

ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

No. TR1/815(14)/2001-MED

Office of the VC & MD
Mushirabad, Hyderabad-20.
Date: 19-11-2001.

CIRCULAR No. 33/2001-MED, DT. 19-11-2001.

SUB. :— TYRES - Tyre Inflation pressures - Allowances to be given when inflation pressures are checked in HOT condition - Clarification - Reg.

REF. :-- 1) Circular No. 12/1989-MED, dt. 07-07-1989.
2) Circular No. 14/1989-MED, dt. 17-08-1989.
3) Circular No. 09/1990-MED, dt. 14-05-1990.
4) Page No. 8 of Tyre Manual (Telugu version) published in 1999.

The Corporation has standardised procurement of 9.00x20, 14 Ply rating, 5 Rib pattern tyres for fitment on our buses. Inflation pressures to be maintained in tyres fitted at Front & Rear positions were fixed based on the loads. Speeds and operating conditions of different kinds of buses duly taking the suggestions of Tyre manufacturers. The details of inflation pressures (in kgsqcm) fixed by the Corporation are tabulated below.

	Cross ply tyre		Radial tyre	
	Front	Rear	Front	Rear
<i>Leyland Vehicles :</i>	5.95	5.30		
Front Engine	5.95	5.30		
Tata Vehicles :	4.90	4.90	6.30	6.00
LP055/TC 1512			6.30	6.00
LP 52			5.30	5.30

The adverse implications of improper tyre inflation pressures were communicated time & again through circulars. The importance of cross checking of tyre inflation pressures by the Managers was explained in meetings and communicated through circulars. The Managers and Supervisors are aware that Over inflation causes concussion failures of tyres and Under inflation causes patch failures, abnormal increase in scrap rate etc., besides loss of mileage.

The overall scrap rate of tyres in the Corporation has increased to 21.90% upto Aug. 2001 against 20.40% in corresponding period of last year. The main reason for such abnormal increase is observed as negligence of tyre inflation pressures at many depots. To study the actual status, random checks of inflation pressures were carried out recently.

During the inflation checks carried out at various bus stations through out the Corporation inflation irregularities were found to be at alarming level. Over inflation was observed on 32% of tyres and Under inflation was observed on 13% tyres checked. Most of these checks were carried out by the Dy. CMEs & AMEs (Tyres) of the Zones.

These details were discussed during the EDs/HODs/RMs meeting convened at Corporate office. The Regional Managers expressed few doubts about checking of tyres in HOT condition and requested to issue clarification on the allowances to be given when tyre inflation pressures are checked in HOT condition.

This aspect was studied again and the suggestions of the tyre companies were taken. As per the tyre manufacturers, the inflation pressures may normally increase by 5 PSI (0.3 kgsqcm) when the tyres are in HOT condition. The tyres are manufactured in such a manner, the temperatures of tyres are maintained at optimum level in operating conditions.

In case of Vehicles having severe brake binding, brake grabbing week brake shoe

retraction springs, defective slack adjusters etc., the temperature of tyres may shoot up abnormally due to overheating of brake drums and thereby inflation pressures are likely to exceed by more than 5 PSI. In such cases the tyres will be damaged due to patch failures and some times may lead to blow-out. This condition shall not be allowed to occur.

Inflation pressures are to be normally checked & corrected after the tyres have attained ambient temperature. If tyres are checked in HOT condition the actual inflation pressure shall be arrived at by reducing 5 PSI from the gauge reading. OVER or UNDER inflation shall be decided duly giving this allowance. In case of the tyres checked in Bus Stations by the Dy. CMEs & AMEs (Tyres) through out the Corporation, this allowance was given and the percentages of inflation irregularities were estimated.

This point was also mentioned in the Tyre Manual of TELUGU version at Page No. 8 and explained time & again to the Managers. Supervisors and Tyre Mechanics during the training classes conducted at Regional/Zonal Head Quarters.

However, as requested by the Regional Managers these aspects are re-iterated for the benefit of Field Managers. Thus, RMs, Dy. CMEs, DVMS and DMs are advised to note the above and ensure to maintain proper tyre inflation pressures by taking this message to the gross root level staff and through regular cross checking of inflation pressures.

Sd/-
Executive Director (Engg)