2006 Toyota Camry at 125,000 mi

4T1BE32KX6U123456

MODEL / CHASSIS	ENGINE	MILEAGE	DRIVETRAIN
Camry · XV30 Camry LE sedan (2.4L)	Toyota AZ-family 2.4L four (2AZ-FE)	125,000 mi	FWD
BUILD MONTH	**REPORT DATE**	**MODE**	**PREPARED FOR**
Not entered (door jamb)	October 27, 2026	Owner	Sample Owner

VIN check: check digit valid; model-year code '6' = 2006, 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: a qualified technician decides what the car actually needs.

1	0	1
inspection recommended now	to plan in the next 30,000 miles	to watch or check at each service

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

Recommended now at the next service — $100–$160

Inspection: check now, while it's cheaper to fix — $100–$160

about 1 h of shop labor, our estimate

Oil consumption (piston rings): Past the range (51,000–123,000 mi, the middle half of 199 owner reports)
Coolant loss from stripped rear head-bolt threads: Past the range (77,000–121,000 mi, the middle half of 29 owner reports) · if it fails: $3,200–$6,400
Water pump leak: Past the range (39,000–77,000 mi, the middle half of 30 owner reports) · if it fails: $710–$950
Known weak points for this engine, not findings on your car. The inspection shows whether yours has early signs.

Next 12 months up to about 137,000 mi

Nothing scheduled here.

Within the next 30,000 miles up to 155,000 mi

Nothing else enters its reported range in this window.

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

Throttle body (idle and stalling codes) **No published price**

Past the range (42,000–68,000 mi, the middle half of 24 owner reports) · Inspect at each service; fix at the first sign

Recommended now

$100–$160

Independent shop, installed. Dealers often charge more.

Planned through 155,000 mi

$100–$160

Nothing else on the list before 155,000 mi. Now + next 12 months + next 30,000 miles. Excludes “watch” and optional items.

Costs are published independent-shop ranges (low end + low end, high end + high end). 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

The maker's maintenance schedule isn't on this report

This report doesn't include the maker's scheduled maintenance for this car yet, so brake fluid, spark plugs, coolant and transmission fluid aren't listed even when they're due. Check the service records and the maker's schedule for this car.

WHERE 125K SITS FOR EACH WEAK POINT

#	WEAK POINT	REPORTED RANGE	THIS CAR
1	Oil consumption (piston rings)	51,000–123,000 mi (middle half of 199 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA	Past the range
2	Coolant loss from stripped rear head-bolt threads	77,000–121,000 mi (middle half of 29 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA	Past the range
3	Water pump leak	39,000–77,000 mi (middle half of 30 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA	Past the range
4	Throttle body (idle and stalling codes)	42,000–68,000 mi (middle half of 24 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA	Past the range

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 2006 Toyota Camry

Safety recall repairs are free at Toyota 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 4T1BE32KX6U123456.
2. Note every recall shown as “Recall incomplete” and keep a screenshot.
3. Ask a Toyota dealer for a campaign printout; it also lists completed campaigns.

2.4L 2AZ-FE RECALLS WE TRACK

NHTSA lists no engine-specific recall campaign for the 2.4L 2AZ-FE as of 2026-10-27. Recalls on the rest of the car are in the model-year list below.

EVERY RECALL NHTSA LISTS FOR THE 2006 TOYOTA CAMRY (1)

RECALL	COMPONENT	WHAT CAN HAPPEN (NHTSA, SHORTENED)
05V-539	Tire and loading label	The tire label on the driver door pillar shows the wrong spare tire size, which could lead to wrong loading or tire pressure. Details

Source: NHTSA recalls API, fetched 2026-10-27 and combined across NHTSA model names: CAMRY. 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 (CAMRY): Four distributor campaigns are left out of this sample: 16V-396 and 14V-743 (Southeast Toyota accessory seat heaters), 10V-036 (Southeast Toyota load labels) and 10V-035 (Gulf States Toyota load labels). They cover only cars those distributors fitted with accessories; a VIN check would show them if they 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 4 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 (XV30).

