No.OP2/462(16)/2003-MED

Office of the VC&MD HYDERABAD-20

CIRCULAR No.23/2003-MED, Dt.07.07.2003

SUB:MAINTENANCE:-Maintenance of Brake System and ensure proper working condition of Hand Brake for all Vehicles - Instructions issued - Req

- REF:1) Cir.No.07/1993-MED, 20.02.1993.
  - 2) Cir.No.42/1993-MED, 12.10.1993.
  - 3) Cir.No.21/1997-MED, 29.09.1997.
  - 4) Cir.No.17/2003-MED, 05.06.2003.

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Corporation is procuring Tata & Leyland Vehicles with Dual Air Brake System in which the front and rear wheel brake systems work independently. A hand brake valve is also provided which has to be applied while parking the Vehicles & can be used as an effective braking tool in case of failure of foot operated service brakes.

The Dual air brake system is provided with a system protection valve with independent ports for air connection to service brakes & hand brake and with a separate port(24) for tapping air for air horn, wiper etc.

Vide Circular No.17/2003, Dt.05.06.2003 it was already instructed to ensure that tapping of air for air horn & other accessories like wiper etc., is taken from the 24 port of system protection valve &not from the air gauges on the dash board.

In the recent Bus accident on Tirumala Hills on 04.06.2003, it was revealed that due to faulty air horn, the service brakes have become ineffective since tapping of air for air horn was taken from air gauges. Though the hand brake valve was in working condition, the Driver has not applied it to bring the Vehicle to a halt & avoid the accident.

During the Technical Audit inspection of Depots & inspection by the AME(PC) it was repeatedly pointed out that hand brakes are not functioning in many of Vehicles & the Depots are not taking corrective action to ensure the hand brake valves are in working condition.

Even on those Buses with hand brakes in working condition, the Drivers are not habituated to using them while parking the Vehicles and in emergency situations for applying the brakes.

Applying hand brakes while parking the Vehicles in Bus Stations or in Depot garages ensures that while the Bus is again started, a minimum air pressure of 4.2 Kg/CM Square is available in the system so as to release the brakes. In case the hand brake is not applied, then the minimum air pressure cannot be ensured & there is a possibility of Driver starting the Vehicle with very low air pressure & meeting with accident due to ineffective brakes.

In view of the above, the following instructions are issued for strict compliance.

- 1) Ensure tapping of air for air horns, wiper & other accessories from system protection valve & not from air gauges as per Circular No.17/2003-MED.
- 2) Hand brake valves should be in working condition in all Vehicles. The wind off bolts in Rear brake chambers should be always in Tightened condition to ensure hand brake in working condition.
- 3) Drivers should be educated about the utility of the hand brakes while parking the Buses & also as a brake in emergency situations.
- 4) Enforcing use of hand brakes by Drivers on duty & by Mechanics in Depot Garage during maintenance of Vehicles. All Vehicles should be parked using hand brakes in the Depot garages after maintenance.
- 5) Ensure system protection valve is in proper working condition and avoid short circuiting of system protection valve.
- 6) Ensure, air pressure gauges and brake lights are in working condition on all Vehicles.
- All Depot Managers are therefore advised to ensure implementation of the above instructions immediately duly drawing the necessary materials from ZWS & Zonal Stores.

The Depot Managers are also advised to educate the Drivers on the functional utility of hand brakes to avoid accidents.

- All the Divisional Managers are advised to ensure proper working condition of hand brake for all Vehicle at the Depots of their jurisdiction.
- All COSs are advised to ensure stocking and supply of required spares for proper working of hand brakes to the Depots immediately.
- All the Works Managers are advised to ensure proper working condition of hand brake for the Vehicles overhauled at Zonal Workshops and dispatched to the Depots besides supplying adequate quantities of overhauled hand brake valves to Depots.

The Principals of ZSTCs should cover the use of hand brakes by Drivers during training. They should ensure that the Driver Training Vehicles have hand brakes in proper working condition.

- All Regional Managers are advised to ensure the implementation of above circular instructions at the Depots in their jurisdiction and cross check the same during their inspections of Depots. They are also advised to organise awareness programs for Drivers duly involving Service Engineers of OEMs & Vehicle manufacturers.
- All Executive Directors (Zones) area are advised to review the implementation of circular instructions during the review meetings held at Zonal level and ensure the same without deviation.

VICE CHAIRMAN & MANAGING DIRECTOR