SAC
Springfield Auto Care EXAMPLE SHOP
service@springfield-auto-care.example

2005 Nissan Altima at 118,000 mi

1N4AL11D05C123456

MODEL / CHASSIS	ENGINE	MILEAGE	DRIVETRAIN
Altima · L31 Altima 2.5 S sedan	Nissan QR25DE 2.5L four, early cars (2002–2006 Altima and Sentra 2.5)	118,000 mi	FWD
BUILD MONTH	**REPORT DATE**	**MODE**	**PREPARED FOR**
Not entered (door jamb)	October 28, 2026	Shop	Sample Owner

VIN check: check digit valid; model-year code '5' = 2005, matches the year entered. The VIN doesn't record the build month. Sample report: synthetic VIN.

1 · SUMMARY

What this car needs, in order

Each item compares this car's mileage with when owners and shops report the part failing. It is not an inspection: our technician decides what the car actually needs.

2
jobs recommended now

0
to plan in the next 30,000 miles · plus 2 factory maintenance items

1
to watch or check at each service

Safety recalls NHTSA lists for this model year (1)

- **07V-527** · Engine · crankshaft position sensor: The crankshaft position sensor can overheat and drop its signal for a moment, so the engine can stop running at low speed without warning. Dealers reprogram the engine computer.

A model-year list, not a VIN check. Repairs are free at a Nissan dealer if open. On a car over 15 years old, ask the dealer whether a newer recall is still repaired free. Check this VIN at nhtsa.gov/recalls.

Step 0 · Free: run the VIN at nhtsa.gov/recalls and ask a Nissan dealer for a campaign printout, including 07V-527. Read the build month (MM/YY) on the driver's door-jamb label.

Recommended now at the next service — $140

Inspection: check now, while it's cheaper to fix — $140

inspection EXAMPLE

Pre-catalyst overheating and catalyst codes (P0420): Past the range (72,000–97,000 mi, the middle half of 96 owner reports) · if it fails: $800–$3,000

Known weak point for this engine, not a finding on your car. The inspection shows whether yours has early signs.

Crank / cam position sensors: stalling and no-start (recalls)

Free if open

Recall 07V-527 is listed for this model year. Check the VIN; the repair is free at a Nissan dealer if it is open.

Next 12 months up to about 130,000 mi

Nothing scheduled here.

Within the next 30,000 miles up to 148,000 mi

Nothing else enters its reported range in this window.

Watch inspect at each service, fix on condition, or optional

Intake manifold power valve screws work loose — Ask us for a quote

Any mileage (2004 Sentra 2.5L and 2004–2005 Altima 2.5L (campaign P5202, expired 2020)) · Inspect at each service; fix at the first sign

Recommended now

$140

Springfield Auto Care prices (example)

Planned through 148,000 mi

From $568

Now + next 12 months + next 30,000 miles, with the factory maintenance on this report if the records don’t show it done. Excludes “watch” and optional items.

Prices are Springfield Auto Care's estimates for typical parts and labor. They don't include tax, shop supplies or disposal fees, and may change after inspection or if part prices change. Not a written repair estimate: Springfield Auto Care confirms the price and gets your OK before any work.

Bundled jobs are priced together because the labor overlaps. Routine service (oil, brakes, tires) isn't included; factory fluid and spark plug intervals are listed below.

FACTORY MAINTENANCE

Scheduled maintenance from 118,000 mi to 148,000 mi

The maker's normal schedule for this car. Service history isn't known here, so an item is shown at its next interval mark; skip it if the records show it was done.

ITEM	INTERVAL	THIS CAR	OUR PRICE
Spark plugs Iridium/platinum plugs; replace early if gap exceeds spec.	every 105,000 mi	**Was due at 105,000 mi (check records)** [M1][M2]	**$249**
Engine coolant First change at 60,000 mi or 48 months, then every 30,000 mi or 24 months.	first at 60,000 mi, then every 30,000 mi or 2 years	**Was due at 90,000 mi and by age (check records)** [M1][M2]	**From $179**
Automatic transmission fluid Nissan normal schedule says inspect only; replace every 30,000 mi / 24 months only under severe use (towing, rough or muddy roads).	no fixed interval	— [M1][M2]	—

