vertical motor, L-head cylinders, located under hood. Bore,  $3\frac{3}{4}$ ". Stroke,  $5\frac{1}{4}$ ". Piston displacement, 231.9 cubic ". Horse-power by S. A. E. formula, 22.5. Cylinders cast en bloc. Three-point suspension.

**CRANKSHAFT BEARINGS**—All plain type. Front, 2" diameter,  $3\frac{1}{2}$ " long. Rear, 2" diameter by  $4\frac{1}{2}$ " long. Center, 2" diameter by  $3\frac{1}{2}$ " long. Connecting rod bearings, 2" diameter,  $2\frac{1}{2}$ " long. Bearings are die-cast babbit.

**GOVERNOR**—Centrifugal type, with grid valve; operated by flexible shaft drive, from the motor. Governor cuts off at motor speed of 1350 revolutions per minute.

**COOLING**—Motor cooling water circulated by centrifugal pump. Cooling system may be completely drained to prevent freezing.

**RADIATOR**—Cast tank type with removable tubular core. Capacity of cooling system, 5 gallons.

**FAN AND FAN BELT**—Four-blade fan, spring tension bracket. Flat belt, 1 inch wide.

**IGNITION**—Magneto with fixed spark.

**LUBRICATION**—Combination force feed and splash. Plunger pump operated from eccentric on camshaft by connecting link.

**CARBURETOR AND FUEL SUPPLY**—Carburetor  $1\frac{1}{4}$ ". Fuel feed from gravity tank under seat. Capacity, 16 gallons.

**CLUTCH**—Dry plate type.

**TRANSMISSION**—Selective type, three speeds forward and one reverse. In unit with motor and clutch. Provision for Air Pump or light power take off.

**DIFFERENTIALS**—M. & S. spiral gear, automatic locking type. Prevents spinning of either drive wheel.

**DRIVE**—Shaft drive from transmission to bevel gears in differential, thence by transverse shaft to driving pinion meshing with internal gear in each rear wheel. Drive and torque are taken up through vehicle springs.

**GEAR REDUCTION**—Motor to rear wheels. First speed 21.76 to 1. Second speed, 12.71 to 1. Third speed, 6.8 to 1. Reverse, 26.38 to 1.

**FRAME**—Pressed channel steel. Depth, 5". Width,  $2\frac{1}{2}$ ". Thickness  $\frac{3}{8}$ ". Length over-all,  $189\frac{1}{2}$ ". Width over-all, 36" rear, 28" front. Frame height, about 30", vehicle loaded.

**FRONT AXLE**—Drop forged "I" beam section,  $2\frac{3}{4}$ " deep by 2" wide. Web,  $\frac{3}{8}$ ", 56" tread.

**REAR AXLE**—Special construction steel beam dead axle carries load. 56" tread.

**BRAKES**—Service brakes, 16" diameter, external contracting on rear wheels, operated by foot pedal. Emergency brake, 7" diameter, external contracting on drive shaft.

**WHEELS**—Front, 12 spokes,  $1\frac{1}{2}$ " square. Rear, 14 spokes,  $1\frac{1}{4}$ " square, made of selected hickory.

**TIRES**—Front, 34 x 3 solid. Rear, 34 x 4 solid pressed on type. Pneumatic optional at additional charge. Front, 34 x  $4\frac{1}{2}$ "; Rear, 36 x 6.

**VEHICLE SPEED**—Maximum with 34" Rear Tires, 20 M. P. H. With 36" Rear Tires, 21.6 M. P. H. With 36" Rear Tires for fire truck or patrol service, 25 M. P. H.

**WHEELBASE**—130", giving a frame length of 104" back of driver's seat. Special lengths not furnished.

**CONTROLS**—Left hand steer, center control. Spark and throttle controls located above steering wheel. Carburetor air control lever located on steering post. Accelerator pedal operated by driver's right foot.

