



ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

No. TR1/815(5)/2018-MED

O/o the VC&MD,  
Vijayawada-13.

Circular No. 7 /2018-MED, dated. 15.05.2018

SUB : TYRES - Guidelines on Mounting & Demounting procedure/ practices to be adopted for Tubeless tyres - Reg.

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REF:- 1) Cir.No. 38/1991-MED, Dated 08.10.1991.  
2) Cir.No. 15/2009-MED, Dated 06.07.2009.

Tubeless tyres are introduced in the corporation in phased manner on all GRD, GRD+, Amaravathi, Vennela and LF/SLF city buses etc. Guidelines were issued through the 2<sup>nd</sup> reference circular regarding procurement of special tools for removal and fitment of tubeless tyres.

The content/ volume of high-end vehicles like Vennala, Amaravathi, Garuda plus, Garuda, SML Middi, Metro Express(Jnnurm phase 1 & 2) and metro luxury buses which are fitted with Tubeless tyres has been increasing year by year in the corporation.

The Tyre companies have given training to tyre mechanics of depots on the maintenance of tubeless tyres. Recently MED team has taken special drive and visited most of the Depots having Tubeless Tyres to educate the Tyre mechanics on the procedure being followed on mounting and demounting of tubeless tyres. Earlier Comprehensive Guidelines were issued through the circular 1st cited on the preparation of tyres with tubes only to improve the serviceability of tubes & Flaps and to enhance Total Tyre Life.

In order to educate the Tyre mechanics and garage supervisors on procedure and precautions to be followed during mounting and demounting tubeless tyres, instructions are given in the Annexures as Tyre preparation is the key to get maximum performance in tubeless tyres.

Hence, all the Dy.CMEs are advised to bestow their attention to educate the Tyre mechanics and garage supervisors on the maintenance of tubeless tyres and report compliance by 30.05.18 to this office.

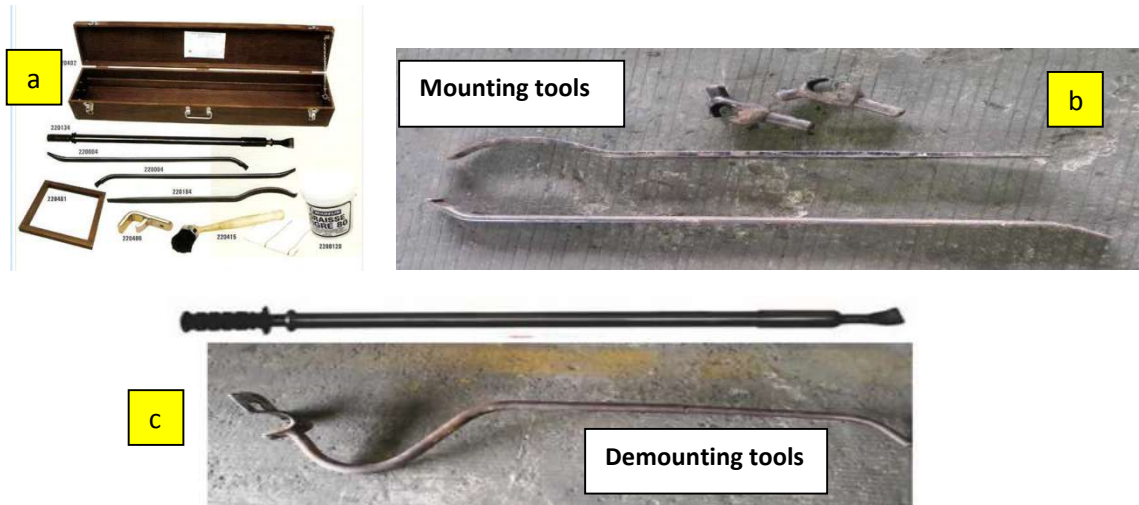
EXECUTIVE DIRECTOR (E & IT)

To  
All Depot Managers

Copy to: VC&MD for favour of infn.  
Copy to: Dir (V&S), ED (O&M), ED (A&P)(H&M), FA & CAO for infn.  
Copy to: All EDs (Zones) for information.  
Copy to: All RMs for necessary action.  
Copy to: All HODs & Senior Scale Officers of H.O. for infn.  
Copy to: All DyCMEs, WMs, COSs & Dy.CAOs of Zones for necessary action.  
Copy to: All Principals of ZSTCs & Principal-TA/VJA for information.  
Copy to: All AMEs(Tyres) for infn & necessary action.  
Copy to: All Maintenance In-charges for necessary action.

## MOUNTING & DEMOUNTING OF TUBELESS TYRES

- 1) Always use Universal Tyre changer or recommended tubeless tyre tools for Mounting & Demounting of tubeless tyres to avoid bead damages.