1 Oil consumption (piston rings)

Past the range

Severity: Critical: rare, but can badly damage the engine · 843 mentions in counted NHTSA complaints COMPUTED FROM NHTSA DATA

At 125,000 mi this car is past the reported range (51,000–123,000 mi (middle half of 199 owner complaints that state a mileage)). If the original parts are still fitted, have them checked and plan for them. Range: 51,000–123,000 mi (middle half of 199 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA [1]



Applies to: 2006–2011 Camry/Corolla/RAV4/Solara/tC and 2008–2015 xB covered by program ZE7 (now expired)

WHAT FAILS OFFICIAL [2]

The piston rings can stop sealing, and the engine burns oil. Toyota's fix replaces the pistons and rings; in some cases the short block. Program ZE7 covered it for 10 years or 150,000 miles, which has now run out for every covered car.

SYMPTOMS

- Oil level low between changes
- More than a quart every 1,200 miles
- Blue smoke at start-up

IF IT'S LEFT TOO LONG

Running low on oil can wear the bearings and destroy the engine; burned oil can clog the catalytic converter.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Track oil use between changes. A piston and ring job costs less than a replacement engine if caught before bearing damage.

ESTIMATED REPAIR COST

Labor only, 14.2–16.3 h Toyota warranty time plus pistons and rings	**$1,420–$2,610** OUR ESTIMATE [3] [8] labor only, parts extra
No published bill; a worn-out engine means a replacement engine	**No published price** reported range for the bill after a failure
Dealer	**Often 1.5–2× the independent-shop price** OUR ESTIMATE

Where the numbers come from: Estimate: Toyota warranty labor time of 14.2–16.3 h (bulletin [3]) × $100–$160/h independent-shop labor rate [8]. Parts are extra unless stated; check the VIN for open warranty coverage first.

PARTS FOR XV30

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

WHAT TO ASK YOUR SHOP

- How much oil does it use between changes?
- Was ZE7 piston work done?

2 Coolant loss from stripped rear head-bolt threads

Past the range

Severity: High: overheating, stalls, limp mode or a big bill · 219 mentions in counted NHTSA complaints COMPUTED FROM NHTSA DATA

At 125,000 mi this car is past the reported range (77,000–121,000 mi (middle half of 29 owner complaints that state a mileage)). If the original parts are still fitted, have them checked and plan for them. Range: 77,000–121,000 mi (middle half of 29 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA [1]



Applies to: 2002–2006 2AZ-FE engines

WHAT FAILS SHOP/RETAILER [4]

On some 2002–2006 engines the threads for the two rear head bolts pull out of the block. The head loses clamping force and coolant seeps out at the back of the head. Engine builders repair it with thread inserts.

SYMPTOMS

- Coolant loss with no visible leak at the front
- Coolant seep at the back of the head
- Overheating

IF IT'S LEFT TOO LONG

Left alone it leads to a failed head gasket and overheating.

IS IT WORTH DOING EARLY? OUR ESTIMATE

At the first unexplained coolant loss, check the rear of the head before replacing other parts.

ESTIMATED REPAIR COST

Thread repair (no published installed price)	**No published price** independent shop, installed
Owner-reported repair bills in NHTSA complaints (n=11)	**$3,200–$6,400** COMPUTED FROM NHTSA DATA [1] reported range for the bill after a failure
Dealer	**Often 1.5–2× the independent-shop price** OUR ESTIMATE

Where the numbers come from: Computed from 11 NHTSA owner complaints that quote a repair bill for this problem (middle half of the bills; median $3,500). Examples: ODI 10621029, 10424292, 10264444, 10595084. Owner-reported, often dealer prices; not shop quotes.

PARTS FOR XV30

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

WHAT TO ASK YOUR SHOP

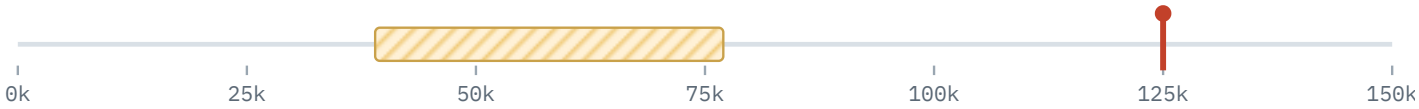
- Any unexplained coolant loss?
- Head gasket or thread repair done?