**GROUND CLEARANCE**— $9\frac{3}{4}$ " under rear axle with solid tires.

**OIL CAPACITY**—About 2 gallons (crank case).

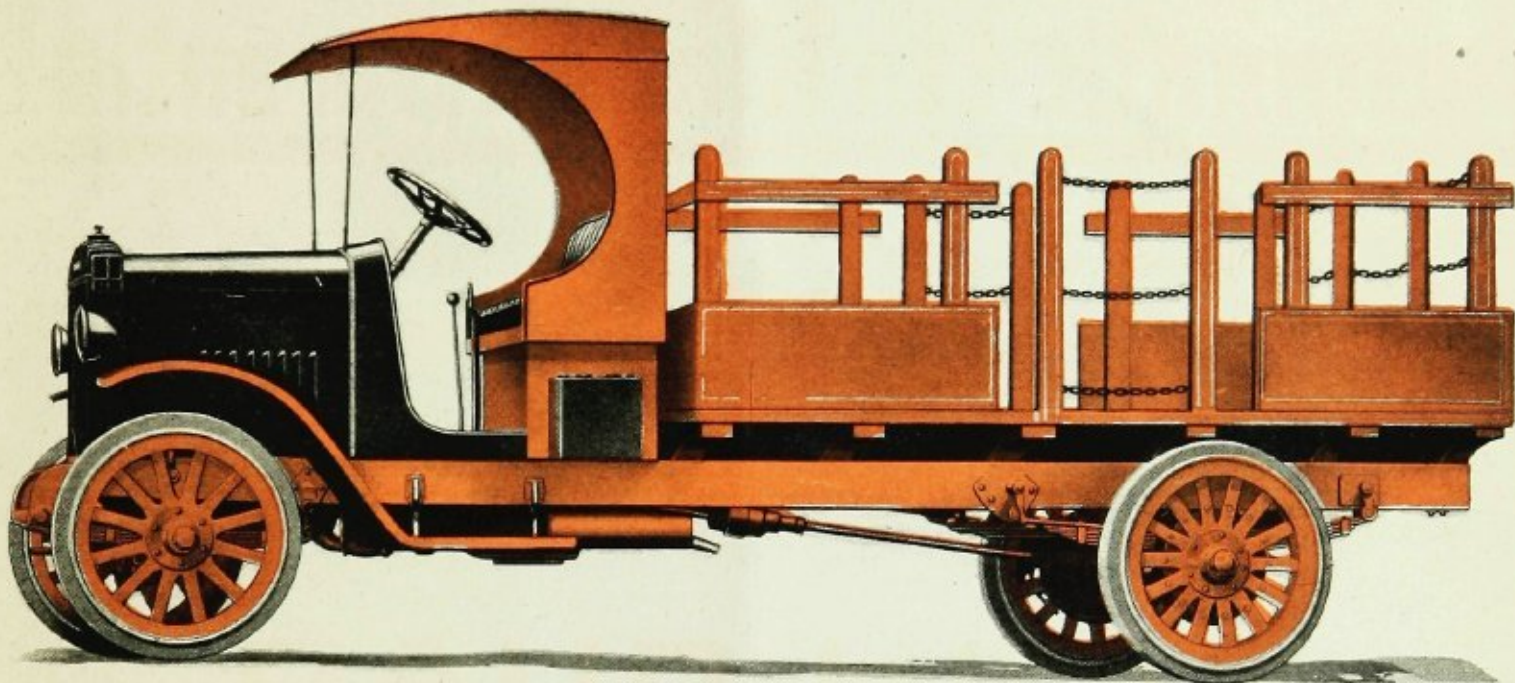
**EQUIPMENT**—Electric lighting and starting system, driver's seat, tools, horn and jack.

**PAINTING**—Chassis painted in lead. If body is ordered with chassis, the body price includes painting both the body and chassis unless otherwise specified.

