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**KIC SERVICE BULLETIN – LUBRICATION FILL VOLUMES**

KIC recommends following TMC RP 631 for lubricant fill instructions, which specifies the use of oil and semi-fluid grease. Following this recommended practice, there are two different fill volumes to be observed:

- Oil is filled to the maximum fill line on the hubcap sight glass below the axis of rotation (27 mm for 001 axles, 20 mm for 002/004/005 axles)
- Semi-Fluid grease is filled up to the rotational axes of the hub, while the hub mounted on the axle. The hubcap in RP 631 is assembled after the semi-fluid grease has been added to the hub.

The Industry sometimes will use NLGI Grade #2 grease instead of oil or semi-fluid grease. NLGI #2 grease at room temperature is solid. The common approach to fill hubs with #2 grease is to hand pack the full inside perimeter of the hub between the bearing cups to smallest bearing cup diameter. Additionally, the two bearing cones should be individually packed with grease. At normal hub operating temperatures (e.g. ~150 F), NLGI #2 grease will become fluid-like.

The lubrication volumes in the table below were calculated based on dimensional data of the hub and estimated hubcap and spindle displacements. Seal displacement was not taken into consideration, and is assumed to be negligible.

<b>Axle Prefix</b>	<b>Assembly Number</b>	<b>Oil (fl. oz.)</b>	<b>Semi-Fluid Grease (fl. oz.)</b>	<b>NLGI Grade #2 Grease (fl. oz.)</b>
001	001-00103	19	22	38
001	001-00125 001-01000	14	18	31
001	001-10511	12	15	23
001	001-02540	19	22	37
001	001-75207	16	20	30
002	002-00137	12	15	24
004	004-00143	34	37	35
004	004-40103	35	36	35
005	005-01005	20	20	29
011	011-04000	7	8	12

If a particular assembly number is not in the list, please contact KIC Engineering at 800-488-5422.

KIC provides this information as a reference source only. Lubrication type and fill volume should be verified for per wheel end assembly configuration. KIC does not assume any liability in the event of improper use, mismatch of components, or incompatibility of a given lubricant for the application or system components.

For non-KIC products, you should consult with the product’s manufacturer for lubrication fill recommendations.