

1949-51 Nash Ambassador

Yesterday's car of the future is still an affordable alternative

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If you fancy owning a true collector car from the 1950s, one that is as distinctive as any car could be, take a closer look at the Nash Airflyte Ambassador. Owners and collectors alike have praised its formidable build quality as equaling that of Cadillac. The truly unique post-war streamlined design stands out at any car show, while its obtainable price is less than Oldsmobile's Super 88 line, or even a Kaiser Deluxe.

Our feature car is a 1951 Ambassador Super, an unrestored car with less than 40,000 miles showing on the odometer, currently under the care of Don Rancatti from Williamstown, Massachusetts. Rather than get into the details about the nickname given to this series of Nash automobiles, or the risqué jabs of the day, we're going to convey the subtle differences between model years, and areas to watch for when you shop for an Ambassador of your own.

ENGINES

Years of mechanical advancements to Nash's straight-sixes continued to yield more power and reliability, and by the time the new 1949 Ambassador hit showroom floors, its straight-six powerplant had a displacement of 234.8 cubic inches. With a Carter single-barrel carburetor and a 7.02:1 compression ratio, it made 112 horsepower at 3,400 RPM. Power was comparable to some of its direct competitors, such as the 115hp found under the hood of Buick's straight-eight-equipped Super.

When it came to the 1950-'51 models, little seemed to change on the surface. Yet thanks to a slight alteration in cylinder head design, the same 234.8-cu.in. engine saw a bump in compression to 7.3, which slightly boosted horsepower to 115. If you were looking strictly at power output, the Ambassador was more appealing than Kaiser's 100hp.

What's particularly interesting about Nash's engine is that the intake manifold was cast directly into the cylinder head. Advertising copy called it "sealed-in-head and water heated," which featured an Ambassador-only aluminum bolt-on plate. This plate would become the key to continuing advancements in the model line: By simply altering the plate, different or multiple carburetors could be used, especially in later models. This also prevented multiple castings of separate intake systems.

Just as interesting is the single exhaust system, the manifold of which is U-shaped, hugging three sides of the engine. It's held in place by a series of U-clamps; a gasket between the manifold and block is not required. Some published reports indicated that the use of thin-wall tubing led to rust issues.

To get the lowdown on these engines, we talked to Dick Matson, a member of the Nash Car Club of America, who has owned only Nashes since high school, including eight Ambassadors; he also operated a service station for 28 years. According to Dick, "I've never really seen any rust issues with the exhaust; the real concern is the way it's bolted on. The manifold is really just piping that, when over-tightened, can become egg-shaped, causing exhaust leaks. Another area of concern is the water pump seals; the pump runs off the generator via belt, and if they are not lined up properly, the seals will wear out much quicker. The engine as a whole, however, is very strong."

Other owners report no inherent weaknesses; they don't overheat and fuel vapor lock is never an issue. Expect to see well over 100,000 miles of use before a rebuild becomes necessary. The only problem area is the rear main seal, which does have a tendency to leak, especially if the cars are stored for long periods.

TRANSMISSIONS

Each 1949-'51 Ambassador featured a conventional column-shift three-speed manual transmission as standard equipment; overdrive, which was a popular option, could have been special-ordered for a nominal fee of roughly \$30. The clutch pedal doubles as a means to start the engine, accomplished by depressing it all the way to the floor. You should keep this in mind as you test-drive a Nash for yourself, lest you hear the familiar "zing" of the starter while shifting gears.

Ambassadors could have been ordered with the GM-built Hydra-Matic transmission beginning with the 1950 models; no other Nash at the time was offered an automatic. It's a unit that had been proven in Cadillacs, and later in Pontiacs, before being installed in a Nash; its long-lasting durability, smoothness of operation and parts availability are legendary. The lack of a clutch pedal necessitated a change to the starting system: Should you find an automatic-equipped Ambassador for sale, simply slide the column-mounted gear selector into neutral, then pull the lever toward you. Nash called this feature "Select-O-Lift" starting.

Like the engines, these transmissions are very strong and last a long time without problems, although sometimes the rear seal can leak fluid.

