MOTTA LUBRICATION | TECHNICAL GUIDANCE

GL5 SERIES

GL-5 Vehicle aceites de engranajes

OPERATION AND HANDLING INSTRUCTIONS

N.º de documento	Revisión	Fecha de emisión	Release status
MOTTA-GL5-OHI-ES	REV.04	2026-09-13	Emitido para use

Use con the current producto TDS, SDS y equipo service instructions. Emitido by MOTTA Lubricants. The current Revisión de Este documento is published at motta-lube.com/documentos/ — if your copy differs, that list governs.

1 Alcance

For MOTTA GL5 y LHD GL5 productos in suitable vehicle axles, differentials y final drives. Follow the exact axle specification. This is not a general manual-transmission, industrial-gear, wet-brake or automatic-transmission fluid guide.

MOTTA productos covered by this handbook

Producto	grados	Standards y nivel de desempeños	Formatos de envase
MOTTA GL-5 Series	SAE 75W-90, 80W-90, 85W-140	API GL-5	4L / 18L / 200L
MOTTA LHD GL-5 Series	SAE 80W-90, 85W-140	API GL-5	4L / 18L / 200L

grados, standards y Formatos de envase as published on each producto's Ficha técnica at motta-lube.com/productos/. Where a data sheet y this table differ, the data sheet governs.

2 Aplicación y fricción requisitos

- Confirm the required SAE viscosity y axle performance specification. API GL-5 alone does not establish suitability para a synchronised manual transmission or replace its especificado GL-4 or dedicated transmission oil; verify fricción y material requisitos para the exact Unidad.
- For limited-slip differentials, verify the required fricción performance y whether the exact producto is suitable. No infer limited-slip suitability from GL-5 alone or add fricción modifier without the vehicle y lubricante instructions.
- Check producto name, grado, lote y container seal. Keep axle aceite separate from aceite de motor, ATF, brake fluid y other workshop fluids.

3 Safe drain y fill

- Park y secure the vehicle; stop y isolate as required. Use rated supports or a lift para underbody access, Nunca a jack alone. Allow the axle y aceite to reach a safe Manejo condition antes de opening plugs.
- Confirm that the correct filler can be opened antes de draining. Inspect the breather and, donde fitted, the magnetic plug using the service procedure. Investigate abnormal debris; No treat all deposits as normal running-in material.

Traducción de la versión inglesa. En caso de diferencia, prevalece la versión inglesa.

- Fill at the vehicle attitude, temperatura y level or quantity especificado para that axle. The lower edge de the filler opening is not a universal level reference. Refit seals y plugs to the especificado torque y verificar para leaks.

4 Initial run y routine verificars

- Restore guards y complete the especificado post-service test. Monitor noise, leakage y abnormal heating from safe positions; follow the axle maker's running-in requisitos después de replacement or overhaul.
- Check level y service at the especificado distance, hours or time, using the severe-duty procedure para towing, off-road or water exposure donde applicable. Inspect promptly después de suspected water ingress; immersion alone does not define one universal drain procedure.

5 Changeover y condition assessment

- Use the especificado producto para top-up y investigate ongoing level loss. Before changing producto, confirm the axle specification y compatibilidad; similar colour or viscosity is insufficient. No use unprescribed solvent Purgaring or additives.
- aceite colour alone does not authorise continued use or require replacement. Assess contamination, metal debris y operating symptoms; repair water-entry paths or mechanical faults antes de refill y return to service.

6 Fault response

- For significant abnormal noise, overheating, severe leakage or loss de drive, stop safely y arrange inspection antes de further use. No keep driving to see whether fresh aceite cures a mechanical fault.
- For limited-slip chatter, investigate the correct fluid, fill y axle condition. No automatically add more fricción modifier or increase viscosity.

7 Valores de referencia — indicativos, no una especificación de MOTTA

The figures below are published industry references, given so that a reading can be judged on site when the máquina documentación is not to hand. They are screening prompts, not scrap limits. Where the fabricante del equipo, the component manufacturer or your aceite analysis laboratory states a figure, that figure governs y this table does not apply.

Specification y grado reference

Reference	What it covers	Published by
API GL-5	Hypoid axle service severity	API
SAE J306	Automotive aceite de engranajes grado de viscosidads	SAE

GL-5 y GL-4 are not interchangeable. A GL-5 aceite in a synchromesh gearbox especificado para GL-4 can attack yellow metals. Confirm the required API level antes de substituting.

When a reading is worth investigating

What is measured	Prompt to investigate	Why this figure
Cinemática viscosity at 40 °C	More than ±10 % from the new-aceite reference para that producto	Common condition-monitoring screening Valor; also confirms the correct producto is in the sistema
Water content	Above 0.05 % (500 ppm), or any free or emulsified water	Free water attacks additive sistemas y bearing surfaces at any level

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A single result is a reason to look, not a reason to drain. Establish the new-aceite reference para el producto actually in use, trend against it, y find the cause antes de changing the aceite — changing the aceite does not remove a contamination source or a mechanical fault.

8 Almacenamiento y residuos Manejo

- Keep original containers closed, dry y clearly labelled. proteger de la contaminación, ignition sources y incompatible materials; follow el producto SDS para Manejo y protective equipo.
- Use limpieza, dry, labelled transfer containers, Nunca food containers. Collect used aceite, filters y aceitey materials separately para appropriate Eliminación; keep aceite out de drains y saceite.

Use y documento information

producto-specific y equipo requisitos govern selection y service. Resolve conflicting instructions con the equipo y lubricante technical contacts antes de proceeding. Follow the site Seguridad y residuos-Manejo procedures.

Revisión 02: Added limited-slip selection y safe axle servicing; corrected universal filler-level y GL-5 substitution wording. Revisión 03: added a reference-Valores section — published industry figures para on-site screening. Revisión 04: corrected the reference Valores para slideways, spindles, sintético aceites de engranajes y ready-to-use refrigerante; added the table de MOTTA productos covered; added the copyright y trademark notice.

Recommended Records to Retain

Record	Details to retain
Unidad / duty	Vehicle y axle model, differential type, mileage/hours y water exposure.
aceite / service	Exact producto y grado, lote, quantity, service date, filters y person responsible.
Condition / action	Top-ups, faults, sample results y Métodos donde used, diagnosis y corrective action.

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