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

2014 BMW 328i at 82,000 mi

WBA3A5C52EJ123456

MODEL / CHASSIS	ENGINE	MILEAGE	DRIVETRAIN
328i · F30 3 Series sedan	N20 / N26 2.0L turbo 4-cylinder	82,000 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 'E' = 2014, 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.

3
jobs recommended now

1
to plan in the next 30,000 miles · plus 1 factory maintenance item

1
to watch or check at each service

Safety recalls NHTSA lists for this model year (7 of 8)

- **24V-608** · Engine cooling · water pump: A short circuit at the water-pump connector increases the risk of a fire.
- **15V-189** · Fuel system · in-tank fuel pump: If the fuel pump fails, the car may stall without warning, increasing the risk of a crash.
- **14V-627** · Brakes · power assist vacuum pump: A failed brake vacuum pump reduces braking assist, which could increase the risk of a crash.
- **13V-454** · Brakes · power assist vacuum pump: A failed brake vacuum pump reduces braking assist, which could increase the risk of a crash.
- **25V-871** · Air bags · side/window · head: A head air bag inflator can rupture and throw metal fragments, or leak and only partly inflate, increasing the risk of injury.
- **24V-527** · Air bags · frontal · driver inflator: An inflator explosion may send sharp metal fragments at the driver or other occupants, increasing the risk of injury or death.
- **24V-288** · Air bags · side/window: A head air bag inflator can rupture and throw metal fragments, or leak and only partly inflate, increasing the risk of injury.

A model-year list, not a VIN check. The full report lists the others. Repairs are free at a BMW dealer if open. 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 24V-608, 14V-627, 13V-454, 15V-189. Read the build month (MM/YY) on the driver's door-jamb label.

Recommended now at the next service — $4,135

Subframe-down bundle — $3,450

Inside the range (50k–100k)

Includes: Timing chain, guides & tensioner · Oil pan gasket · Oil filter housing gasket + belt

our price EXAMPLE

`If it fails: $6,000–$10,000 · about 2.3× our price`

Spark plugs & ignition coils — $520

Past the range (Plugs 50k–60k · coils 60k–75k) · if the records don't show it done

our price EXAMPLE

`If it fails: $1,000–$2,500 · about 3.4× our price`

Inspection: check now, while it's cheaper to fix — $165

Turbo wastegate: Inside the range (80k+) · if it fails: $3,500–$5,000

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 94,000 mi — $1,290

Cooling bundle — $1,290

Inside the range (55k–100k)

Includes: Electric water pump + thermostat · Coolant expansion tank & vent hose

Check recall 24V-608 first: if a dealer replaces the pump under it, only the rest is paid.

our price EXAMPLE

`If it fails: $3,000–$6,000 · about 3.5× our price`

Within the next 30,000 miles up to 112,000 mi

Nothing else enters its reported range in this window.

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

Valve cover / PCV valve — $1,150

Inside the range (60k–100k+ and 6+ years) · Inspect at each service; fix at the first sign

our price EXAMPLE

Recommended now

$4,135

Springfield Euro Auto prices (example)

Planned through 112,000 mi

$5,574

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 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

Scheduled maintenance from 82,000 mi to 112,000 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
Brake fluid BMW's service display sets the date; BMW owner's manuals call for new brake fluid every two years.	every 2 years	**By time: check the records** [M1][M2]	**$149**
Engine coolant BMW rates the coolant as long-life; it lists no change interval except during repairs.	no fixed interval	— [M1]	—

M1. 2015 BMW 3/5/7 Series Service and Warranty Information (BMW USA) OFFICIAL
https://www.bmwusa.com/content/dam/bmw/marketUS/common/warranty-books/2015/2015-BMW-3Series-5Series-7Series-Service-Warranty-Information.pdf

M2. 2010 BMW X3 Owner's Manual, brake fluid (copy on ManualOwl) OFFICIAL
https://manualowl.com/am/BMW/2010-X3/Manual/76?page=108