Model No. 2018

Standard chassis (in lead)		\$1650.00
Stake platform body (includes painting chassis)		} Prices on application
Flareboard express body (includes painting chassis)		
Fixed cab top over driver's seat (with curtains)		
Folding bow top over driver's seat (with curtains)		
Full canopy top for express body (with curtains)		

All prices list f. o. b. Kenosha



# NASH TWO TON

## SPECIFICATIONS

**RATED LOAD CAPACITY**—4000 pounds. Maximum permissible weight on chassis 5200 pounds, including body, load and special equipment.

**MOTOR SPECIFICATIONS**—4-cylinder, 4-cycle, vertical motor, L-head cylinders, located under hood. Bore, 3 $\frac{3}{4}$ ". Stroke, 5 $\frac{1}{4}$ ". Piston displacement, 231.9 cubic ". Horse-power by S. A. E. formula, 22.5. Cylinders cast en bloc. Three-point suspension.

**CRANKSHAFT BEARINGS**—All plain type. Front, 2" diameter, 3 $\frac{1}{4}$ " long. Rear, 2" diameter by 4 $\frac{1}{2}$ " long. Center, 2" diameter by 3 $\frac{1}{4}$ " long. Connecting rod bearings, 2" diameter, 2 $\frac{1}{2}$ " long. Bearings are die-cast babbit.

**GOVERNOR**—Centrifugal type, with grid valve; operated by flexible shaft drive, from the motor. Governor cuts off at motor speed of 1350 revolutions per minute.

**COOLING**—Motor cooling water circulated by centrifugal pump. Cooling system may be completely drained to prevent freezing.

**RADIATOR**—Cast tank type with removable tubular core. Capacity of cooling system, 5 gallons.

**FAN AND FAN BELT**—4-blade fan, spring tension bracket. Flat belt, 1 inch wide.

**IGNITION**—Magneto with fixed spark.

**LUBRICATION**—Combination force feed and splash. Plunger pump operated from eccentric on camshaft by connecting link.

**CARBURETOR AND FUEL SUPPLY**—Carburetor 1 $\frac{1}{4}$ ". Fuel feed from gravity tank under seat. Capacity, 16 gallons.

**CLUTCH**—Dry plate type.

**TRANSMISSION**—Selective type, three speeds forward and one reverse. In unit with motor and clutch. Provision for Air Pump or light Power take off.

**DIFFERENTIALS**—M. & S. worm gear, automatic locking type. Prevents spinning of either wheel.

**DRIVE**—INTERNAL GEAR—Shaft drive from transmission to bevel gear in rear axle, thence by transverse shaft to driving pinion meshing with internal gear in each rear wheel. Drive and torque are taken up through vehicle springs.

**STANDARD GEAR REDUCTION**—Motor to rear wheels. First speed, 28.8 to 1. Second speed, 16.87 to 1. Third speed, 9 to 1. Reverse, 34.9 to 1.

**OPTIONAL GEAR REDUCTION**—Motor to rear wheels. First speed, 25.42 to 1. Second speed, 15.187 to 1. Third speed, 8.10 to 1. Reverse, 31.42 to 1.

**FRAME**—Pressed channel steel. Depth, 6". Width, 3". Thickness,  $\frac{3}{4}$ ". Length over-all—standard, 203 $\frac{1}{2}$ "; special, 227 $\frac{1}{2}$ ". Width over-all—33 $\frac{1}{2}$ " rear, 28" front. Frame height, about 30"; vehicle loaded.

**FRONT AXLE**—Drop forge "I" beam section, 2 $\frac{3}{4}$ " deep by 2" wide. Web,  $\frac{3}{8}$ "; 56 $\frac{1}{2}$ " tread.

**REAR AXLE**—INTERNAL GEAR DRIVE—Specially constructed steel beam dead axle carries load. 59 $\frac{1}{2}$ " tread.

**BRAKES**—Service brakes, 16 $\frac{1}{2}$ " diameter, external contracting on rear wheels, operating by foot pedal. Emergency brakes, 7" diameter, external contracting on drive shaft.

