

**ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION**

No.TLI/690(I)/2000-MED,

O/of the Managing Director  
Msrd:HO:Hyderabad-20.

**CIRCULAR NO.13/2000-MED, Dated 27.04.2000**

**SUB: Conversion of special type of vehicles - Instructions - Reg.**

**REF: 1. Circular No.4/98-MED, Dated 05.02.1998. 2.  
Circular No.25/99-MED, Dated 20.07.1999.**

As per the replacement policy of the Corporation special type vehicles ie., Hi.Tech/Luxury/Express buses are being replaced after performing about 5.5 lakh KMs. These replaced vehicles are to be converted as Ordinary/City buses at Zonal workshops.

The Zonal Workshops are unable to cope-up the demand of conversion of special type vehicles into Ordinary/City buses for various reasons as a result of which the depots are operating these replaced vehicles without conversion, affecting the quality of operations.

In order to obviate from the above, the following instructions are issued.

**1) CONVERSION OF REPLACED HI-TECH BUSES INTO ORDINARY/CITY BUSES:**

A Committee consisting of WM (Zonal workshop, Uppal), Dy.CME (Production) and Dy.CAO (Hyderabad Zone) was constituted to examine the feasibility of converting the replaced Hi.Tech buses into Ordinary/City buses.

The committee after inspection of sizable number of replaced Hi-tech buses, observed the following:

- 1. The MS structure of Hi.tech bus bodies are extremely in damaged condition due to severe rusting at Cant rail, crib rail, wheel arch etc. at about 5.5 lakh KMs.**
- 2. It is not possible to overhaul the steel structure bodies which have developed corrosion and also in view of the sunken gangway provided in Hi.tech buses.**
- 3. At present, the chassis of the replaced Hi.tech buses are being overhauled at Zonal workshops and least serviceable ordinary bus bodies are being identified from Zonal Scrap yard for body overhaul and mounted on the overhauled chassis.**
- 4. Least serviceable ordinary bus bodies are not available adequately to meet the demand for body overhaul consequent upon enhancing the economic life of the vehicles from 8.5 lakh KMs to 10.5 lakh KMs.**

Keeping the above observations in view, the Committee recommended to overhaul the chassis of replaced Hi.tech vehicles at concerned Zonal workshop and send the same to BBW/Miyapur for fabrication of new ordinary/city bus body on the overhauled chassis axs the cost difference between overhauled serviceable bus body vis-à-vis new bus body would be offset by reduced body maintenance and overhaul expenditure.

After examining the recommendations of the Committee, it is felt appropriate to get the chassis of replaced Hi.tech buses overhauled at the Zonal workshop and send the same to BBW/Miyapur SSIs for fabrication of new ordinary/ city bus body.

In case serviceable bodies are available in the scrap yard, the same may be utilised for converting the replaced Hi.tech into Ordinary/city bus after thorough body overhaul.

With the improvement in the road condition and as the Hi.tech buses are normally being operated on good roads, the condition of majority of the chassis of replaced Hi. tech buses are found to be satisfactory and do not warrant even chassis overhaul. In case the replaced Hi.tech buses which do not warrant chassis overhaul (after thoroughly checking (1) No crack on chassis long members, bend or twist (2) no digging in on chassis long member flange at the body cross bearer mounting area, (3) no oblonged holes to chassis frame at the spring hanger bracket area etc.,) such chassis can be taken up for new body fabrication without chassis overhaul. A committee consisting of concerned WM, Dy.CME of the Region and AWM (Chassis) shall inspect the condition of such chassis for the above mentioned defects and decide whether the chassis is fit for new body fabrication without chassis overhaul.

The replaced Hi.tech bus chassis that do not require chassis overhaul at Zonal workshop are to be thoroughly washed, painted and sent to BBW, Miyapur for new body fabrication with the certification of the committee. In respect of Tata chassis, cabin and front and structure need not be constructed at Zonal workshop.

Reclining seats procured from M/s Haritha Grammer Ltd. fitted in Hi.tech buses are to be withdrawn at Zonal workshop and are to be sent to Hyderabad-I depot hanger for refurbishing and reuse.

After conversion, the buses shall be allotted to the same depot / Region/ Zone. Any incidence of not accepting the buses will be viewed very seriously.

The amount involved for fabricating new bus body on the replaced Hi.tech bus chassis at BBW, Miyapur shall be transferred to the concerned Regional AO/Dy.CAO through a Debit Advice by AO(BBW). The Regional AO/Dy.CAO shall accept the Debit Advice received from AO(BBW) and treat it as revenue expenditure of the depot to which the vehicle is allotted.

## **2) CONVERSION OF REPLACED LUXURY BUSES INTO ORDINARY/CITY BUSES:**

The replaced luxury buses are to be converted as Ordinary/city buses at Zonal workshops. Seats procured from the reputed seat manufacturers are fitted in the Luxury buses to provide comfort to the passengers. These seats are to be withdrawn from the replaced Luxury buses before overhaul at Zonal workshops and are to be sent to Hyderabad-I depot hanger for refurbishing and reuse.

While converting replaced Luxury bus into ordinary/city bus at Zonal workshop the following items are to be attended.

- 1) In the luxury buses there will be no seat rail and hence during conversion and overhaul, new seat rail has to be fitted.
  - a) The seat rail is to be fitted by removing the exterior panels and the seat rail has to be solid riveted to the truss panel and pillar flange.