REAR AXLE

A torque tube links the transmission to the differential, which contains standard hypoid semi-floating axles. According to 1951 literature, three final drive ratios were available: 4.10:1 if the standard three-speed was installed, 4.44 with overdrive, or 3.54 with a Hydra-Matic. These same ratios were also utilized from 1949-'50.

Although the understudy Statesman model utilized the same hypoid-type system, final drive ratios were different due to the use of a less-stout variant of the straight-six engine, minus the Hydra-Matic option, so interchangeability--if you wish to retain "stock" configuration--may be an issue. These differentials should last 250,000 miles or more before needing to be rebuilt.

SUSPENSION

Up front is your typical independent suspension setup, including unequal A-arms, coil springs, tubular hydraulic shocks and an Ambassador-only front anti-roll bar. At the opposite end, the solid axle rear is kept in position via tubular shocks, coil springs and a track bar.

If you take a peek under the front end, you'll notice that the lower A-arms have a Swiss cheese look, which was done intentionally by the factory to help lighten the overall front-end weight. Conversely, it increased wind drag.

Also of note, the shocks on these cars were positioned inside the coil springs for added protection. Mechanics who performed suspension work complained that because of the way they were bolted in, changing shocks required the complete removal of the coil springs.

Suspension components as a whole should not be prone to excessive wear or failure. "Even though just over 150,000 Ambassadors were built during this time, you just don't see a lot of them on the road today. As a result, places like NAPA might not carry suspension parts like they would for a Chevy," Dick told us. "These days, there are few suppliers, but there are guys in the club who have items like bushings and tie rod ends on hand."

BRAKES

Stopping a roughly 3,400-pound Ambassador was done via very effective four-wheel drum brakes; power assist was not offered. Each cast-iron drum measured 10 inches in diameter and two inches deep for all three model years. It's a then-standard system featuring components of comparable size to other makes.

Motor Trend, in a December 1950 article, tested the stopping power of a Statesman, and was able to record a 60-0 MPH distance of 166 feet and three inches. Keep in mind, however, that the Statesman weighs 400 pounds less, and utilized only nine-inch brakes.

While new master and wheel cylinders are obtainable and rebuild kits are available, too, Dick cautions that finding replacement drums is a different story. "As far as I am aware, nobody has them, and nobody is reproducing them at this time. If you find a used set for sale, make sure that there is still enough material to work with."

CHASSIS/BODY

Reflecting its Airflyte name, the chassis and body were designed, engineered and styled to be as aerodynamic as possible; with its new, state-of-the-art unit-body construction, therefore, there was no separate chassis. The body was offered in either a two- or four-door sedan style.

Aside from the sparsely trimmed body, the most outstanding feature of this vintage of Nash has to be the skirted fenders. At first glance, it would seem that maneuverability would be significantly hampered. However, engineers took the body design into account and narrowed the front track by nearly three inches; the Airflyte's front comes in at just under 55 inches, compared to a rear track of 60.5 inches.

All models featured the same flush-mounted windshield, but a larger rear backlight was used on the fastback in 1950. The most notable styling was the relocation of the rear taillamps from the trunklid to the aft edge of redesigned quarter panels, which in turn gave the Ambassador an extra inch of overall length. The curved vent windows are easily found, but the side windows are basic flat glass, which can be made by several glass specialists.

When it comes to sourcing body and trim parts, it's important to note that the Ambassador is nine inches longer than the Statesman (called 600 in 1949). The difference comes from the cowl forward, in that the Statesman used a smaller straight-six engine. The rest of the body panels were shared between models. Finding a parts car

or a rust-free model in a salvage yard is virtually your only option for replacement exterior items because not a single body panel has been reproduced, and the chances are slim that they ever will be.

Ambassadors are not immune to rust, according to Dick. "The box sections behind the rocker panels--where a conventional frame would be--are prone to holding water, and can rust through quickly. I've had to rebuild this section on two cars I've owned, but because of the stout unit-body construction, the body did not sag.

"Another area to watch for is a pocket behind the rear quarter panels in the area of the coil spring mounts. It's tough to reach and keep clean. It just traps moisture and debris."