WHERE 82K SITS FOR EACH WEAK POINT

#	WEAK POINT	REPORTED RANGE	THIS CAR
1	Timing chain, guides & tensioner	50k–100k OUR ESTIMATE	● Inside the range
2	Electric water pump + thermostat	55k–100k FORUM/BLOG	● Inside the range
3	Coolant expansion tank & vent hose	80k+ or 8–12 years OUR ESTIMATE	● Inside the range
4	Oil filter housing gasket + belt	60k+ and 6+ years FORUM/BLOG	● Inside the range
5	Valve cover / PCV valve	60k–100k+ and 6+ years FORUM/BLOG	● Inside the range
6	Oil pan gasket	80k+ OUR ESTIMATE	● Inside the range
7	Spark plugs & ignition coils	Plugs 50k–60k · coils 60k–75k FORUM/BLOG	● Past the range
8	Turbo wastegate	80k+ OUR ESTIMATE	● Inside 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 2014 BMW 328i

Safety recall repairs are free at BMW dealers. 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 WBA3A5C52EJ123456.
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.

N20 RECALLS WE TRACK

24V-608 · Electric water-pump connector (fire risk)

NHTSA lists this model and year: check by VIN

The water-pump electrical connector may let water in and short-circuit, which is a fire risk. Dealers inspect it, replace the pump and connector as needed, and fit a shield, free. OFFICIAL [15]

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

14V-627 · Brake vacuum pump lubrication (follow-up to 13V-454)

NHTSA lists this model and year: check by VIN

Insufficient lubrication can make the brake vacuum pump fail and reduce power braking assist. Dealers install a locking ring in the camshaft. OFFICIAL [31]

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

13V-454 · Brake vacuum pump lubrication

NHTSA lists this model and year: check by VIN

Insufficient lubrication can make the brake vacuum pump fail and reduce power braking assist. OFFICIAL [31]

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

15V-189 · In-tank (low-pressure) fuel pump

NHTSA lists this model and year: check by VIN

Improper plating inside the in-tank fuel pump can make it fail, and the car may stall without warning. This is the in-tank pump, not the high-pressure pump. Dealers replace it free. OFFICIAL [31]

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

EVERY RECALL NHTSA LISTS FOR THE 2014 BMW 328I (8)

RECALL	COMPONENT	WHAT CAN HAPPEN (NHTSA, SHORTENED)
24V-608 N20 tracked	Engine cooling · water pump	A short circuit at the water-pump connector increases the risk of a fire. Details
15V-189 N20 tracked	Fuel system · in-tank fuel pump	If the fuel pump fails, the car may stall without warning, increasing the risk of a crash. Details

RECALL	COMPONENT	WHAT CAN HAPPEN (NHTSA, SHORTENED)
14V-627 N20 tracked	Brakes · power assist vacuum pump	A failed brake vacuum pump reduces braking assist, which could increase the risk of a crash. Details
13V-454 N20 tracked	Brakes · power assist vacuum pump	A failed brake vacuum pump reduces braking assist, which could increase the risk of a crash. Details
25V-871	Air bags · side/window · head	A head air bag inflator can rupture and throw metal fragments, or leak and only partly inflate, increasing the risk of injury. Details
24V-527	Air bags · frontal · driver inflator	An inflator explosion may send sharp metal fragments at the driver or other occupants, increasing the risk of injury or death. Details
24V-288	Air bags · side/window	A head air bag inflator can rupture and throw metal fragments, or leak and only partly inflate, increasing the risk of injury. Details
15V-520	Exterior lighting	If the side marker lights don't work, the car is less visible at night, increasing the risk of a crash. Details

