SEA **Springfield Euro Auto** EXAMPLE SHOP
service@springfield-euro-auto.example

2007 BMW M5 at 84,000 mi

WBSNB93527CX12345

MODEL / CHASSIS	ENGINE	MILEAGE	DRIVETRAIN
M5 · E60 M5 sedan	S85 5.0L V10 (M)	84,000 mi	RWD
BUILD MONTH	**REPORT DATE**	**MODE**	**PREPARED FOR**
Not entered (door jamb)	October 27, 2026	Shop	Sample Owner

VIN check: check digit valid; model-year code '7' = 2007, 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	0	3
jobs recommended now	to plan in the next 30,000 miles	to watch or check at each service

Safety recalls NHTSA lists for this model year (1)

- **12V-126** · Electrical system · battery cables: A loosened positive battery cable connection can overheat and start a fire, even when the car is parked.

A model-year list, not a VIN check. Repairs are free at a BMW 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 BMW dealer for a campaign printout, including 12V-126. Read the build month (MM/YY) on the driver's door-jamb label.

Recommended now at the next service — $4,065

Rod bearings — $3,900
Inside the range (Most reported failures 60k–100k; many owners replace them at 60k–80k)
our price EXAMPLE
`If it fails: $25,000–$35,000 · about 7.7× our price`

Inspection: check now, while it's cheaper to fix — $165
SMG gearbox hydraulic pump: Past the range (Often reported 60k–80k (guide)) · if it fails: $1,100
Known weak point for this engine, not a finding on your car. The inspection shows whether yours has early signs.
inspection EXAMPLE

Next 12 months up to about 89,000 mi

Nothing scheduled here.

Within the next 30,000 miles up to 114,000 mi

Nothing else enters its reported range in this window.

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

VANOS high-pressure pump and lines — **$150**
Any mileage (no reliable figure) · Ask for this check at every service
our price EXAMPLE

Throttle actuators — **$450**
Any mileage (Wear item; no mileage figure) · Inspect at each service; fix at the first sign
our price EXAMPLE

Valve cover gaskets (oil leaks) — **$900**
Any mileage (Age-related; cars over ~10 years) · Inspect at each service; fix at the first sign
our price EXAMPLE

Recommended now
$4,065
Springfield Euro Auto prices (example)

Planned through 114,000 mi
$4,065
Nothing else on the list before 114,000 mi. Now + next 12 months + next 30,000 miles. Excludes “watch” and optional items.

Prices are Springfield Euro Auto'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 Euro Auto 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

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 84K SITS FOR EACH WEAK POINT

#	WEAK POINT	REPORTED RANGE	THIS CAR
1	Rod bearings	Most reported failures 60k–100k; many owners replace them at 60k–80k FORUM/BLOG	Inside the range
2	VANOS high-pressure pump and lines	Any mileage; no reliable figure FORUM/BLOG	Any mileage
3	Throttle actuators	Wear item; no mileage figure FORUM/BLOG	Any mileage
4	SMG gearbox hydraulic pump	Often reported 60k–80k (guide) FORUM/BLOG	Past the range
5	Valve cover gaskets (oil leaks)	Age-related; cars over ~10 years FORUM/BLOG	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 2007 BMW M5

Safety recall repairs are free at BMW 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 WBSNB93527CX12345.
2. Note every recall shown as “Recall incomplete” and keep a screenshot.
3. Ask a BMW dealer for a campaign printout; it also lists completed campaigns.

S85 RECALLS WE TRACK

12V-126 · Positive battery cable connection (fire risk) NHTSA lists this model and year: check by VIN

Certain 2004–2010 5 Series including the M5: a loosened positive battery cable connection can overheat and cause a fire, even when parked. Free repair. OFFICIAL [2]

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

EVERY RECALL NHTSA LISTS FOR THE 2007 BMW M5 (1)

RECALL	COMPONENT	WHAT CAN HAPPEN (NHTSA, SHORTENED)
12V-126 S85 tracked	Electrical system · battery cables	A loosened positive battery cable connection can overheat and start a fire, even when the car is parked. Details

Source: NHTSA recalls API, fetched 2026-10-27 and combined across NHTSA model names: M5. 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

SERVICE ACTIONS, BULLETINS AND WARRANTY PROGRAMS

CAMPAIGN	WHAT IT SAYS	THIS CAR
No rod-bearing recall or extension found	We found no recall or warranty extension for S85 rod bearings in NHTSA's records. Engines built 2007 to late 2008 had tight bearing clearances; BMW repaired many under the original warranty. FORUM/BLOG [4]	Owner's cost

4 · THE 5 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 (E60).

