



## GC-LB Specification

All requirements and descriptions are fully described in ASTM D4950. See Tables 10.2 (LB chassis grease) and 10.3 (GC wheel bearing grease) for requirements. It is best to refer to the latest ASTM D4950 standards for exact specification requirements.

Table 10.2 Guide to requirements: LB chassis grease

ASTM D4950 Specification Requirements for LB Chassis Grease		
Test	Description	Acceptance Limits
D217	Consistency, Worked Penetration, mm/10	220-340 (A)
D2265 (D566)	Dropping Point, °C, min.	150
D1742	Oil Separation, mass%, max.	10
D1743	Rust Protection, rating, max.	Pass
D2266	Four Ball Wear, Scar Diameter mm, max.	0.6
D2596	Four Ball EP, Load Wear Index, kgf, min.	30
	Four Ball EP Weld, kgf, min.	200
D4170	Fretting Wear, max loss, mg, max.	10 (B)
D4289	Elastomer Compatibility SAE AMS3217/3C:	
	Compatibility: Volume Change, %	0 to 40
	Hardness Change, Durometer A points	-15 to 0
D4693	Low-Temperature Torque @ -40 °C, N*m, max.	15.5

(A) Vehicle manufacturer's requirements may be more restrictive; grease containers should display the NLGI Grade as well as category designation.

(B) The fretting wear requirement is significant in passenger car and light-duty truck service, but it was not known to be significant in heavy-duty truck applications at the time this specification was developed.

Table 10.3 Guide to requirements: GC Wheel Bearing Grease

ASTM D4950 Specification Requirements for GC Wheel Bearing Grease		
Test	Description	Acceptance Limits
D217	Consistency, Worked Penetration, mm/10	220-340 (A)
D2265 (D566)	Dropping Point, °C, min.	220
D1264	Water Washout, 80 °C, %, max.	15
D1742	Oil Separation, mass%, max.	6
D1743	Rust Protection, rating, max.	Pass
D2266	Four Ball Wear, Scar Diameter mm, max.	0.9
D2596	Four Ball EP, Load Wear Index, kgf, min.	30
	Four Ball EP Weld, kgf, min.	200
D3527	High-Temperature Life, hours, min.	80
D4289	Elastomer Compatibility SAE AMS3217/2C:	
	Compatibility: Volume Change, %	-5 to 30
	Hardness Change, Durometer A points	-15 to 2
D4290	Leakage, g, max	10
D4693	Low-Temperature Torque @ -40 °C, N*m, max.	15.5

(A) Vehicle manufacturer's requirements may be more restrictive; grease containers should display the NLGI Grade as well as category designation.