M1. Nissan USA official maintenance schedule lookup: 2005 Altima (component pages, Standard Driving Conditions) OFFICIAL
https://maintenance-schedules.nissanusa.com/maintenance-schedules/2005/altima/components/engine-coolant/

M2. Nissan USA official maintenance schedule lookup: 2005 Sentra (component pages, Standard Driving Conditions) OFFICIAL
https://maintenance-schedules.nissanusa.com/maintenance-schedules/2005/sentra/components/engine-coolant/

WHERE 118K SITS FOR EACH WEAK POINT

#	WEAK POINT	REPORTED RANGE	THIS CAR
1	Crank / cam position sensors: stalling and no-start (recalls)	43,000–100,000 mi (middle half of 85 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA	Past the range
2	Pre-catalyst overheating and catalyst codes (P0420)	72,000–97,000 mi (middle half of 96 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA	Past the range
3	Intake manifold power valve screws work loose	2004 Sentra 2.5L and 2004–2005 Altima 2.5L (campaign P5202, expired 2020) OFFICIAL	Any mileage

Colors compare mileage with reported failures, not the car's condition. Red: past the range. Amber: inside or approaching. Green: below, or not listed for a recall.

2 · RECALLS AND BULLETINS

Recalls to check for this 2005 Nissan Altima

Safety recall repairs are free at Nissan dealers. On a car over 15 years old, ask the dealer whether a newer recall is still repaired free. Nothing here can tell whether a recall is open or already done on this VIN; only the official VIN lookup or a dealer can.

Official VIN check (2 minutes)

1. Go to nhtsa.gov/recalls and enter 1N4AL11D05C123456.
2. Note every recall shown as “Recall incomplete” and keep a screenshot.
3. Ask a Nissan dealer for a campaign printout; it also lists completed campaigns.

2.5L QR25DE (2002–2006) RECALLS WE TRACK

03V-455 · Crank or cam position sensor can fail; engine may stop (2002–2003)

Not listed for MY2005

A solder joint on the sensor circuit board can fail, causing a no-start, reduced power or the engine stopping while driving. Free sensor replacement. OFFICIAL [2]

06V-242 · Crank angle sensor signal can drop out; engine may stall (2003–2004 2.5L)

Not listed for MY2005

Temperature changes can briefly interrupt the crank sensor signal so the engine stalls at low speed. Free ECM reprogram. OFFICIAL [3]

07V-527 · Crankshaft position sensor can overheat; engine may stall (2002, 2005–2006 2.5L)

NHTSA lists this model and year: check by VIN

The crank sensor can overheat and briefly lose its signal so the engine stalls at low speed. Free ECM reprogram. OFFICIAL [3]

☐ VIN checked ☐ Open: booked with dealer ☐ Completed (printout kept)

03V-084 · Exhaust debris near the catalyst; pre-catalyst can overheat (2002–2003 2.5L)

Not listed for MY2005

Road debris caught on an exhaust hanger pin can touch the hot catalyst, and on 2002 cars the pre-catalyst can overheat; either can start a fire. Hanger pin trimmed and heat shields added. OFFICIAL [5]

EVERY RECALL NHTSA LISTS FOR THE 2005 NISSAN ALTIMA (1)

RECALL	COMPONENT	WHAT CAN HAPPEN (NHTSA, SHORTENED)
07V-527 2.5L QR25DE (2002–2006) tracked	Engine · crankshaft position sensor	The crankshaft position sensor can overheat and drop its signal for a moment, so the engine can stop running at low speed without warning. Dealers reprogram the engine computer. Details

Source: NHTSA recalls API, fetched 2026-10-28 and combined across NHTSA model names: ALTIMA. Safety categories (air bags, fire, brakes, stalling, roll-away and loss of control) are listed first; listings whose NHTSA text names another engine, or an aftermarket

part, go last. OFFICIAL
Left out of this list (ALTIMA): 07E-087 covers aftermarket TYC headlamps sold for 2005–2006 Altimas, not factory parts, and is left out of this sample; a VIN check would show it if it applied.

SERVICE ACTIONS, BULLETINS AND WARRANTY PROGRAMS

Manufacturer bulletins and warranty programs for this engine are cited on each weak point in section 4, where they apply.