1 Rod bearings

Inside the range

Severity: Critical: rare, but can badly damage the engine · 4 mentions in counted NHTSA complaints COMPUTED FROM NHTSA DATA

At 84,000 mi this car is inside the reported range (Most reported failures 60k–100k; many owners replace them at 60k–80k), 24,000 miles past where reports start. Range: Most reported failures 60k–100k; many owners replace them at 60k–80k FORUM/BLOG [3]



WHAT FAILS FORUM/BLOG [3]

Tight factory bearing clearances (2007 to late 2008 builds especially) reduce oil flow, the bearings wear, and a spun bearing can destroy the engine.

SYMPTOMS

- Faint ticking at idle and low rpm
- Copper or gold flakes in the oil
- Rod knock

IF IT'S LEFT TOO LONG

A bearing failure usually means a replacement engine. Two owners told NHTSA they were quoted $25,000 and $35,000.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Strong case on a car past ~60k with original bearings: a planned job is about a tenth of a replacement engine.

ESTIMATED REPAIR COST

Preventive bearing job, shop (guide estimate, $3,000+)	**Our price is in the plan above** ask us for a written quote
Replacement-engine quotes owners reported to NHTSA (2 bills)	**$25,000–$35,000** FORUM/BLOG [1] reported range for the bill after a failure

Where the numbers come from: Fix early: BMWTuning gives about $1,000 in parts and $2,000+ in labor ("$3,000+ at a shop"); the upper figure is that plus an oil-pan reseal, our estimate. If it fails: two owner quotes in 2006 M5 NHTSA complaints (ODI 10437852, $25,000 new engine; ODI 10586304, $35,000 dealer quote).

PARTS FOR E60

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

QUESTIONS TO ASK US

- Have the rod bearings been replaced? Invoice, brand and clearances?
- Oil analysis history?

2 VANOS high-pressure pump and lines

Any mileage

Severity: Critical: rare, but can badly damage the engine · 3 mentions in counted NHTSA complaints

COMPUTED FROM NHTSA DATA

Reports cover a wide mileage span (Any mileage; no reliable figure), so mileage doesn't say much here. Range: Any mileage; no reliable figure FORUM/BLOG [5]

WHAT FAILS FORUM/BLOG [5]

The S85 runs VANOS at high oil pressure. The high-pressure pump coupling and the pressure lines can fail or leak, and a failure can damage the engine.

SYMPTOMS

- VANOS fault codes
- Burning-oil smell or smoke from a leaking pressure line
- Rough running or loss of power

IF IT'S LEFT TOO LONG

A failed pump or line can cause serious engine damage; owners report bills from about $3,000 up to an engine.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Ask for a VANOS check at every service and fix leaks or codes at once. No preventive replacement interval is published.

ESTIMATED REPAIR COST

Inspection at a service visit	**Our price is in the plan above** ask us for a written quote
No reliable published figure (the one owner-report site found spans $3,000–$32,000)	**No published price** reported range for the bill after a failure

PARTS FOR E60

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

QUESTIONS TO ASK US

- Any VANOS codes or oil at the pressure lines?
- Has the high-pressure pump or coupling been replaced?

3 Throttle actuators

Any mileage

Severity: High: overheating, stalls, limp mode or a big bill · 1 mentions in counted NHTSA complaints

COMPUTED FROM NHTSA DATA

Reports cover a wide mileage span (Wear item; no mileage figure), so mileage doesn't say much here. Range: Wear item; no mileage figure FORUM/BLOG [3]

WHAT FAILS FORUM/BLOG [3]

Each engine has two throttle actuators with plastic gears that wear; some also fail electrically. A failure puts the car in limp mode.

SYMPTOMS

- Limp mode
- Rough running
- Codes CDC0, 2B21 or 2B57

IF IT'S LEFT TOO LONG

Limp mode until it is fixed.

ESTIMATED REPAIR COST

Gear repair kit fitted by a shop ($100 kit + $250–$400 labor)	**Our price is in the plan above** ask us for a written quote
New actuators fitted (reported range)	**$1,500–$3,500** FORUM/BLOG [5] reported range for the bill after a failure

PARTS FOR E60

IS IT WORTH DOING EARLY? OUR ESTIMATE

Fix on failure. A gear kit fixes worn gears for much less than two new actuators; electrical failures need new units.