**WHEELS**—Front, 12 spokes, 1 $\frac{1}{2}$ " square. Rear, 14 spokes, 1 $\frac{1}{4}$ " x 2", made of selected hickory.

**TIRES**—Front, 34 x 4 solid. Rear, 34 x 6 single solid pressed on type. Pneumatic tires optional at extra cost. Front, 34 x 4 $\frac{1}{2}$ " or 35 x 5. Rear, 38 x 7 or 40 x 8.

**VEHICLE SPEED**—With 34" rear tires and 8.1 to 1 gear ratio, 17 M. P. H., or 15.5 M. P. H. with 9. to 1 gear ratio. With 40" rear tires and 8.1 to 1 gear ratio, 20 M. P. H. or 18 M. P. H. with 9. to 1 gear ratio. With 40" rear tires and 8.1 to 1 gear ratio, for fire truck or patrol service, 25 M. P. H.

**WHEELBASE**—Standard 144", giving a frame length of 118 $\frac{1}{4}$ " back of driver's seat. Long wheelbase 168"; length back of driver's seat, 142 $\frac{1}{4}$ ".

**CONTROLS**—Left hand steer, center control. Spark and throttle controls located above steering wheel. Carburetor air control lever located on steering post. Accelerator pedal operated by driver's right foot.

**GROUND CLEARANCE**—9 $\frac{1}{2}$ " under rear axle with solid tires.

**OIL CAPACITY**—About 2 gallons (crank case).

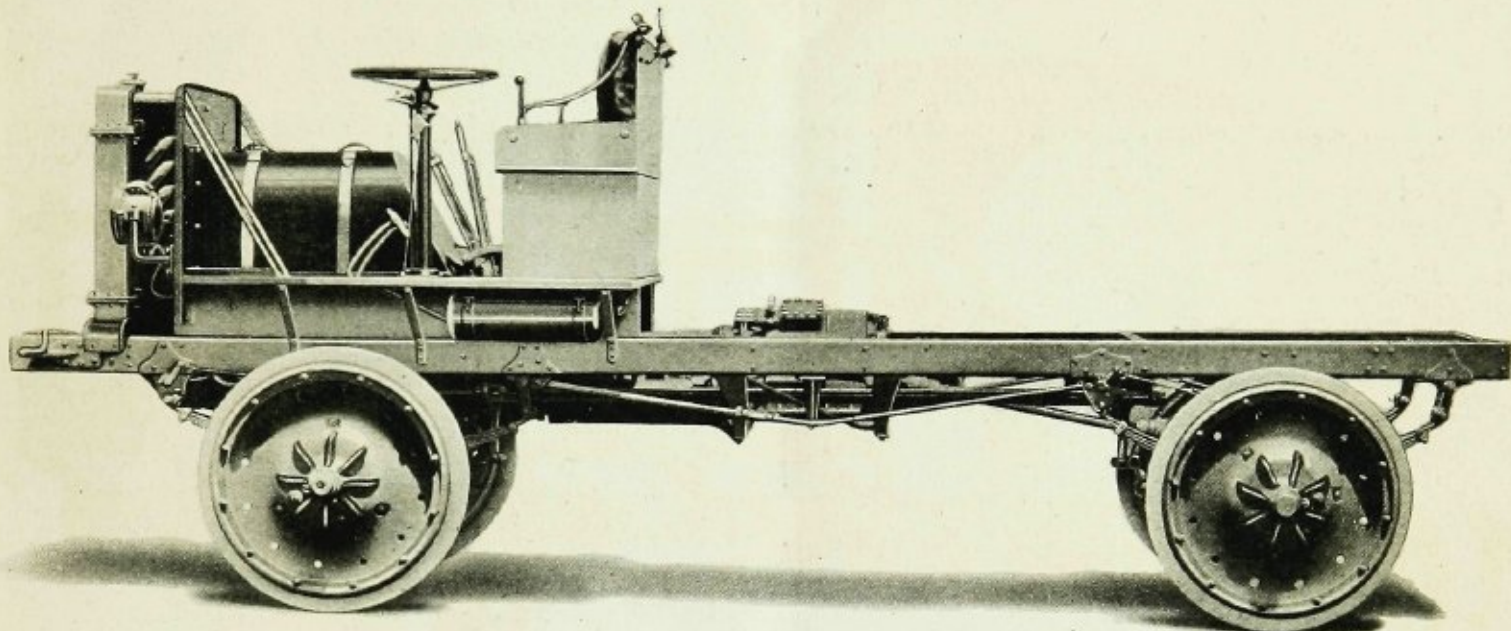
**EQUIPMENT**—Electric lighting and starting system, driver's seat, tools, horn and jack.