4 · THE 3 WEAK POINTS

Each weak point, one card each

Every figure carries its source. Retailer part numbers are shown only when the retailer lists them for this chassis (L31). Left out because they apply to other models, years, engine sizes or body codes: Oil consumption (piston rings).

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1 Crank / cam position sensors: stalling and no-start (recalls)

Past the range

Severity: Critical: rare, but can badly damage the engine · 1276 mentions in counted NHTSA complaints COMPUTED FROM NHTSA DATA

At 118,000 mi this car is past the reported range (43,000–100,000 mi (middle half of 85 owner complaints that state a mileage)). If the original parts are still fitted, have them checked and plan for them. Range: 43,000–100,000 mi (middle half of 85 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA [1]



Applies to: 2002–2006 Altima 2.5 and Sentra 2.5 under recalls 03V-455, 06V-242 and 07V-527

WHAT FAILS OFFICIAL [2][3][4]

The crankshaft or camshaft position sensor can lose its signal, so the engine stalls without warning or will not restart. On 2002–2003 cars a solder joint on the sensor board can fail (03V-455; new sensors). On 2003–2006 2.5L cars heat can briefly interrupt the crank sensor signal (06V-242, 07V-527; ECM reprogram). Nissan also lists P0340 / P0345 and hard warm starts on 2003–2005 Altimas.

SYMPTOMS

- Engine stalls while driving, often at low speed
- Hard start or no start when warm
- Check-engine light with P0335, P0340 or P0345

IF IT'S LEFT TOO LONG

Stalling in traffic can cause a crash.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Check the VIN for all three recalls; replace a failing sensor with a Nissan part.

ESTIMATED REPAIR COST

Owner-reported repair bills in NHTSA complaints (n=33)	**Our price is in the plan above** ask us for a written quote
Owner-reported repair bills in NHTSA complaints (n=33)	**$200–$390** COMPUTED FROM NHTSA DATA [1] reported range for the bill after a failure

Where the numbers come from: Computed from 33 NHTSA owner complaints that quote a repair bill for this problem (middle half of the bills; median $290). Examples: ODI 10263720, 10713389, 10490390, 10319341. Owner-reported, often dealer prices; not shop quotes.

PARTS FOR L31

- Ask your parts supplier for the OE part number for this VIN.

QUESTIONS TO ASK US

- Any stalling or hard warm starts?
- Recalls 03V-455 / 06V-242 / 07V-527 done?

2 Pre-catalyst overheating and catalyst codes (P0420)

Past the range

Severity: High: overheating, stalls, limp mode or a big bill · 434 mentions in counted NHTSA complaints COMPUTED FROM NHTSA DATA

At 118,000 mi this car is past the reported range (72,000–97,000 mi (middle half of 96 owner complaints that state a mileage)). If the original parts are still fitted, have them checked and plan for them. Range: 72,000–97,000 mi (middle half of 96 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA [1]



Applies to: 2002–2003 Altima and 2002 Sentra (recall 03V-084); 2004–2005 Altima P0420 bulletin

WHAT FAILS OFFICIAL [5][6]

The front catalyst (pre-catalyst) sits right at the exhaust manifold. On 2002 Altima and Sentra cars, some running conditions can make it overheat and damage the catalyst substrate; the recall added heat shields. On 2004–2005 Altimas P0420 can set with an undamaged converter, so Nissan says to check the bulletin before replacing it.

SYMPTOMS

- Check-engine light with P0420
- Rattle from the exhaust manifold
- Loss of power or a burning smell

IF IT'S LEFT TOO LONG

A damaged catalyst can restrict the exhaust and get very hot.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Check the VIN for recall 03V-084; confirm the converter is actually damaged before replacing it.

ESTIMATED REPAIR COST

No published price	**Our price is in the plan above** ask us for a written quote
Owner-reported repair bills in NHTSA complaints (n=29)	**$800–$3,000** COMPUTED FROM NHTSA DATA [1] reported range for the bill after a failure

Where the numbers come from: Computed from 29 NHTSA owner complaints that quote a repair bill for this problem (middle half of the bills; median $1,200). Examples: ODI 10965549, 10746914, 10475750, 10456717. Owner-reported, often dealer prices; not shop quotes.