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

QUESTIONS TO ASK US

- Any limp mode or throttle codes? Were the actuators rebuilt or replaced?

4 SMG gearbox hydraulic pump

Past the range

Severity: High: overheating, stalls, limp mode or a big bill · 6 mentions in counted NHTSA complaints COMPUTED FROM NHTSA DATA

At 84,000 mi this car is past the reported range (Often reported 60k–80k (guide)). If the original parts are still fitted, have them checked and plan for them. Range: Often reported 60k–80k (guide) FORUM/BLOG [3]



WHAT FAILS FORUM/BLOG [3]

On SMG cars the hydraulic pump motor fails most often; the clutch sensor and pressure accumulator can also fail. Manual-gearbox US M5s (2007–2010) don't have it.

SYMPTOMS

- Slow or hesitant shifts
- Transmission warning light
- Car stuck in neutral

IF IT'S LEFT TOO LONG

The car can stop shifting and leave you stranded; owners report stalls in traffic.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Fix when it shows symptoms; ask for the pump's history on a used SMG car.

ESTIMATED REPAIR COST

Pump motor replacement, guide estimate ($600+ parts, $500+ labor)	**Our price is in the plan above** ask us for a written quote
No separate failure price published (same figure)	**$1,100** FORUM/BLOG [3] reported range for the bill after a failure

PARTS FOR E60

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

QUESTIONS TO ASK US

- Is this an SMG car? Has the pump been replaced?

5 Valve cover gaskets (oil leaks)

Any mileage

Severity: Medium: leaks and wear · 0 mentions in counted NHTSA complaints COMPUTED FROM NHTSA DATA

Reports cover a wide mileage span (Age-related; cars over ~10 years), so mileage doesn't say much here. Range: Age-related; cars over ~10 years FORUM/BLOG [3]

WHAT FAILS FORUM/BLOG [3]

ESTIMATED REPAIR COST

The rubber gaskets on both valve covers harden and crack with heat cycling.

SYMPTOMS

- Oil smell or smoke
- Oil on the exhaust side

IF IT'S LEFT TOO LONG

Oil dripping on the exhaust is a smoke and fire risk.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Fix when it leaks.

2 gaskets (~$25 each) + 4–6 hours labor at $150–$175/hr, our estimate	**Our price is in the plan above** ask us for a written quote
Same job	**$650–$1,100** OUR ESTIMATE [3] reported range for the bill after a failure

PARTS FOR E60

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

QUESTIONS TO ASK US

- Any oil smell or seep at the covers?

5 · ALSO REPORTED, NOT RANKED

Other themes in S85 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

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/BMW 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 M5 and M6, 2006–2010: 153 complaints. We pooled every complaint NHTSA files under these model names and years; where a nameplate also came with another engine or powertrain, a few complaints may be about it. Themes are keyword matches on the complaint text. Owner complaints include rod-bearing failures with $25,000–$35,000 engine quotes (ODI 10437852, 10586304). `COMPUTED FROM NHTSA DATA`

THEME	COMPLAINTS	IN THIS REPORT
SMG transmission	6	Item 4
Rod bearings / engine failure	4	Item 1
VANOS	3	Item 2
Throttle actuator	1	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 complaints for the 2006 BMW M5 (complaintsByVehicle), read Oct 27, 2026: owner-quoted engine bills (ODI 10437852, 10586304) `OFFICIAL`
https://www.nhtsa.gov/nhtsa-datasets-and-apis

2. NHTSA recall list for the 2007 BMW M5 (12V-126), checked Oct 27, 2026 `OFFICIAL`
https://www.nhtsa.gov/recalls?nhtsaId=12V126000

3. BMWTuning: the 4 most common BMW S85 engine problems (updated Aug 29, 2024) `FORUM/BLOG`
https://bmwtuning.co/the-4-most-common-bmw-s85-m5-m6-engine-problems/

4. unixnerd.co.uk: BMW S85 V10 and S65 V8 engines (bearing clearances on 2007–2008 builds) `FORUM/BLOG`
https://www.unixnerd.co.uk/s85.html

5. Au7o known issues: BMW M5 2006–2010 (VANOS pump, rod bearings, throttle actuators: reported cost ranges) `FORUM/BLOG`
https://au7o.io/known-issues/bmw-m5?year=2007

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

No warranty

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