**PAINTING**—Chassis painted in lead. If body is ordered with chassis, the body price includes painting both the body and chassis unless otherwise specified.

### Model No. 3018

Standard chassis (in lead)	\$2175.00	Lee side dump body	Prices
Stake platform body (includes painting chassis)	} applica- tion	Laly hand dump body	on
Fixed cab top over driver's seat (with curtains)		Tank body	applica-
Folding bow top over driver's seat (with curtains)		Fire apparatus body	tion

All prices list f. o. b. Kenosha



# NASH QUAD

## SPECIFICATIONS

**TRADE NAME**—Nash Quad.

**RATED LOAD CAPACITY**—4000 pounds. Maximum permissible weight on chassis, 5200 pounds, including load, body, and special equipment.

**MOTOR SPECIFICATIONS**—4-cylinder, 4-cycle, vertical motor, L-head cylinders, located under hood. Bore,  $4\frac{1}{4}$ ". Stroke,  $5\frac{1}{2}$ ". Piston displacement, 312 cubic inches. Horse-power by S. A. E. formula, 28.9. Cylinders cast en bloc. Three-point suspension.

**CRANK SHAFT BEARINGS**—All plain type. Front,  $2\frac{1}{8}$ " diameter,  $3\frac{1}{4}$ " long. Rear,  $2\frac{3}{8}$ " diameter, 4" long. Center,  $2\frac{1}{4}$ " diameter,  $2\frac{3}{4}$ " long. Connecting rod bearings,  $2\frac{1}{8}$ " diameter,  $2\frac{1}{2}$ " long. Bearings are brass shell, with cast babbit linings.

**GOVERNOR**—Centrifugal type, with grid valve; operated by flexible shaft from motor. Governor valve cuts off at motor speed of 1,191 revolutions per minute.

**COOLING**—Motor cooling water circulated by centrifugal pump. Cooling system may be completely drained to prevent freezing.

**RADIATOR AND WATER CAPACITY**—Fin and tube type. Located in front of the vehicle, protected against accident by strong bumper. Capacity of cooling system, 7 gallons.

**FAN AND FAN BELT**—Four-blade fan, spring tension bracket. Flat belt, two inches wide.

**IGNITION**—High-tension magneto.

**LUBRICATION**—Force feed. Pump operated by spiral gears from cam-shaft.

**CARBURETOR AND FUEL SUPPLY**—Carburetor,  $1\frac{1}{4}$ ". Fuel feed from gravity tank under driver's seat.

**CLUTCH**—Dry-plate type.

**TRANSMISSION**—Selective type, four speeds forward and one reverse. Three-point suspension. Forward-speed gears constantly in mesh. Speed changing by dog clutches. Location, amidships.

**DIFFERENTIALS**—M. & S. Spiral gear, automatic locking type, on both front and rear axle.

**DRIVE**—Propeller shaft drive from transmission to bevel gears in differentials, thence by transverse shaft to driving pinion meshing with internal gear in each of the four road wheels. Drive and torque are taken up through vehicle springs.

**STANDARD GEAR REDUCTION**—Motor to road wheels: First speed, 42.3 to 1; second speed, 24.7 to 1; third speed, 14.05 to 1; fourth speed, 8.5 to 1; reverse, 45 to 1.

