VibeSensor NVH Diagnostic Report - Concept Mockup

Run date/time: 2026-02-20 09:14
Car: BMW 640i Gran Turismo
Type: G32 640i RWD
Worksheet layout refined | Prosumer + mechanic

Observed signature

Primary pattern: Driveline
Strongest sensor: Driveshaft tunnel
Speed band: 82 - 108 km/h
Strength: Strong
Certainty: Medium (overlapping rear sensor signals)
Pattern-based suggestion only. Parts listed are common matches for system + location.

Systems with findings

Driveline

Observed: Primary pattern at driveshaft tunnel

Common associated parts

- Guibo / flex disc (driveline + center hotspot)
- Center support bearing (center cabin path)
- Propshaft (speed-linked driveline pattern)

Wheel/Tire

Observed: Secondary rear-left wheel pattern

Common associated parts

- Rear tire imbalance / flat spot (rear-left asymmetry)
- Bent rear wheel (wheel/tire pattern)
- Rear-left wheel bearing (recurring rear-left signal)

Next steps

Pri	System	Next step
1	Driveline	Inspect guibo / flex disc for cracks, play, or tearing
2	Driveline	Check center support bearing and mount condition
3	Driveline	Inspect propshaft for damage or runout history
4	Wheel/Tire	Swap rear wheels and repeat same speed-band test
5	Wheel/Tire	Road-force balance rear wheels if signal remains

Data trust

Run quality: Good

- 4 sensors active
- Good speed coverage
- Minor rear overlap
- No clipping

Use checks to confirm before replacing parts.

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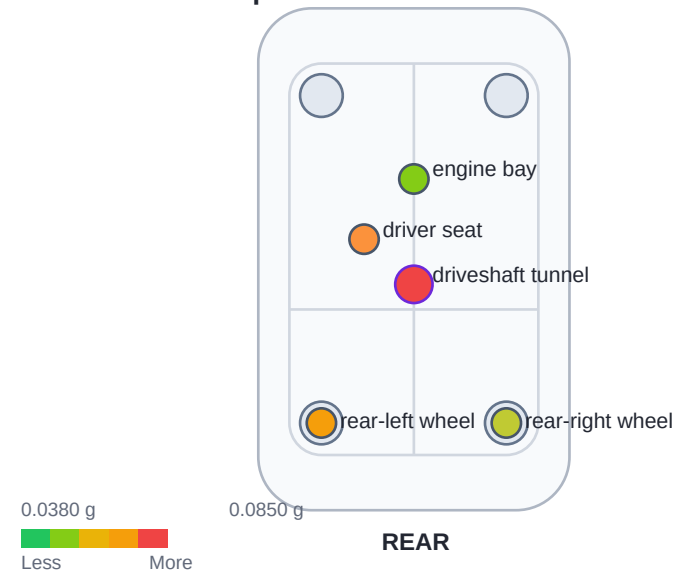
Hotspot map (current visual kept)
Evidence and hotspots



The car hotspot visual stays on page 2.

Pattern evidence (replaces graph)

Matched systems: Driveline (primary), Wheel/Tire (secondary)
Strongest location: Driveshaft tunnel **Speed band:** 82 - 108 km/h
Strength: Strong **Certainty:** Medium (overlapping rear sensor signals)
Warning: Rear wheel overlap. Confirm with wheel swap or lift checks.
Interpretation: Center-cabin dominance points to driveline first.

Why these parts were listed

System	Part shown	Why shown
Driveline	Guibo / flex disc	Center hotspot + driveline band
Driveline	Center support bearing	Center cabin transmission path
Driveline	Propshaft	Speed-linked driveline pattern
Wheel/Tire	Rear-left tire / wheel	Rear-left asymmetry

Top peaks and system relevance

Peak	Freq / order	Likely system	Location
1	47.8 Hz / 1.9x	Driveline	Driveshaft tunnel
2	23.9 Hz / 0.95x	Wheel/Tire	Rear-left wheel
3	95.4 Hz / 3.8x	Driveline	Driver seat