- b) **The seat rail is to be fitted inside the saloon at a height of 9" from the floor level to accommodate the seat legs of Ordinary / City bus. Care shall be taken to fit the seat rail without shearing (or) removing the truss panel.**
  
- 2) **The floor longitudes are provided in the luxury buses at the time of new body fabrication to mount the seat legs of the seats procured from reputed seat manufacturers. The location of floor longitudes cannot be disturbed during overhaul to fix the seat legs of the Ordinary/city bus as it affects the structural rigidity. Additional floor longitudes MSL 50X50X3 mm are to be provided to suit the mounting of seat leg bolts of the ordinary/ city bus seat frames. Seat frames shall not be fitted directly on the checkered flooring sheet.**
  
- 3) **Four stanchions are to be suitably located at an equal pitch without obstructing the free movement of passengers. New/serviceable continuous beam identified from Scrap yard, are to be fitted at the center of interior ceiling. Stanchions are to be located between continuous beam on the top and floor longitudes at the bottom (under the flooring) and not directly on checkered sheets of the flooring as there are no floor longitudes.**
  
- 4) **The Luxury buses fabricated during 1994-95 and 1995-96 were provided with rear luggage booth to accommodate passenger luggage and without luggage carrier over the roof.**

**The following modifications have to be carried out on the luxury buses provided with rear luggage booth while conversion into Ordinary bus in addition to the points mentioned above at Doints 1, 2 & 3.**

- a) **Rear luggage booth has to be removed.**
  
- b) **Chassis long members are to be extended to 60% at Rear over hang portion supported by cross bearers as the Luxury bus body is with 60% overhang.**
  
- c) **Flooring has to be laid on the extended portion inline with saloon flooring.**
  
- 5) **Luggage carrier with catwalk and landing platform has to be fabricated at ZWS as per the specifications and mounted on the roof as mentioned hereunder.**
  - a) **Interior ceiling panels at luggage carrier leg mounting area are to be removed.**
  
  - b) **6 mm MS base plate of 215X85 mm size are to be rivetted with MS solid rivets to roof stick by drilling holes on the flanges of the roof stick from inside. Exterior panels need not be opened.**
  
  - c) **Luggage carrier legs are to be welded to the base plate.**
  
  - d) **Shalimar tarfelt shall be provided between exterior panel and base plate to avoid water leakage.**
  
  - e) **Silicon sealant shall be applied around the base plate to ensure leak proof joint.**
  
- 6. **Jack knife door provided in Luxury bus has to be replaced with ordinary passenger door fabricated at Zonal workshop duly modifying the step well. Three Forged hinges with door stoppers, dovetail catches, striking plate are to be provided.**

7. **In order to avoid rattling of window shutter frames, terene felt has to be replaced.**

**All the Works Managers concerned shall explore the possibility of identifying ordinary/city bus seat frames either from depots in the zone or from the zonal scrap yard. Only in the event of non-availability of sufficient ordinary seat frames requisition has to be placed on Controller of Stores for procurement from the bus body fabricators by inviting limited tenders.**

**The conversion of Luxury buses can also be taken up at depot either by the depot staff or by entrusting to an outside agency as per the instructions contained in Circular No.25/99-MED under "Selective repairs".**

### **3. CONVERSION OF REPLACED EXPRESS BUSES INTO ORDINARY VEHICLES:**

**For various reasons, the replaced express vehicles cannot be drawn for conversion as ordinary buses, as a result of which the replaced express buses are continued to be operated without conversion.**

**If the condition of the replaced Express bus chassis is not satisfactory ie., cracks are developed on the chassis long members at spring hanger bracket area, oblonged holes on the chassis frame at the spring hanger bracket, bend/ twist observed on the chassis long members, digging-in developed on the flange of the chassis long member at the body cross bearer mounting area, such replaced express vehicles are to be sent to Zonal workshops for overhauling the chassis and for conversion into Ordinary bus. The seat frames of the express buses are to be removed and ordinary seat frames are to be fitted at Zonal workshops. All the Works Managers concerned shall explore the possibility of identifying ordinary seat frames either from depots or from the zonal scrap yard. Only in the event of non-availability of ordinary seat frames requisition has to be placed on Controller of Stores to take procurement action from the bus body fabricators by inviting limited tenders.**

**With the improvement in road condition, it is observed that condition of the chassis of majority replaced express vehicles is found to be satisfactory and do not warrant chassis or body overhaul. Such replaced express vehicles which do not warrant complete overhaul are to be converted into Ordinary buses at the respective depot itself without replacing the express bus seats, attending to dents, damages to panels and by applying the signal red paint externally specified for ordinary buses. In order to avoid rattling of window shutter frames, terene felt has to be replaced. Damaged and torn out seats are to be attended replacing the Rexene. Jack knife door provided in Express buses has to be replaced with Ordinary passenger door collecting from Zonal workshops duly modifying the step well. Three forged hinges with door stoppers, dovetail catch and striking plate are to be provided.**

**If it is not possible to attend to the above conversion activity by the depot staff, it can be entrusted to an outside agency as per the instructions mentioned in circular No.25/99-MED, under the category of "Selective repairs".**

**All EDs, RMs, Dy.CMEs, WMs are advised to follow the instructions contained in this circular and send the action taken reports to ED(Engg) for review as a monthly report.**

**This circular has the concurrence of Financial Advisor.**

**Sd/-**

**(V. Appa Rao)**

**VICE CHAIRMAN & MANAGING DIRECTOR**

*// Attested by //*

**Sd/-**

**Dy Chief Mechanical Engineer (C&B)**