**OPTIONAL GEAR REDUCTION**—Motor to road wheels: First speed, 48.9 to 1; second speed, 28.5 to 1; third speed, 16.2 to 1; fourth speed, 9.8 to 1; reverse, 51.9 to 1.

**FRAME**—Pressed channel steel, heat-treated. Depth,  $5\frac{3}{8}$ ". Width, 2". Thickness,  $\frac{1}{2}$ ". Length over all,  $202\frac{1}{2}$ ". Width over-all,  $38\frac{1}{4}$ ". Frame is straight from end to end, and is trussed in the middle under each side member. Frame height, about  $38\frac{1}{2}$ " vehicle unloaded.

**AXLES**—Drop-forged dead axles, "I" beam section,  $3\frac{1}{2}$ " deep,  $2\frac{1}{4}$ " wide, web  $\frac{1}{4}$ ". Made of select open-hearth steel, .30-.40 carbon. Heat treated. Front axle is exact duplicate of rear axle.

**BRAKES**—Five in number. Service brake pedal actuates four internal-expanding brakes, one in each wheel.  $16\frac{3}{4}$ " brake drums are formed integral with the cast-steel disk wheels. Emergency brake lever actuates the four wheel brakes simultaneously with an 8" emergency external-contracting brake located on drive shaft to the rear of the transmission.

**WHEELS**—One-piece cast-steel, disk type. Internal gear (alloy steel, forged, machine-cut, heat-treated) is mounted within wheel. Wheels are carried on Timken roller bearings. Power is transmitted to all four wheels.

**SPRINGS**— $48 \times 2\frac{1}{2}$ ". Bronze bushings. Made of chrome vanadium steel, double heat-treated.

**TIRES**—Solid,  $36 \times 5$ . Single. Interchangeable front and rear. Pressed on type, standard equipment. Bolted on type furnished at purchaser's option.

**WHEEL BASE**—Standard 124" (long enough for standard body 10 feet long). Special 142", furnished at extra cost.

**TREAD**—Standard tread,  $60\frac{1}{2}$ ", front and rear.

**STEERING**—Four wheel steer furnished when desired for short turning radius. Two wheel steer optional.

**CONTROLS**—Left-hand steer, center gear-change and emergency brake controls. Spark and throttle levers on quadrant on steering wheel. Carburetor choke on steering column. Accelerator pedal operated by driver's right heel. Left pedal for clutch, right pedal for service brakes.

**GROUND-CLEARANCE**— $14\frac{3}{4}$ " under axles. 22" under transmission girder (located amidships).

**GASOLINE TANK**—Located under driver's seat. Capacity 26.7 gallons. Tank divided so that last 5 gallons are held in reserve and are made available only by opening a shut-off cock.

**OIL CAPACITY**—About  $2\frac{1}{4}$  gallons (crank case).

**HEIGHT**—Over all, stripped 80" empty (top of seat-back); folding top, 102"; cab or canopy top, 104".

**WIDTH**— $78\frac{1}{2}$ " over hub caps.

**EQUIPMENT**—Two Prest-o-lite headlights (complete with tank and brass tubing—acetylene generator optional); one oil tail-light; Hub odometer; hand-operated diaphragm horn; 24 tire chains; tool box, tools and jack; instruction books, etc.

**PAINTING**—Chassis painted in lead. If ordered with body, painting of chassis and body is included in body cost, unless otherwise specified.