INTERIOR

While it's well known that Nash offered a front seat that would unlatch to form a bed, only two-door models had this as a standard feature; it was extra cost on four-door models. For the 1950 line, customers could order an "Airliner Reclining" front seat. Although no seat upholstery kits are presently available, you can still refresh your Nash's interior: Because the fabric that Nash used is similar, if not identical, to what was used on other cars built in this era, that original material is readily available. You'll just need to find an upholsterer who can stitch you new seat covers. Replacement headliners are available in a variety of colors, but unfortunately, interior door panels and carpet sets have not been reproduced.

Two different instrument panels greeted drivers. From 1949-'50, a circular "Uniscope" instrument cluster was positioned directly atop the steering column, which housed the speedometer and auxiliary gauges. While this design was intended to aid drivers in easy gauge reading, electrical gauge repairs can be difficult, as all wiring is funneled through the four-inch-diameter column. For 1951, a more conventional gauge arrangement appeared on the dash.

Although the gauges are interchangeable on the Uniscope pod, the pods themselves are not. Due to the inclusion of the Hydra-Matic option in 1950, the pod is actually shorter to make room for the gear indicator.

The main difference between the Super and upscale Custom models was essentially relegated to interior trim appointments. For instance, two-tone colors were only available in the Custom. A clock was standard on the Custom, but optional on the Super. Both models featured rear floor carpet, with a rubber mat up front; however, Customs were equipped with carpet inserts over the rubber mat.

Due to the body's wind-cheating shape, the cabin is very quiet at highway speeds, although the defroster fan, which is mounted on struts, can be noisy. The door lock cylinders are of the rotary kind, which, as they get worn, are difficult to adjust.

"About the only area of concern here is the front windshield. If the seal is old, chances are it will leak, or already has. Moisture finds its way under the rubber floor mat and starts to corrode the metal floors. I believe a new seal is available, but it is costly," said Dick.

RESTORATION PARTS

In theory, unique styling and high production should have its advantages when it comes time for a restoration. Unfortunately, that's not the case with these particular Ambassadors. Demand for reproduction body and trim parts is very low, hence the lack of reproductions. But a significant number of mechanical components are still readily available, including all engine parts, suspension and electrical components. Members of the Nash Club of America can be valuable assets, as well.

Specialists

- Havekost Nash, Rambler & AMC Parts
 - <https://nashparts.com>
 - bkhavekost@gmail.com

- NOS and used Nash parts
- Blaser Auto
 - (309) 764-3571
 - <https://www.blaserauto.com/index.htm>
 - NOS and used Nash parts
- American Parts Depot
 - 937-678-7249
 - www.americanpartsdepot.com
 - NOS, used and reproduction auto parts
- Kanter Auto Products
 - 800-526-1096
 - www.kanter.com
 - New brake, engine and suspension parts
- SMS Auto Fabrics
 - 503-263-3535
 - www.smsautofabrics.com
 - Original-spec upholstery
- Steele Rubber Products
 - 888-840-7833
 - www.steelerubber.com
 - Replacement weather seals

Parts Prices

- Wheel bearings, rear \$125
- Brake hose, front \$24
- Brake shoes (plus \$10 core) \$40
- Clutch disc \$75
- Coil spring, front \$45
- Exhaust system, mild steel \$365
- Main bearing set \$150
- Master brake cylinder \$149
- Pad, clutch pedal \$20
- Piston, each \$66
- Pressure plate, 10-inch clutch \$95
- Radiator hose, upper \$30
- Shift lever \$35
- Steering linkage, \$125
- center link, NOS Thermostat \$10
- Tie rod end, outer \$15
- Voltage regulator \$75
- Weatherstrip, \$149
- door vent window, pair Wheel cylinder \$39

Club Scene

- Nash Car Club of America
 - 1N274 Prairie
 - Glen Ellyn, Illinois 60137
 - www.nashcarclub.org
 - Dues: \$30/year; Membership: 1,600

Owner's View

"I found this car listed for sale in the Nash Club's classifieds in 2006; it was located in Bend, Oregon. There are a few things that attracted my attention: Namely, the fact that it's a reasonably rare automobile with an interesting design, plus it was an unmolested original, including the paint and interior.

"Looking at and driving the car, you can feel the workmanship that went into the build, even years after it left the assembly line. Since purchasing it, we add roughly 3,000 miles to the odometer reading annually, whenever the weather is nice. It's a smooth, comfortable ride."

- Don Rancatti