3 Water pump leak

Past the range

Severity: High: overheating, stalls, limp mode or a big bill · 93 mentions in counted NHTSA complaints COMPUTED FROM NHTSA DATA

At 125,000 mi this car is past the reported range (39,000–77,000 mi (middle half of 30 owner complaints that state a mileage)). If the original parts are still fitted, have them checked and plan for them. Range: 39,000–77,000 mi (middle half of 30 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA [1]



Applies to: Any mileage; Toyota has a leak-inspection bulletin for 2008-on models

WHAT FAILS OFFICIAL [5]

The water pump can seep from the weep hole, leak or wear its bearing.

SYMPTOMS

- Pink crust at the pump
- Coolant level dropping
- Whine from the belt area

IF IT'S LEFT TOO LONG

Low coolant can overheat the engine.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Replace at the first active leak.

ESTIMATED REPAIR COST

Water pump replacement, 2004 Solara (RepairPal estimate)	**$710–$950** SHOP/RETAILER [6] independent shop, installed
Same job; overheating damage costs more	**$710–$950** SHOP/RETAILER [6] reported range for the bill after a failure
Dealer	**Often 1.5–2× the independent-shop price** OUR ESTIMATE

1.0× The failure-bill midpoint ($830) is about 1.0× the early-fix midpoint ($830). A cost ratio, not a probability.

PARTS FOR XV30

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

WHAT TO ASK YOUR SHOP

- Water pump ever replaced?

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4 Throttle body (idle and stalling codes)

Past the range

Severity: Medium: leaks and wear · 130 mentions in counted NHTSA complaints

COMPUTED FROM NHTSA DATA

At 125,000 mi this car is past the reported range (42,000–68,000 mi (middle half of 24 owner complaints that state a mileage)). If the original parts are still fitted, have them checked and plan for them. Range: 42,000–68,000 mi (middle half of 24 owner complaints that state a mileage) COMPUTED FROM NHTSA DATA [1]



Applies to: 2002–2008 Camry, Solara and RAV4 with the 2AZ-FE

WHAT FAILS OFFICIAL [7]

Toyota updated the throttle body part for these engines. A sticking throttle body can cause rough idle, surging or stalling.

SYMPTOMS

ESTIMATED REPAIR COST

No published price	**No published price** independent shop, installed

- Rough or surging idle
- Stalling when coming to a stop
- Throttle codes

IF IT'S LEFT TOO LONG

Stalling in traffic is a safety risk.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Clean or replace when idle problems or throttle codes appear.

Owner-reported repair bills in NHTSA complaints (n=14)	**$1,000–$1,200** COMPUTED FROM NHTSA DATA [1] reported range for the bill after a failure
Dealer	**Often 1.5–2× the independent-shop price** OUR ESTIMATE

Where the numbers come from: Computed from 14 NHTSA owner complaints that quote a repair bill for this problem (middle half of the bills; median $1,030). Examples: ODI 10436156, 10364197, 10434749, 10358917. Owner-reported, often dealer prices; not shop quotes.

PARTS FOR XV30

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

WHAT TO ASK YOUR SHOP

- Any stalling or surging idle?

5 · ALSO REPORTED, NOT RANKED

Other themes in 2.4L 2AZ-FE 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
Transmission	794	Counts every transmission complaint; not an engine fault.

6 · BUYING OR SELLING

Used-car checklist and resale helper

For owners this is a resale checklist: it's what a careful buyer will ask.

Ask the inspecting shop to check

- Oil level and consumption history
- Coolant seep at the rear of the head
- Water pump weep hole
- Idle quality

Ask the seller

- ZE7 oil-consumption repair done?
- How much oil between changes?
- Head gasket or thread repair?