Source: NHTSA recalls API, fetched 2026-10-27 and combined across NHTSA model names: 328I, 328XI. 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
Plastic oil filter housing service action (MC-10146945)	For N20 cars built Aug 2011–Mar 2012, BMW replaced the black plastic oil filter housing with aluminum part 11 42 8 637 812. OFFICIAL [22]	Doesn't apply to this build
SI B17 02 12: false low-coolant warning (early F30)	On early F30 N20/N26 cars built through 8/2012, a corroded coolant-level sensor connector can trigger a false low-coolant warning. Rule it out before replacing the tank. SHOP/RETAILER [19]	Doesn't apply to this build
Timing-chain warranty extension and extended coverage	A 7-year/70k extension (SI B11 03 17), then SI B11 02 21 for MY2012–2015 cars built through February 2015: up to 8 years / 100,000 miles, with tiered reimbursement above 70,000. OFFICIAL [2]	Coverage likely expired (estimate)
SIB B01 03 22: fuel tank emission warranty extension	BMW extended the emission warranty on the plastic fuel tank to 15 years / 150,000 miles from the in-service date, for leaks due to defects (not fuel-gauge or fuel-transfer problems). Listed N20 cars: 2-door and 4-door F2x/F3x 228i, 320i, 328i and 428i built from Oct 2011 (328i sedan) to between Jun 2015 and Apr 2016 depending on model (for example 328i sedan automatic Oct 19, 2011–Jul 16, 2015; 328i sedan manual to Apr 28, 2016; 320i to Apr 30, 2016). X1, X3, X4, Z4 and 528i are not listed. OFFICIAL [36]	May apply: check model and build date

BUILD-DATE VERDICT

Timing chain: build-date verdict

Original chain design Based on model year 2014 (build month not entered).

BMW updated the N20 chain parts during production, and no BMW document we have gives the exact changeover date. SI B11 02 21 covers cars produced through February 2015; SI B11 03 17 (Rev. 7) lists 328i production through July 2015. OFFICIAL [2][35]

Read the door-jamb label

Open the driver's door and read the manufacture date on the door-jamb label (MM/YY). 02/15 or earlier = original design; 03/15–07/15 = ask a dealer; 08/15 or later = likely revised.

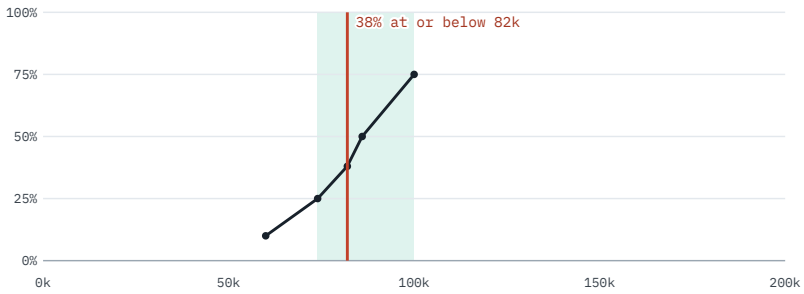
Warranty and extended coverage

BMW's extended chain coverage (SI B11 02 21) applied to MY2012–2015 cars built through February 2015, up to 8 years / 100,000 miles with tiered reimbursement above 70,000. By 2026 that coverage has effectively ended (estimate). If a chain repair was paid inside the window and never claimed, ask a dealer to check the VIN.

3 · OWNER-REPORT DATA

Timing chain: what owner reports show

Of 145 owners who reported a timing-chain failure to NHTSA with a mileage, about 4 in 10 had 82k or fewer miles. This car's 82k is inside the 74k–100k range where the middle half of reports fell.



Line = share of the 145 reports at or below each mileage, drawn through the published percentiles (dots). Shaded = middle half of reports, 74k–100k. Half came before about 86k (95% confidence range 83k–90k).

COMPUTED FROM NHTSA DATA

How to read this. Data: owners who filed an NHTSA complaint about a timing-chain failure and gave a mileage (145 of 228). Cars that never failed, and owners who didn't complain, aren't in it, so this is not a failure rate or a prediction for any car.

Share of N20 complaints that mention the chain, by model year: MY2012 20.6% · MY2013 23.0% · MY2014 5.6% · MY2015 2.4% · MY2016 4.2% · MY2017 0.0%. Publicity about BMW's coverage may have increased reporting.

