

FREE SAMPLE

The opening pages of

1970 Buick GS 455 Restoration Guide

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Nothing here is rewritten or summarised — it is the product itself,
so you can judge the depth before you spend a dollar.

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RESTORATIONESSENTIALS

1970 Buick GS 455

Factory-Correct Restoration Guide

Key facts at a glance

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Single-year coverage. Factory-correct specifications. No guesswork.

SAMPLE EXCERPT — full guide available at the link on the cover sheet



Manufacturer History

Buick was founded in 1903 by David Dunbar Buick and became a founding pillar of General Motors in 1908, the company William C. Durant built around the Buick Motor Company. From the start Buick occupied the upper-middle of the GM ladder: above Oldsmobile and Pontiac, below Cadillac, the 'doctor's car' for buyers who wanted prestige without the Cadillac price.

Two engineering signatures defined Buick for decades. The first was the overhead-valve engine: Buick built OHV engines from the company's earliest days and never looked back. The second was the Nailhead V8 (1953-1966), so called for its small, vertical valves that made the rocker-arm studs look like nail heads. Nailheads ran hot, breathed poorly at high rpm, and made enormous low-end torque - exactly the formula Buick's customers liked.

Buick was late to the factory muscle party. Pontiac had the GTO in 1964 and Oldsmobile the 4-4-2; Buick's answer, the Skylark Gran Sport, arrived at midyear 1965 with a 401-cubic-inch Nailhead wearing a '400' badge. It sold in strong numbers, and the GS became a standalone series in 1967 with a new 400-cubic-inch V8. The 1968 redesign brought the GS 400, the Stage 1 option arrived in January 1968, and in 1970 the GS 455 replaced the 400 with Buick's biggest big-block - the torque monster that made Buick the quiet giant of the muscle era.

The Riviera Gran Sport followed a parallel path. The Riviera itself was Buick's personal luxury coupe from 1963; the Gran Sport package, introduced for 1965, added the dual-quad 425 Nailhead and handling upgrades. The 430 replaced the Nailhead in 1967, and the Riviera GS remained the gentleman's performance Buick through 1969, tracked by collectors today as one of the most documentable Buicks ever built.

Buick's muscle era ended the way everyone's did: compression dropped to 8.5:1 for 1971, net horsepower ratings arrived for 1972, and the GS faded from a headline act to an option package. But the cars never lost their following. The Buick GS Club of America and the Sloan Museum's Buick Gallery in Flint, Michigan, keep the paper trail alive - and that paper trail is what makes a real Buick worth restoring.

2 — Model History

The Gran Sport became a standalone Buick series in 1967, and the GS 400 carried the performance banner through 1969. For 1970 Buick replaced the 400 with its largest big-block: the 455, a 4.312-by-3.90-inch V8 rated at 350 horsepower and a class-leading 510 lb-ft of torque. The GS 455 was the quiet giant of the 1970 muscle year - less advertised than the Chevelle SS 454 or GTO, but heavier on torque than nearly all of them.

The Stage 1 option continued on the 455 with larger valves, a hotter cam, and a recalibrated carburetor, rated at 360 horsepower with the same 510 lb-ft of torque. Midway through the 1970 model year Buick added the GSX package - spoilers, stripes, hood tach, Rally Ride suspension, and chrome Rally wheels - available on the base 455 or the Stage 1. The GSX is covered in its own guides; this guide covers the GS 455 itself.

For 1971 General Motors cut compression to 8.5:1 across the board for low-lead fuel, and the GS 455's ratings fell to 315 gross horsepower (345 for the Stage 1, though some references report 330). For 1972 the industry moved to net horsepower ratings and Buick added engine codes to the VIN: U for the base 455, V for the Stage 1. The 1972 GS 455 is one of the most documentable Buicks ever built, because the VIN itself tells you which engine the car was born with.

3 — What Is Unique About This Model Year

The 455 was new for 1970 and the headline change: 4.312 x 3.90 inches, 10.0:1 compression, 350 horsepower and 510 lb-ft of torque made the GS 455 the torque king of the 1970 A-body field.

1970 was the last year for high compression - 10.0:1 on the base 455, 10.5:1 on the Stage 1 - before GM's



pression cut. It is also the last year before net horsepower ratings, so these are the biggest numbers a factory GS 455 ever carried.

The GSX package arrived at midyear 1970 on the GS 455 (and Stage 1): front and rear spoilers, hood tachometer, Rally Ride suspension, chrome Rally wheels, and bold stripes in Saturn Yellow or Apollo White. The GSX is its own guide; a GSX is always also a GS 455 underneath.

Axle strategy was specific: 3.42 gears for the base 455 and for Stage 1 cars with air conditioning, 3.64 for Stage 1 without A/C - the A/C compressor dictated the ratio, a detail that authenticates original cars.

Year-to-year changes

- New 455 engine replaces the GS 400's 400 - the headline change of the year
- Last year of high compression (10.0:1 / 10.5:1) and gross horsepower ratings
- GSX package introduced at midyear on the GS 455 and Stage 1
- 8.2-inch 10-bolt rear axle (corporate 8.5-inch arrives for 1971)

4 — VIN Decoding

1970 Buick VINs are 13 digits with no engine code. Example: 446370H100001.

Position 1: 4 = Buick. Positions 2-3: 46 = GS 455 series - this is the series code that separates a real GS 455 from a Skylark clone.

Positions 4-5: body style - 37 = 2-door hardtop sport coupe, 67 = 2-door convertible.

Position 6: 0 = 1970 model year. Position 7: assembly plant - H = Flint, Michigan (primary GS plant).

Positions 8-13: production sequence number.

A GSX carries the same 44637/44667 VIN as a GS 455 - the GSX was an option package, not a separate series. Any 'GSX' with a Skylark (44-series) VIN is a clone or tribute.

5 — Cowl / Fender-Tag Decoding

The cowl (trim) tag on the firewall carries: ST 70 (model year), the model number (44637 hardtop / 44667 convertible), body assembly plant, trim code, paint code, and build date (e.g., 03B = second week of March).

Paint codes: 10 = Apollo White, Q (shown as QQ on the tag) = Saturn Yellow. A GSX in any other paint code, or a GSX paint code on a non-GSX tag story, needs documentation to explain itself.

Trim code 188 = black interior, standard on the GSX. Build date should fall in the 1970 model year and precede the car's delivery; GSX builds cluster from the package's midyear introduction onward.

Rivets, tag font, and firewall paint around the tag are authentication points - reproduction tags exist.

Compare against survivor-car photos in the GS Club archives before condemning or accepting a tag.

6 — Engines

Factory engine lineup

Engine

Compression

Horsepower

Torque

455 4-barrel (base GS 455)

10.0:1

350 hp @ 4600

510 lb-ft @ 2600

455 Stage 1

10.5:1

360 hp @ 4600

510 lb-ft @ 2800

455 4-barrel (base GS 455) 455 cu in — bore 4.312 in × stroke 3.90 in, 10.0:1 compression, 350 hp @