



ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

Case No: TR1/815(17)/2010-MED.

O/o VC&MD
Hyderabad-624

CIRCULAR NO:18/2010 – MED Dt.11.08.2010

SUB: **TYRES** - Repairing of Tyres - Process improvement - Usage of Electric Spotters and Uniseals - Need to strengthen the System – Reg.

REF: 1) Circular No.34/1987 – MED. Dt. 11.05.1987.
2) Lr.No. TR1/815(30)/2008-MED. Dt. 11.09.2008.

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It is a proven fact that frequent exposure of Tyres to high Temperatures is detrimental to its life. **Many developments** such as introduction of Precured Tread Rubber, Precured Patches, Precured Uniseals etc, took place in Tyre Retreading and Repairing process that **lead to less operating temperatures** which in turn contributed to longer life of Tyres casings. Of late such methods are being neglected due to lack of proper supervision at Shop floor. Some of them which **need immediate attention** at Tyre Retreading shops are:

- 1) Usage of **Electric Spotters**.
- 2) Usage of **Precured Uniseals**.

Electric Spotters: Detailed guidelines on the usage of Electric Spotters are available in the Circular cited at first reference. The **Repair Reuse tyres having injuries above 1" and up to 3" shall be cured only in Electric Spotters** to derive the following advantages:

- The **area** of exposing the tyre to higher temperatures is **nominal**, which is restricted to only the injury filling area requiring vulcanization i.e., curing.
- The **curing time** is **only 1½ hrs** as against 1 hr.45 min in Electrical Chambers.
- The **preparation time** in curing is also **less** compared to that in Electrical Chamber resulting in **reduction of overall cycle time**.

Care shall be taken in **tightening the clamps** periodically in the first half an hour of curing time which avoids porosity in the curing rubber.

Uniseals: Instructions were already given vide the letter cited at 2nd reference to **repair the injuries up to 1" on Repair Reuse Tyres only with Uniseals** to derive the following advantages:

- **No curing** is required and hence total avoidance of exposure to high temperatures.

- **Injury preparation** avoids human error of improper skiving, leaving the loose cords etc, as it is done by a **special drilling tool**.
- **Minimum repair cycle time** is ensured by the above aspects.

Care shall be taken for the proper **classification of Repair Tyres** to utilize Uniseals. **Availability of required drilling tools** of different sizes is to be ensured at any point of time in the shop floor.

During the recently conducted review meeting with **WMs** and **AMEs(T)** held on 08.07.2010, it is observed that there are **abnormal variations** in the consumption of Uniseals among TRSs, from **1.8%** at TRS/VZM to **17.6%** at TRS/KRMR **of total repairs** including patches during the period **up to May'10**. There are also abnormal variations at **individual Tyre Retreading Shops** compared to the corresponding period of last Year. For instance TRS/VJA Uniseals' consumption is **10.1% up to May'10 as against 0% up to May'09**. At TRS/HYD, it is **2.3%** against **9.3%** during the respective periods. The main reasons for such abnormal variations are:

- **Improper Supervisory attention** in the classification of Repairs.
- **Ineffective** Production Line **inspection** and **improper monitoring** of Repair Work Orders.
- **Non-availability of Uniseals** in required quantities at shop floor.

Therefore all the **Assistant Mechanical Engineers(T)** are advised to bestow their personal attention in streamlining the above Repair activities without further loss of time which goes in a long way in improving the overall Tyre Life. Availability of different sizes of Electrical Curing spotters shall be ensured. As far as Uniseals are concerned, consumption may be reviewed time to time in LFC and for further fixing appropriate limits to avoid any stocking out.

Works Managers are advised to ensure implementation of above procedures effectively at the Tyre Retreading Shops under their Jurisdiction.

Executive Directors of Zones are requested to see that the instructions are implemented and the progress/stabilization of these procedures may also be discussed in Production Review Meetings.

Vice-Chairman & Managing Director

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