

Blackreef — AxiomIQ Fleet Overview

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Coverage: 2026-01-01 -> 2026-03-31 | Samples: 64800 | Engines: 6

Run Configuration

Version: 0.1.0

Key Changes Since Last Report

- DG3 priority reduced HIGH → MED.
- DG3 top risk changed charge_air_pressure_bar → htcw_engine_outlet_temp_c.

Fleet Verdict

DG2, DG5, DG1, DG3, DG4, DG6 shows degradation and should be scheduled for inspection.

This page ranks generator sets by operational priority using health score, drift severity, and estimated time-to-limit.

| Engine | Trend | Health | Top Risk | Reason | Action | ETA | Pri |
|--------|-------|--------|---------------------------|---|------------------|-----|-----|
| DG2 | | 66.5 | htcw_engine_outlet_temp_c | Health 66.5 (<80) and ETA unavailable; schedule inspection (htcw_engine_outlet_temp_c). | Sched next maint | N/A | MED |
| DG5 | | 69.4 | lo_inlet_temp_c | Health 69.4 (<80) and ETA unavailable; schedule inspection (lo_inlet_temp_c). | Sched next maint | N/A | MED |
| DG1 | | 70.4 | lo_inlet_temp_c | Health 70.4 (<80) and ETA unavailable; schedule inspection (lo_inlet_temp_c). | Sched next maint | N/A | MED |
| DG3 | | 70.4 | htcw_engine_outlet_temp_c | Health 70.4 (<80) and ETA unavailable; schedule inspection (htcw_engine_outlet_temp_c). | Sched next maint | N/A | MED |
| DG4 | | 70.6 | htcw_engine_outlet_temp_c | Health 70.6 (<80) and ETA unavailable; schedule inspection (htcw_engine_outlet_temp_c). | Sched next maint | N/A | MED |
| DG6 | | 72.1 | htcw_engine_outlet_temp_c | Health 72.1 (<80) and ETA unavailable; schedule inspection (htcw_engine_outlet_temp_c). | Sched next maint | N/A | MED |

Blackreef — AxiomIQ Analytics Report

Executive Summary

Engine DG2 is currently operating within defined limits, with an overall health score of 66.5 out of 100. Analysis indicates developing drift patterns rather than immediate failure conditions.

Key Developing Risk Indicators

- **htcw_engine_outlet_temp_c (High Temperature Cooling Water) Trend:** →

Observed trend suggests: Increasing HT cooling water outlet temperature may indicate reduced heat transfer, cooler fouling, or elevated engine thermal load.

Risk classification: Thermal stress and reduced margin

Estimated time to limits: min=N/A | max=N/A

- **charge_air_pressure_bar (Air Intake / Turbocharging) Trend:** →

Observed trend suggests: A sustained decline in charge air pressure may indicate intake restriction, air filter fouling, or reduced turbocharger efficiency.

Risk classification: Performance degradation leading to thermal stress

Estimated time to limits: min=N/A | max=N/A

- **engine_lo_inlet_pressure_bar (Main Lubrication System) Trend:** →

Observed trend suggests: A gradual drop in lube oil inlet pressure can indicate filter loading, pump wear, or internal leakage.

Risk classification: Loss of lubrication margin

Estimated time to limits: min=N/A | max=N/A

- **tc_lo_inlet_pressure_bar (Turbocharger Lubrication) Trend:** →

Observed trend suggests: Declining turbocharger lube oil pressure may suggest filter restriction or pump performance issues.

Risk classification: Turbocharger bearing wear

Estimated time to limits: min=N/A | max=N/A

- **lo_inlet_temp_c (Lubrication Oil) Trend:** →

Observed trend suggests: Rising lube oil inlet temperature can indicate reduced cooling efficiency, oil cooler fouling, or increased engine friction.

Risk classification: Accelerated wear and oil breakdown

Estimated time to limits: min=N/A | max=N/A

Operational Recommendations

- No immediate shutdown or load reduction is recommended at this time.
- Prioritize inspection of the highest-risk subsystem during the next planned maintenance opportunity.
- Monitor key lubrication and cooling parameters for continued drift over the next 72 hours.
- Re-run AxiomIQ analysis after additional data is collected (ideally 7–14 days).