PARTS FOR L31

- Ask your parts supplier for the OE part number for this VIN.

QUESTIONS TO ASK US

- Any catalyst codes?
- Converter or manifold replaced?

3 Intake manifold power valve screws work loose

Any mileage

Severity: Medium: leaks and wear · 49 mentions in counted NHTSA complaints
COMPUTED FROM NHTSA DATA

Reports cover a wide mileage span (2004 Sentra 2.5L and 2004–2005 Altima 2.5L (campaign P5202, expired 2020)), so mileage doesn't say much here. Range: 2004 Sentra 2.5L and 2004–2005 Altima 2.5L (campaign P5202, expired 2020) OFFICIAL [9]

WHAT FAILS OFFICIAL [9]

Screws that hold the power valve inside the intake manifold may loosen. The check-engine light can come on

ESTIMATED REPAIR COST

and the engine can idle unevenly or lose power. Nissan inspected and replaced the screws under a campaign that has now ended.

SYMPTOMS

- Check-engine light
- Unstable idle
- Loss of power

IF IT'S LEFT TOO LONG

A loose screw can fall into the engine.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Have the power valve screws checked if the campaign was never done.

No published price	**Our price is in the plan above** ask us for a written quote
No published price	**No published price** reported range for the bill after a failure

PARTS FOR L31

- Ask your parts supplier for the OE part number for this VIN.

QUESTIONS TO ASK US

- Campaign P5202 done?

5 · ALSO REPORTED, NOT RANKED

Other themes in 2.5L QR25DE (2002–2006) owner complaints

Every NHTSA complaint theme with 10 or more counted reports is either a weak point above or explained here.

THEME	COMPLAINTS	WHY IT ISN'T A WEAK POINT
Floor pan and rear suspension rust	801	Body rust (floor pan class action, rear suspension member campaign); not an engine fault.
Air bags / steering	355	Air bag and steering complaints; not engine faults.
Engine fire	221	Owners mostly link fires to the catalyst or low oil; covered by recalls 03V-084 and 06V-223.

How this report is built

Inputs. VIN, model year, model, mileage and build month (if entered). Model and engine are checked with NHTSA's vPIC decoder.

Mileage positions. Below: more than 10,000 miles before the reported range. Approaching: within 10,000. Inside: in the range, or past the start of an open-ended range. Past: beyond the top of the range. These bands are our rules, not an industry standard.

The plan. Critical items inside or past their range go first; high-severity items follow, and jobs that share labor are bundled. At most three jobs land in “Recommended now”. Leaks that are cheap to watch are fixed on condition; inspections are asked for at each service.

Costs. Published independent-shop ranges from shop quotes, retailer prices and owner reports. Shop prices come from the issuing shop. The worst-case cost of every item failing is not shown: it isn't an expected cost.

Labels. `OFFICIAL` NHTSA/Nissan documents · `SHOP/RETAILER` parts prices and shop articles · `FORUM/BLOG` owner forums and blogs · `COMPUTED FROM NHTSA DATA` our analysis of NHTSA data · `OUR ESTIMATE` ours.

NHTSA complaint data. Pulled Oct 27, 2026 from NHTSA's complaints API for 2002–2006 Altima complaints that do not name the V6, 3.5, SE-R or hybrid, and 2002–2006 Sentra complaints that name the 2.5, SE-R or Spec V: 4,107 complaints. Some of these nameplates were sold with other engines too. For some we kept only complaints whose text names this engine (which under-counts); for others we left out complaints that name another engine or a hybrid (so a few about other engines can remain). Themes are keyword matches on the complaint text.
`COMPUTED FROM NHTSA DATA`

THEME	COMPLAINTS	IN THIS REPORT
Stalling / crank or cam sensor	1,276	Item 1
Floor pan and rear suspension rust	801	Also reported
Catalytic converter	434	Item 2
Air bags / steering	355	Also reported
Oil consumption	234	Other years or engine sizes
Engine fire	221	Also reported
Intake manifold / power valve	49	Item 3

Limits: complaints are self-reported and not adjusted for cars sold; keyword matching over- and under-counts; owners rarely file safety complaints about oil seeps, so leaks look rarer than they are.