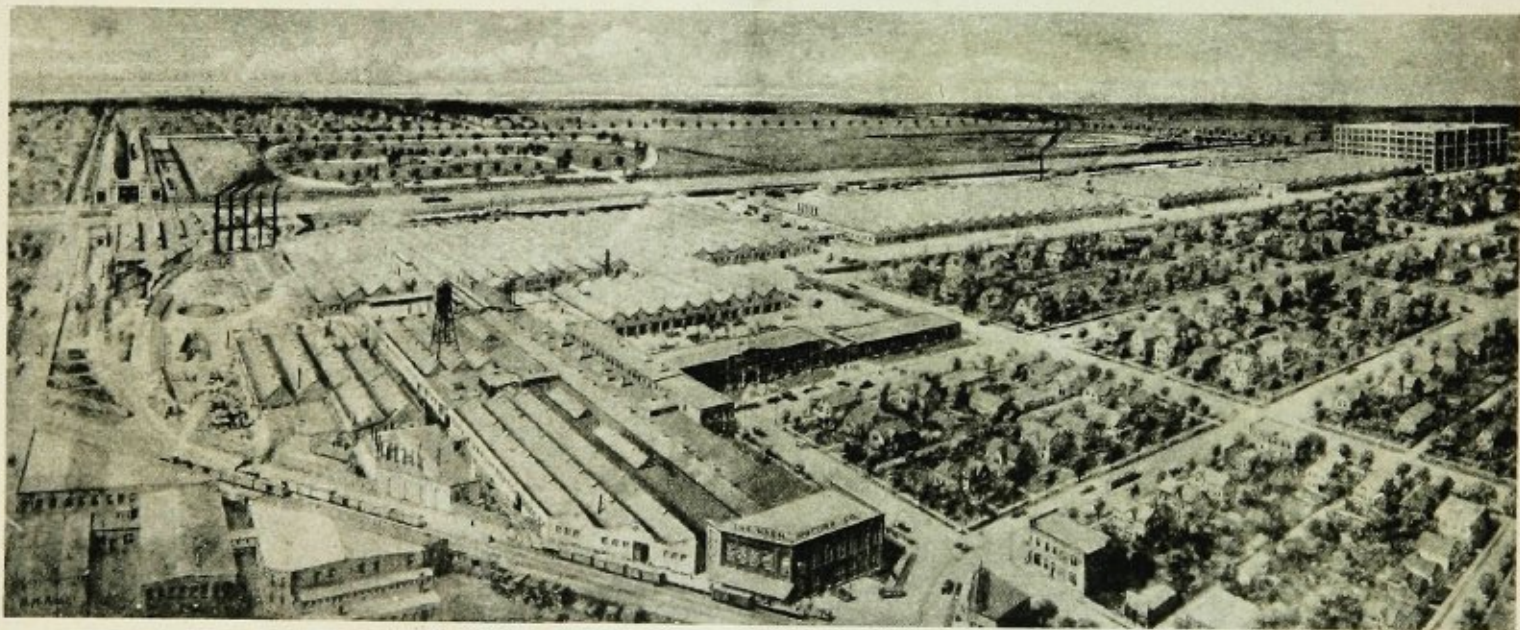
**SHIPPING WEIGHT OF CHASSIS**—About 6250 pounds.

**MODEL No. 4017**

**STANDARD CHASSIS** (painted in Lead)—\$3250. Special 142" Chassis for Lumber Business, \$3300. Electric starting and lighting system, extra.

**BODIES**—Dump bodies in various types. Oil Tank bodies, Fire Apparatus, Stake Platform, Roll-Off Lumber Body. Prices on receipt of requirements or specifications.

All prices list f. o. b. Kenosha



Where Nash Trucks are Built

# Built by Nash

**N**ASH Trucks are built in the giant factory of The Nash Motors Company at Kenosha. The Nash factory is superbly equipped to build trucks and passenger cars of high quality. The factory itself is one hundred acres in extent, with thirty-one acres under roof. Its machine equipment is most modern and complete. It is manned by three thousand expert mechanics, who for years have built fine trucks and passenger cars. The high quality of this factory and these workmen, supervised by the directing ability of the Nash organization, is your best assurance of the value of Nash products.

---

---



## THE NASH MOTORS COMPANY

MANUFACTURERS OF PASSENGER CARS  
AND TRUCKS, INCLUDING THE  
FAMOUS NASH QUAD

*NASH-ALLEGHENY SALES CO.*

*5850 Ellsworth Avenue*

*Phone Hilland 1516* \_\_\_\_\_ *PITTSBURGH, PA.*