ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

No:TR1/815(20)/2008-MED

O/o the VC & MD, MSRD, Hyderabad-624

CIRCULAR No :12/2008-MED, Dt.16-06-2008

Sub:- TYRES: Tyre maintenance practices - Late removal of Tyres for Recapping - Reg.

Ref: 1. Cir No. 30/1990-MED, Dt: 20/10/1990.

- 2. Cir No. 40/1993-MED, Dt: 20/10/1993.
- 3. Cir No. 1/1998-MED, Dt: 8/01/1998.
- 4. Cir No. 19/2000-MED, Dt: 6/06/2000.
- 5. Cir No. 11/2005-MED, Dt: 26/9/2005.
- 6. Cir No : 5/2008- MED, Dt: 15/5/2008.

The Depots were already cautioned on the declining trends in Total Tyre Life. The main causes were analysed as **increase in NTS** and **decrease in RT Factor**. The negative trend i.e., **increase in Total Tyre scrap rate** has also contributed in pulling down the Total Tyre life as shown below.

Parameter	2006-07	2007-08
NTS	2.17	2.71
RT FACTOR	3.31	3.03
TTS	21.37	22.01
TTL	181576 Kms	177223 Kms

The result of the negative trends is that the CPK on Tyres has increased to **52** Paise in **2007-08** (upto FEB'08) from the CPK of **49** Paise in **2006-07**. We are well aware that it is the Total Tyre life that ultimately matters in controlling the cost on Tyres. The other review parameters can only influence the Total life. Extraction of maximum kms. from a Tyre mainly depends on its strength/Resilience in **Tyre casing** to withstand different load, climatic and RC/RT process conditions.

Most of the Tyre casing failures occur when the leftover Tread depth i.e., Non-Skid Depth (NSD) reaches to 2 to 3 mm. It is always desirable to remove the Tyres with 2 mm NSD in case of both the New and Recapped tyres. This will reduce the repair content & scrap rate and improves the RT Factor.

The Tyres with less than 2 mm NSD are more prone to through cuts, Run flats and concussions which weakens the Tyre casing and results in scrapping of Tyre casing in most of the cases. Such late removals contribute to more repair work also, before recapping and thereby resulting in additional cost.

The Tyres allowed to run with less than 2 mm are more prone for the exposure of under tread or the base rubber, which actually protects the plies. Cases of ply exposures are also there at some depots. This not only weakens the Tyre casing but also results in scrapping of tyre under S3 i.e., non-removal on time disqualifying the Tyre for further process. Timely removal of Tyre results in retention of strength even during the recapping process since under tread/base rubber provided for protecting the casing plies remains intact during the course buffing and rasping operations at TRS. The non-removal on time i.e., not removing the Tyres on reaching 2 mm NSD is much more dangerous in case of Radial Tyres. The exposure of steel wires due to through cuts or excess wear damages adhesive properties of wire with the Rubber. Even the recapping process will not be effective and the weakened casing will give less life due to reasons like tread lifting or tread burst. Also the Radial Tyres have to be removed for repair process on observing the through cuts immediately. If it is not done timely the through cuts will cause injury intention (faster than that in Nylon Tyres) rendering the Tyres unfit for RC when they are removed for Recapping.

Timely removal of Tyres also results in generation of more Fit for Front Tyres as the base rubber/under tread and strength of Tyre casings are protected. The corporation has also gone for classifying 2nd RC Bias play Tyres as Fit for Front Tyres in addition to the 1st RC Tyres in view of the improvement in protection of Tyre casing. In case of Radial Tyres, only the 1st RC is recommended for classification as Fit front Tyre.

But the recent negative trends in key parameters ultimately resulting in decline of Total Tyre life reveals that the depots have not taken care of the TYRE CASINGs by way of removing the Tyres on time i.e., on reaching 2 mm NSD. The scrap rate has abnormally increased in case of S1, S2 and S3 classifications even at New Stages. As per the records available, the percentage of Tyres removed with less than 2 mm NSD stands at 16.31 during the year 2007-08 against 10.46 of 2006-07.

Inspite of zero/negative outstanding of Tyres i.e., comfortable Tyre position at depots for the last two years, the depots have not resorted to remove the Tyres for recapping on time. The Depot Managers are not ensuring timely removal of Tyres for recapping with minimum of 2 mm NSD for no valid reason.

Time and again instructions were repeated advising the depots to remove the Tyres with a minimum of **2**mm NSD. It is regretted to observe from the Tyres received for recapping at all TRSs that the depots are not following the instructions strictly.

The DMs are once again instructed to take all measures in ensuring timely removal of Tyres with minimum **2** mm NSD in both the cases of Nylon and Radial Tyres. The wear may not be uniform right round the crown. Wear with left over NSD of **2** mm at any excluded spot on the crown shall also make the Tyre eligible to be removed for recapping. All the Supervisors and Tyre mechanics shall be provided with **DEPTH GAUGES**.

Depots which are damaging New Tyres due to Through Cuts, Concussion and Runflat etc., at less than 2 mm left over NSD shall be taken up suitably by the Dy.CMEs and Regional Managers. Serious view shall be taken by the Regional Managers in case of New Tyres being scrapped under S3 (non-removal on time). During the year 2007-08, 93 New Tyres were scrapped under S3 classification. There shall not be a single Tyre Scrapped under S3 either in New or RC stages at any depot.

If things do not improve immediately, it may be necessary to withhold incentives to defaulting depots. The Regional Managers, the Divisional Managers (HCR and SCR) and the Dy.CMEs are advised strictly to implement these instructions. Executive Directors (Zone) are advised for Implementation of the instructions in letter and spirit.

The Asst.Mech.Engineers(Tyres) are instructed to concentrate on the this aspect of late removals at the time of inspection of Tyres while receiving and to communicate clearly the percentages of Tyre received with less than 2 mm NSD depot wise on monthly basis. This shall be reviewed by the Regional Managers in their review meetings with DMs and Maintenance Incharges. Dy.CMEs shall take corrective action during their inspections to the Depots.

VICE CHAIRMAN & MANAGING DIRECTOR.

То

All Depot Managers.

Copy to : Director (V & S), ED (O&MIS), ED (A&P), ED(T&C) and Secretary to Corporation, FA, CAO for information.

Copy to : All ED (Zones) for information and necessary action.

Copy to : CME(O), CCOS, CME(C&B) & CE(IT) for necessary action.

Copy to : All HODs for information.

Copy to : All Regional Managers for necessary action.

Copy to : All Dy.CMEs of Regions for necessary action.

Copy to : Dy CME(O)/ Dy CME(P)/Dy CME(C&B)/DY CME(IEU)/ COS(Comp) and

Sr.Manager(IT) for necessary action.

Copy to : All DVMs/GH for necessary action.

Copy to : All WMs/COSs for necessary action.

Copy to : Principal, TA/HPT, & all ZSTCs for necessary action..

Copy to : All Maintenance Incharges for necessary action.

Copy to : Manual section, H.O.