Computed by RepairAhead from NHTSA data (version 2026-10-19); NHTSA has not reviewed or endorsed this analysis.

4 · THE 8 WEAK POINTS

Each weak point, one card each

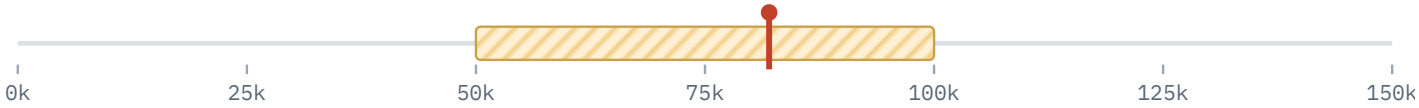
Every figure carries its source. Retailer part numbers are shown only when the retailer lists them for this chassis (F30).

1 Timing chain, guides & tensioner

Inside the range

Severity: Critical: rare, but can badly damage the engine · 228 mentions in VIN-confirmed NHTSA complaints COMPUTED FROM NHTSA DATA

At 82,000 mi this car is inside the reported range (50k–100k), 32,000 miles past where reports start. Range: 50k–100k OUR ESTIMATE [1][5]



“Usually after 50,000 miles” (BMWTuning) and an independent shop that doesn't usually see failures “until around 75k” (r/F30). The 50k–100k working range is our estimate. Half of 145 reported chain failures with a mileage came before about 86,000 miles.

WHAT FAILS FORUM/BLOG [1][4]

The original polymer chain guides wear. The chain gains slack and can skip timing or break. The N20 is an interference engine, so the pistons can hit the valves. The job also covers the oil-pump drive chain.

SYMPTOMS

- A loud whine from the front of the engine that rises with RPM, most noticeable cold
- Chain slack visible through the oil filler opening (a shop can judge this)

IF IT'S LEFT TOO LONG

A broken or skipped chain usually means a used or replacement engine.

IS IT WORTH DOING EARLY? OUR ESTIMATE

The big decision on an original-design car you plan to keep. Have a BMW-experienced shop measure chain stretch and guide wear first; if you hear a cold-start whine, get it checked soon and avoid hard driving.

ESTIMATED REPAIR COST

Fix early	**Our price is in the plan above** ask us for a written quote
If it fails	**$6,000–$10,000** FORUM/BLOG [10] [1][11] reported range for the bill after a failure

PARTS FOR F30

- FCP Euro N20/N26 timing chain kit 11318648732KT, rear-wheel drive / sDrive (with updated sprockets) SHOP/RETAILER [6]
  Listed for the N20; confirm by VIN

1 retailer listing for other chassis or drivetrains left out.

QUESTIONS TO ASK US

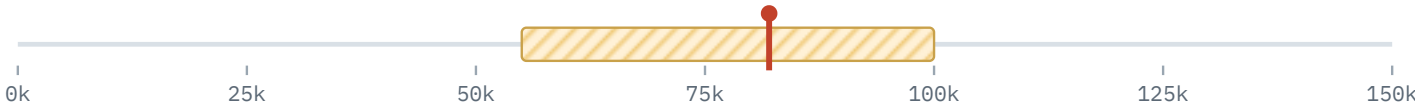
- Will you use BMW's current (updated) chain, guides, tensioner and oil-pump drive parts? Can I see the part numbers on the invoice?
- Does the quote include dropping the subframe, and what would the oil pan gasket and engine mounts add?
- Can you check chain slack and guide wear before I commit?

2 Electric water pump + thermostat

Inside the range

Severity: High: overheating, stalls, limp mode or a big bill · 91 mentions in VIN-confirmed NHTSA complaints COMPUTED FROM NHTSA DATA

At 82,000 mi this car is inside the reported range (55k–100k), 27,000 miles past where reports start. Range: 55k–100k FORUM/BLOG [14][13]



55k–85k (BimmerTalk) and 60k–100k (Torrance Motors), combined.

> Check recall 24V-608 first. If NHTSA lists the car, a dealer inspects the pump connector free and replaces the pump/connector if needed.