SOURCES

1. NHTSA owner complaints for 2002–2006 Altima (complaints that do not name the V6, 3.5 or SE-R) and 2002–2006 Sentra complaints that name the 2.5, SE-R or Spec V, pulled Oct 27, 2026 (ODI numbers in the cost notes) `OFFICIAL`
https://www.nhtsa.gov/report-a-safety-problem#complaints

2. NHTSA recall records: 03V-455 (2002–2003 Altima, Sentra, Maxima and others: crank or cam position sensor circuit board solder joint can fail; engine can stop running), checked Oct 27, 2026 `OFFICIAL`
https://www.nhtsa.gov/recalls?nhtsaId=03V455000

3. NHTSA recall records: 06V-242 (2003–2004 Altima and Sentra 2.5L) and 07V-527 (2002 and 2005–2006 Altima and Sentra 2.5L): crankshaft position sensor signal can drop out briefly so the engine stalls at low speed; ECM reprogram, checked Oct 27, 2026 `OFFICIAL`
https://www.nhtsa.gov/recalls?nhtsaId=06V242000

4. Nissan Service bulletin 04063: MIL on with P0340 / P0345 (camshaft position sensor) and/or engine hard to start when warm (2003–2005 Altima) (2004-05-24), filed with NHTSA `OFFICIAL`
https://www.nhtsa.gov/?nhtsaId=10007903

5. NHTSA recall records: 03V-084 (2002–2003 Altima and 2002 Sentra 2.5L: exhaust hanger pin can catch debris near the catalyst; on 2002 cars the pre-catalyst can overheat and damage its substrate; heat shields added), checked Oct 27, 2026 OFFICIAL
https://www.nhtsa.gov/recalls?nhtsaId=03V084000

6. Nissan Service bulletin 06004: MIL on with DTC P0420: catalytic converter is undamaged (2004–2005 Altima) (2006-01-24), filed with NHTSA OFFICIAL
https://www.nhtsa.gov/?nhtsaId=10019113

7. NHTSA recall records: 06V-223 (2006 Altima and Sentra 2.5L: excessive oil consumption from the piston rings; ECM reprogram, inspection, engine replacement in some cases), checked Oct 27, 2026 OFFICIAL
https://www.nhtsa.gov/recalls?nhtsaId=06V223000

8. Nissan Campaign PB023 update: 2006 Altima and Sentra QR25DE oil consumption: ECM "limp home" mode if the oil level drops; inspection and engine replacement under the service campaign ended Sept 4, 2015 (2015-08-20), filed with NHTSA OFFICIAL
https://static.nhtsa.gov/odi/tsbs/2015/MC-10192632-9999.pdf

9. Nissan NTB05-058c / campaign P5202: 2004 Sentra 2.5L and 2004–2005 Altima 2.5L: intake manifold power valve screws may loosen (MIL, unstable idle or power loss); campaign expired July 2020 (2020-07-16), filed with NHTSA OFFICIAL
https://static.nhtsa.gov/odi/tsbs/2020/MC-10178245-0001.pdf

This report contains no affiliate links; retailer prices are quoted as price sources only. Found an error? Email hello@repairahead.com.

PLEASE READ

Important

Based on public records and published repair costs. Not a diagnosis or a guarantee. Your technician's inspection decides what your car needs. Confirm recalls with a dealer using your VIN.

Informational only. This report is not a mechanical inspection, a diagnosis, or professional, legal or financial advice. It was issued by Springfield Auto Care using RepairAhead data; the inspection findings and prices are the shop's.

Reported ranges and estimates, not predictions

Failure mileages are reported ranges compiled from public owner complaints, manufacturer bulletins, recalls and repair-shop reports. Costs are estimates. Parts can fail earlier, later or not at all, and other problems can occur. Statistics from owner complaints describe past reports to NHTSA; NHTSA has not reviewed or endorsed this analysis.

Safety issues go to a dealer

If you notice overheating, a burning or fuel smell, smoke, a brake-assist problem, stalling or loss of power, pull over when it's safe and contact a Nissan dealer or qualified shop. Safety recall repairs are free at Nissan dealers. Confirm recalls for this VIN at nhtsa.gov/recalls.

No warranty

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