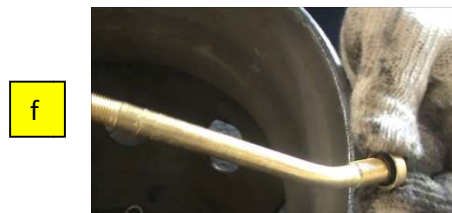
- 2) Inspect the condition of wheel discs for cracks, oblong of wheel bolt holes & for bends on both edges of wheel disc to select good condition wheel disc. (Fig. d)



- 3) Clean the rusting on wheel disc and paint with Aluminum paint. (Fig. e)



- 4) Inspect the valve stem for damage and wear. Replace old valve stem with new one once in a year in order to avoid leakage at valve stem due to damage of 'o' ring. (Fig. f)



- 5) It is important that the vegetable grease be clean and free of dirt, sand, metal shavings or other hard particles. Presence of dirt, sand & foreign particles etc in vegetable grease causes pits on tyre bead area, which causes slow air leakage. Provide a cover for the portable container to prevent contamination of the lubricant when not in use. (Fig. g)



- 6) Never dilute vegetable grease with water. Apply clean vegetable grease to both sides (inner & outer) of the bead and both edges of wheel disc to avoid the bead damage. The tyre should be mounted and inflated before the lubricant dries.



7) Mounting procedure:

- Apply vegetable grease to both sides (inner & outer) of the bead and both edges of wheel disc. (Fig. h)
- Place the wheel disc in correct position, short side up (drop center up). (Fig. i)



- Place the tyre on wheel disc rocking motion with adequate downward pressure (the bottom bead may drop over the wheel flange). (Fig. j)



- Mount the bottom bead with mounting tyre tools. (Fig. k)



- Mount the second bead i.e., top bead with tyre tools. (Fig. L)



- Use the proper tool to obtain the correct seating of bead. (Fig. m)

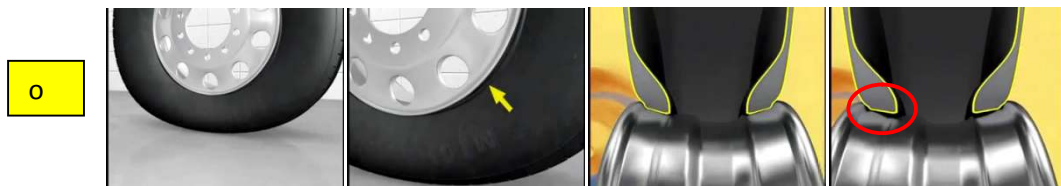




**Bead seating:-** In order to make sure that the bead is evenly seated on the rim, the best practice of inflating tyre assembly is in horizontal position. Place the assembled tyre rim on fitment stand. Placing the fitment stand under the wheel disc helps us to expand the tyre in a right seating area. 1 inch Height of Tyre stand shall be used keep the tyre above the ground. (Fig. n)



8) Never inflate in vertical position initially. When the tyre is in vertical position the weight of the rim can results in the beads are not centered of the rim. Improper mounting of beads on rim causes lateral runout, irregular wear and bead damages. (Fig. o)



9) Demounting procedure:

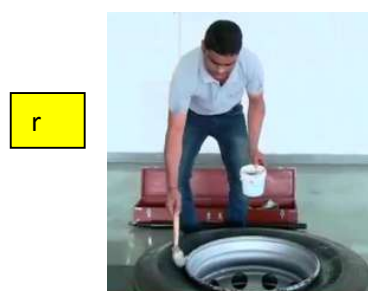
➤ Complete deflate the Tyre by removing the valve pin. (Fig. p)



➤ With the tyre assembly laying flat, break the bead seat of both beads with a bead breaking tool. Do not use hammers of any type to break the bead. Striking a wheel assembly with a hammer of any type can damage the tyre or wheel disc. (Fig. q)



➤ Apply vegetable grease on the rim and bead area with the help of tyre brush for lubricate/softening the bead. (Fig. r)



- *Insert demounting lever between bead and wheel disc rim. Make sure that lever is inserted properly and push the long edge of the tool down so that the bead comes out slowly. (Fig. s)*

s



- *Now repeat the same process to pullout the other side of bead also. (Fig. t)*

t



- *Lift the tyre assembly, place the tyre lever inside and allow the assembly to drop and rock the tyre from the wheel disc . (Fig. u)*

u



*The key to successful fitment and  
demounting of tubeless tyres is*  
**"USE OF VEGETABLE GREASE"**  
*in a right way, as much as possible*