WHAT FAILS SHOP/RETAILER [12][13]

The N20 uses an electric, engine-computer-controlled water pump. The motor fails, often without warning, and the engine overheats.

SYMPTOMS

- Overheat or coolant warning on the dash
- Weak cabin heat
- Radiator fan running hard
- Fault codes 2E81 / 2E82

IF IT'S LEFT TOO LONG

Driving on after an overheat warning can blow the head gasket or crack the head: “a $600–900 repair into a $3,000+ one” (BimmerTalk).

IS IT WORTH DOING EARLY? OUR ESTIMATE

Strong case, after the free recall check. If the dealer replaces the pump under 24V-608, only the tank and hose remain.

ESTIMATED REPAIR COST

Fix early	**Our price is in the plan above** ask us for a written quote
If it fails	**$3,000–$6,000** OUR ESTIMATE [14] reported range for the bill after a failure

PARTS FOR F30

- Electric water pump BMW 11 51 8 635 089 / Pierburg 7.03665.66.0 SHOP/RETAILER [16][17]
  Listed for F30
- Thermostat: ask your supplier for the OE number for this VIN.

QUESTIONS TO ASK US

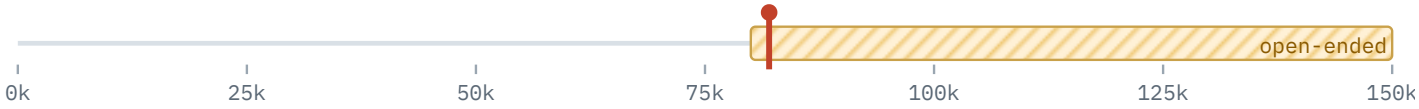
- Is recall 24V-608 open on my VIN, and will a dealer replace the pump/connector under it?
- If paying: is the pump genuine BMW or Pierburg 11 51 8 635 089, and is the thermostat included?
- Are there stored 2E81/2E82 codes?

3 Coolant expansion tank & vent hose

Inside the range

Severity: High: overheating, stalls, limp mode or a big bill · 12 mentions in VIN-confirmed NHTSA complaints COMPUTED FROM NHTSA DATA

At 82,000 mi this car is inside the reported range (80k+ or 8–12 years), 2,000 miles past where reports start. Range: 80k+ or 8–12 years OUR ESTIMATE



Age-driven; typically 8–12 years / 80k+ (our estimate).

WHAT FAILS FORUM/BLOG [19][1]

The plastic tank cracks at its bonded seam and the vent hose cracks, giving sudden coolant loss.

SYMPTOMS

- Low-coolant warning
- Sweet smell or dried coolant crust at the tank seam
- Sudden coolant loss

IF IT'S LEFT TOO LONG

Same overheating exposure as the water pump if it's driven hot.

GOOD TO KNOW

On early F30s built through 8/2012, rule out a corroded coolant-level sensor connector (SI B17 02 12) before replacing the tank for a warning.

IS IT WORTH DOING EARLY? OUR ESTIMATE

A cheap part that ages at the same rate as the pump; add it to the cooling bundle.

ESTIMATED REPAIR COST

Fix early	**Our price is in the plan above** ask us for a written quote
If it fails	**$1,500–$4,000** OUR ESTIMATE [14] reported range for the bill after a failure

PARTS FOR F30

- Coolant vent hose 17 12 8 570 061 SHOP/RETAILER [19]
  Fitment not confirmed for this chassis; confirm by VIN
- Expansion tank and cap: ask your supplier for the OE number for this VIN.

QUESTIONS TO ASK US

- Is the tank original? Any crust or weeping at the seam?
- What does it add if done with the water pump?

