

ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

No. OP2/377(4)/2002-MED

Office of the VC & MD
Mushirabad. Hyderabad-20.

CIRCULAR No. 07/2002-MED, DT. 18-07-2002

SUB. :- PREVENTIVE MAINTENANCE - Periodicity of change of High Performance Wheel Bearing Grease - Reg.

REF. :- Circular No. 23/1994-MED, Dt. 23-07-1994.

Vide Circular cited at reference, instructions were issued to change the high performance wheel bearing grease in the Vehicles as follows.

TATA	48,000 KMs.	(Every Fourth Sch.III)
LEYLAND	36,000 KMs.	(Every Sch.-IV)

Recently, a survey was conducted at some Depots in Leyland and Tata areas to ascertain the consumption pattern of wheel bearing grease. Such survey has revealed that early and premature change of wheel Bearing Grease is carried out ignoring the fact that we have introduced high performance Grease. Such action has in turn reflected in excess consumption of wheel bearing grease.

It is understood that Depot Mechanics are in the habit of changing the wheel bearing grease in every Sch. III maintenance with an apprehension that the grease has lost its viscosity and other properties.

Recent training programmes organised at various Depots on dry setting of hub revealed that, the Mechanics in Depots are accustomed to fit the front & rear hubs without any play with an impression that any play in hubs adversely affects the tyre life. Due to this preloading of bearings, the rollers get damaged and the excessive heat generated on account of not maintaining required play. As a result grease gets melted. At most Depots hub servicing is done without dry setting the hub and packed with wheel bearing grease.

In view of the above prevailing practices at the Depots, the following fresh guidelines are issued for strict implementation.

- 1) Sch-III/IV maintenance is carried out at different mileages for different tyres of Buses. Therefore it is felt necessary that change of wheel bearing grease has to be synchronized with Sch-III/IV maintenance as follows. The periodicity of change of wheel bearing grease for Tata Vehicles is 48.000 KMs. and 36,000 KMs. for Leyland Vehicles.

For District Operation

	<u>TATA</u>	<u>LEYLAND</u>
Ordinary	Every Fourth Sch.III	Every Sch.-IV
Long Distance Buses and all New Buses upto 2.00 lakhs KMs. of Life.	Every Sch.-IV	Every Alternate Sch.-III

For City Operation :

All City Buses	Every 5th Sch. III	Every Fourth Sch.III
New City Buses upto 1.00,000 KMs. of Life.	Every Fourth Sch.-III	Every Sch.-IV

The above is suggested to synchronize with the Kilometers prescribed i. e., 48,000 KMs. for Tata Vehicles and 38,000 KMs. for Leyland Vehicles.

- 2) The Sch.III/IV in charge shall maintain Vehicle wise record of wheel bearing grease changes.
- 3) Dry setting of front & rear hubs has to be carried out during change of grease. Magnetic Dial Gauge has to be invariably used while dry setting of hubs. The recommended clearance shall be provided in the hubs as follows during the dry setting.

	<u>LEYLAND</u>	<u>TATA</u>
Front	4 to 6 thou	0.10 mm to 0.15 mm
Rear	2 to 4 thou	0.05 mm to 0.10 mm

- 4) Correct quantity of grease has to be packed into the hub to ensure proper lubrication of bearings. Hence the following quantities of grease are recommended for use in the Vehicles after detailed discussions with Service Engineers of Vehicle manufacturers.

	<u>FRONT</u>	<u>REAR</u>
Leyland	450 Grams per hub	550 Grams per hub
Tata 15i0 Vehicles	450 Grams per hub	700 Grams per hub
Tata Cummins Vehicles	450 Grams per hub	450 Grams per hub

All the Depot Managers are advised to instruct the Mechanical Incharges, Sch.-III/iV Incharges and concerned mechanical staff to follow the above guidelines without any deviation.

The Depot Managers should arrive at the monthly requirements of wheel bearing grease based on the norms prescribed above to indent the correct quantity.

The above aspects have to be cross checked during the inspection of Depots by concerned instructing officials.

All the Dy. Chief Mechanical Engineers and Divisional Managers are advised to review the maintenance practices during the Depot inspections invariably. The periodically of change of wheel bearing grease & quantity consumed shall form part of their inspection format hereafter.

Please submit compliance on the implementation of the above guidelines within 15 days of receipt of this Circular.

Sd/-(R. P. SINGH)
Vice Chairman & Managing Director

// Attested //
Sd/-
(CH. BALAKRISHNA RAO)
Chief Mechanical Engineer (O)