Documents to request

- Dealer service-history printout for the VIN
- nhtsa.gov/recalls screenshot

WHAT A BUYER MAY DEDUCT

FINDING	ESTIMATED ADJUSTMENT
Oil consumption (piston rings): fault found on inspection	No published price
Coolant loss from stripped rear head-bolt threads: symptoms or fault codes present	No published price
Water pump leak: seeping or leaking	$710–$950
Throttle body (idle and stalling codes): symptoms or fault codes present	No published price
Pre-ticked rows (●), if no records clear them	**None at this mileage**

● = expected at this mileage. Estimated repair costs, not an appraisal. Recalls cost the seller nothing: ask for open recalls to be completed rather than discounted. OUR ESTIMATE

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. The worst-case cost of every item failing is not shown: it isn't an expected cost.

Labels. `OFFICIAL` NHTSA/Toyota 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 28, 2026 from NHTSA's complaints API for 2002–2009 Camry, Solara and 2004–2008 RAV4 complaints that do not mention a V6 or hybrid, 2001–2007 Highlander complaints that name the 2.4L or a four-cylinder, 2005–2010 Scion tC and 2008–2015 Scion xB complaints, and Corolla/Matrix/2009–2010 Pontiac Vibe complaints that mention the XRS, GT, AWD or 2.4L: 13,326 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
Oil consumption	843	Item 1
Transmission	794	Also reported
Coolant loss / head gasket	219	Item 2
Throttle body / idle	130	Item 4
Water pump	93	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 2002–2009 Camry and Solara (2.4L), 2004–2008 RAV4 (2.4L), 2001–2007 Highlander (2.4L), 2005–2010 Scion tC, 2008–2015 Scion xB, Corolla XRS, Matrix and Pontiac Vibe 2.4L, pulled Oct 28, 2026 (ODI numbers in the cost notes) `OFFICIAL`
https://www.nhtsa.gov/report-a-safety-problem#complaints

2. Toyota Warranty Enhancement Program ZE7: Extension of warranty coverage for 2AZ engine oil consumption (2015-04-24), filed with NHTSA `OFFICIAL`
https://static.nhtsa.gov/odi/tsbs/2015/MC-10111382-9999.pdf

3. Toyota T-SB-0030-15 Rev1: 2AZ engine oil consumption repair procedure (piston and ring replacement) (2015-05-26), filed with NHTSA `OFFICIAL`
https://static.nhtsa.gov/odi/tsbs/2015/MC-10111520-9999.pdf

4. Engine Builder Magazine: Coolant loss on 2002–2006 Toyota 2.4L 2AZ-FE engines (stripped rear head-bolt threads) `SHOP/RETAILER`
https://www.enginebuildermag.com/?p=1939

5. Toyota T-SB-0103-20 Rev1: Water pump leak inspection and diagnostic tips, 2008–2025 Toyota (2024-06-19), filed with NHTSA `OFFICIAL`
https://static.nhtsa.gov/odi/tsbs/2024/MC-11005061-0001.pdf

6. RepairPal: 2004 Toyota Solara water pump replacement estimate (Austin, TX), via search extract Oct 27, 2026 `SHOP/RETAILER`
https://repairpal.com/estimator/toyota/solara/2004/austin-texas/water-pump-replacement-cost

7. Toyota TSB-0111-10: 2AZ-FE throttle body: updated part number (drain pipe eliminated) (2010-04-19), filed with NHTSA `OFFICIAL`
https://www.nhtsa.gov/?nhtsaId=10034265

8. Tekmetric: average auto repair labor rates by state, 2026 (national average $132/h; state averages $85–$197/h). We use $100–$160/h for labor-time estimates. SHOP/RETAILER
https://tours.tekmetric.com/answers/average-auto-repair-labor-rates-by-state-2026

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. Nobody from RepairAhead has seen, driven or inspected this vehicle.

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 Toyota dealer or qualified shop. Safety recall repairs are free at Toyota dealers. Confirm recalls for this VIN at nhtsa.gov/recalls.

No warranty

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Wrong input (VIN, mileage, build date)? Email hello@repairahead.com with report ID RA-TOY2AZ-123456-20261027 and we'll correct and reissue it.