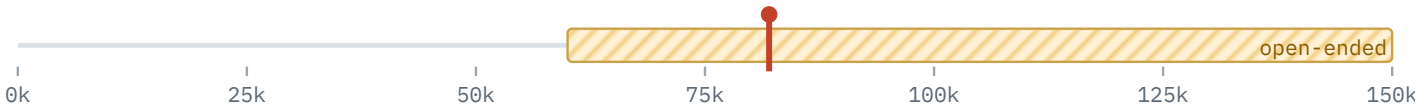
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4 Oil filter housing gasket + belt

Inside the range

Severity: High: overheating, stalls, limp mode or a big bill · 11 mentions in VIN-confirmed NHTSA complaints COMPUTED FROM NHTSA DATA

At 82,000 mi this car is inside the reported range (60k+ and 6+ years), 22,000 miles past where reports start. Range: 60k+ and 6+ years FORUM/BLOG [1]



WHAT FAILS FORUM/BLOG [20][21]

The rubber gaskets harden and leak. Oil reaches the serpentine belt, which swells and shreds; a shredded belt can be pulled in behind the crank pulley and damage the front crank seal.

SYMPTOMS

- Oil seeping down the front left of the block
- Burning-oil smell
- Oil on the belt, or a frayed belt

IF IT'S LEFT TOO LONG

ESTIMATED REPAIR COST

Fix early	**Our price is in the plan above** ask us for a written quote
If it fails	**$1,500–$4,000** OUR ESTIMATE reported range for the bill after a failure

PARTS FOR F30

- Aluminum oil filter housing 11 42 8 637 812 (service-action replacement for the early plastic housing)

Belt, crank seal and cleanup plus a tow. Rare worst case: engine damage from belt debris.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Do it with the timing chain while the front is open, or on its own with the cooler seals and a new belt.

OFFICIAL [22]

Listed for the N20; confirm by VIN

- Gasket / oil-cooler seal kit and belt: ask your supplier for the OE numbers for this VIN.

QUESTIONS TO ASK US

- Is there oil on the belt or the front left of the block?
- Does the quote include the oil cooler seals and a new belt?

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5 Valve cover / PCV valve

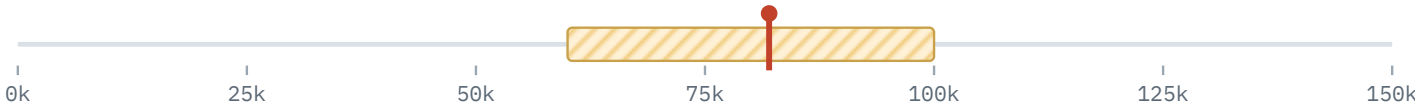
Inside the range

Severity: Medium: leaks and wear · 28 mentions in VIN-confirmed NHTSA complaints

COMPUTED FROM NHTSA DATA

At 82,000 mi this car is inside the reported range (60k–100k+ and 6+ years), 22,000 miles past where reports start.

Range: 60k–100k+ and 6+ years FORUM/BLOG [1][23]



WHAT FAILS FORUM/BLOG [1][23]

The plastic cover and gasket go brittle and crack, and oil leaks onto the exhaust and turbo. The PCV diaphragm is molded into the cover, so a torn diaphragm means a new cover.

SYMPTOMS

- Oil smoke or smell from the exhaust side
- Whistle at idle
- Oil filler cap sucked down hard at idle (PCV)
- Lean code P0171

IF IT'S LEFT TOO LONG

Oil-fouled sensors, catalytic converters and mounts: “a $1,000 job becomes a $2,500 one”. Oil on the exhaust is a fire risk.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Fix when a seep or PCV fault shows. Have it checked during the ignition job; the coils come off anyway.

ESTIMATED REPAIR COST

Fix early	**Our price is in the plan above** ask us for a written quote
If it fails	**$2,000–$3,000** OUR ESTIMATE [23] reported range for the bill after a failure

PARTS FOR F30

- Valve cover with integrated PCV: ask your supplier for the OE or OE-supplier number for this VIN.

QUESTIONS TO ASK US

- Any oil on the exhaust side or turbo?
- Is the oil cap sucked down at idle, or is there a whistle?

6 Oil pan gasket

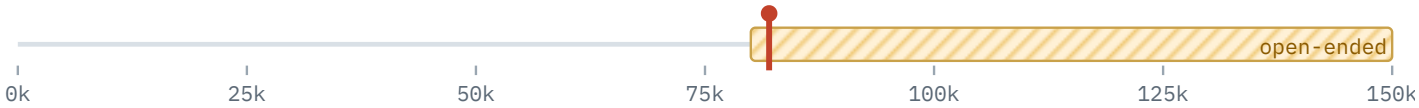
Inside the range

Severity: Medium: leaks and wear · 12 mentions in VIN-confirmed NHTSA complaints

COMPUTED FROM NHTSA DATA

At 82,000 mi this car is inside the reported range (80k+), 2,000 miles past where reports start. Range: 80k+

OUR ESTIMATE



Our estimate; no good public mileage figure.

WHAT FAILS FORUM/BLOG [25]

The gasket seeps. On most cars the front subframe has to be dropped, so the job is labor-heavy; xDrive cars add axle work and an alignment.

SYMPTOMS

- Oil drips under the engine
- Burning smell after driving

IF IT'S LEFT TOO LONG

Done on its own after it starts leaking: $1,500–$2,500 at an independent shop. Oil on the exhaust adds a smoke risk.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Not worth doing alone. Best done while the subframe is down for the timing chain.

ESTIMATED REPAIR COST

Added cost with the timing-chain job	**Our price is in the plan above** ask us for a written quote
If it fails	**$1,500–$3,500** OUR ESTIMATE reported range for the bill after a failure

PARTS FOR F30

- ECS upper/lower oil pan gasket kit with bolts (BMW101412KT) SHOP/RETAILER [26]
  Listed for the N20; confirm by VIN

QUESTIONS TO ASK US

- If you're doing the chain: what does the oil pan gasket add while the subframe is down?
- If not: is it actually leaking, or just damp?

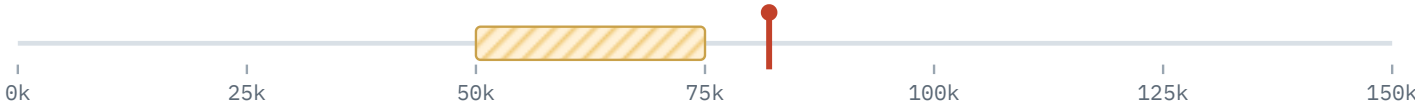
7 Spark plugs & ignition coils

Past the range

Severity: Medium: leaks and wear · 14 mentions in VIN-confirmed NHTSA complaints

COMPUTED FROM NHTSA DATA

At 82,000 mi this car is past the reported range (Plugs 50k–60k · coils 60k–75k). If the original parts are still fitted, have them checked and plan for them. Range: Plugs 50k–60k · coils 60k–75k FORUM/BLOG [1]



Stock intervals (BMWTuning). Tuned cars: plugs every 20k–25k, coils every 25k–35k.

WHAT FAILS FORUM/BLOG [1]

The pencil coils fail at random, and plugs wear. Misfires follow.

SYMPTOMS

ESTIMATED REPAIR COST

Fix early	**Our price is in the plan above** ask us for a written quote
If it fails	**$1,000–$2,500** OUR ESTIMATE

- Misfire or rough idle
- Flashing check-engine light
- Limp mode under boost

IF IT'S LEFT TOO LONG

A misfire under boost can overheat the catalytic converter.

IS IT WORTH DOING EARLY? OUR ESTIMATE

Routine maintenance. Replace the 4 coils with the plugs if they're original past about 75k; check the valve cover while you're there.

	reported range for the bill after a failure

PARTS FOR F30

- Use the OE-spec plug and coil numbers your supplier lists for this VIN.

QUESTIONS TO ASK US

- When were the plugs last done? Are the coils original?
- Any stored misfire codes?

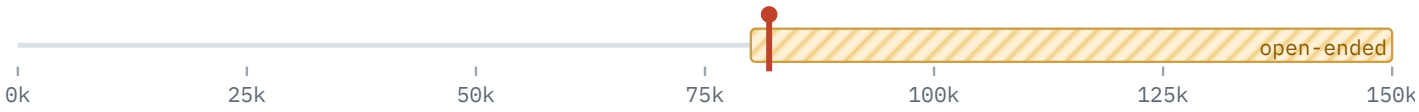
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8 Turbo wastegate

Inside the range

Severity: High: overheating, stalls, limp mode or a big bill · 12 mentions in VIN-confirmed NHTSA complaints COMPUTED FROM NHTSA DATA

At 82,000 mi this car is inside the reported range (80k+), 2,000 miles past where reports start. Range: 80k+ OUR ESTIMATE



WHAT FAILS SHOP/RETAILER [28][29]

The wastegate flap bushing on the TD04 turbo wears. It usually sets no fault code until it causes underboost or limp mode. BMW's wastegate extension applied to the N54, not the N20.

SYMPTOMS

- Metallic “clack-clack” at cold start, idle or light throttle
- A rattle that goes away warm is “watch”; one that persists hot is “fix”
- Underboost or limp mode (codes 30FF / 120308 reported)

IF IT'S LEFT TOO LONG

Turbo replacement: about $3,500 at an independent shop.

IS IT WORTH DOING EARLY? OUR ESTIMATE

An inspection doesn't stop wear. Its value is early warning: budget for a turbo, buy used or reman, or sell first.

ESTIMATED REPAIR COST

Sound and play check	**Our price is in the plan above** ask us for a written quote
If it fails	**$3,500–$5,000** OUR ESTIMATE [30] reported range for the bill after a failure

PARTS FOR F30

- Inspection item; no preventive part.

QUESTIONS TO ASK US

- Do you hear wastegate rattle on a cold start, and does it persist when hot?
- Any stored 30FF or 120308 codes?

5 · ALSO REPORTED, NOT RANKED

Other themes in N20 owner complaints

Every NHTSA complaint theme with 20 or more VIN-confirmed reports is either a weak point above or explained here.

THEME	COMPLAINTS	WHY IT ISN'T A WEAK POINT
Stall / loss of power / limp	276	A symptom with many causes (chain, fuel pump, wastegate, ignition, electrical). The engine causes we can source are scored as their own items.
Auto start-stop / battery	64	Mostly battery and battery-sensor faults: a maintenance item, not an engine weak point.
Overheat	64	A symptom. Its usual causes are the cooling items (water pump, expansion tank and vent hose).
Fuel pump / HPFP	63	Not ranked yet. The in-tank pump on 2014 cars is covered by recall 15V-189 (listed for this model year). We don't yet have sourced ranges or costs for the high-pressure pump.
Generic oil leak	29	Unspecified leaks. The named N20 leak points are scored as the oil filter housing, valve cover and oil pan items.

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 18, 2026 for every N20 trim name, MY2012–2015. The raw pull (2,088) over-counts because NHTSA groups trims; we decoded each complaint's partial VIN and kept 1,726 VIN-confirmed N20 complaints (dropped 244 other engines, 118 with no usable VIN). By model year: 2012: 176 · 2013: 636 · 2014: 454 · 2015: 460. 62 report a fire (all causes), 105 a crash, 76 injuries. `COMPUTED FROM NHTSA DATA`

THEME	COMPLAINTS	IN THIS REPORT
Stall / loss of power / limp	276	Also reported
Timing chain / tensioner / guide	228	Item 1
Water pump / coolant pump	91	Item 2
Auto start-stop / battery	64	Also reported
Overheat	64	Also reported
Fuel pump / HPFP	63	Also reported
Turbo	56	Item 8
Generic oil leak	29	Also reported
Valve cover / PCV	28	Item 5
Thermostat	22	Item 2
Ignition coil / plug / misfire	14	Item 7
Oil pan	12	Item 6
Coolant leak / hose / tank	12	Item 3
Wastegate	12	Item 8
Oil filter housing	11	Item 4
Injector	4	—
Charge pipe	0	—

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.

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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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