



ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

Office of the VC&MD,
Mushirabad, Hyderabad.
Dt.31.12.2012

No : TL5/286(1-D)/2012-MED

CIRCULAR NO: 26/ 2012 – MED, Dt :31.12.2012.

SUB: BUSES – Repair attention of M.S Super Luxury & other M.S Bus Body vehicles - Reg

- REF: 1) Circular no. 25/1999-MED, Dt. 20/07/1999.
2) Circular no. 5/2011-MED Dt.24.03.2011.
3) Circular no.17/2012-MED Dt.17.07.2012.

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At the end of the financial year 2011-12, the Super Luxury fleet in the Corporation is 1796 and high end buses are 262 (A/C 15, A/C Volvo 117, Garuda Plus 32 & A/C Indra 98). All these buses are either with MS structure or GI structure. These vehicles are high speed vehicles and the accidents occurred on these fleet are also increasing year after year, resulting long off road of vehicles and loss of revenue to the Corporation, besides huge expenditure on these high end buses towards repair/re-furbishing.

It would be our prime requisite/endeavour to complete the repair/re-furbishing/midterm attention of Super Luxury and other high end MS/GI bus bodies with in shortest possible time to avoid revenue loss and wastage of resources.

On reviewing the accidental damages occurred during the 2011-12 & 2012-13 on Super Luxury & other high end vehicles, it is observed that 80% of them were either due to “head on collision” or due to “hitting the stranded vehicle from the rear”, as mentioned hereunder.

Year	Total No. of accidental damages received at C&B section	Head on collision	Hitting from Rear	Other causes	Remarks
2011-12	80	61	5	14	-
2012-13 Upto Nov'12	59	30	2	27	-

The Registered / available local sources for taking up the accident / re-furbishing works to the MS/GI structure vehicles are only a few and these agencies are taking more time for completion of works, in some cases the time taken for accident repairs is upto 200 days.

To avoid delay in taking up the works, it was proposed to take up the accident repair / refurbishing works at the BBW, Miyapur and all the Zonal Workshops through out-sourcing. Accordingly the required facilities and machinery such as MIG welding plant etc., are provided.

In view of non-availability of man power with required skills for repairing / refurbishing of MS/GI structure bus bodies, guidelines were issued vide circular 5/2011-MED for under taking accident repairs and midterm attention of Super Luxury through outside agencies in the premises of BBW, Miyapur and other Zonal workshops. But appreciable progress is not seen in implementation of above instructions due to following constraints.

- Rigid system in calculating the labour charges like estimation of labour cost on percentage of material cost was not proportionate with the work involved. Whenever MS items were used the labour cost arrived is less though the work content is more. This is evident mostly on the front And rear end structures.
- The labour charges for reusing the old serviceable material is not embedded into the system. In most of the repairs, it was attempted to utilize the existing material itself by removing the deformation and twists, instead of new material, though work involved is more in case of old material.
- Work involvement in dismantling the damaged parts is not properly assessed.

- In spite of clear cut estimates and piece rate charges were finalized through tender, the individual cases were again referred to head office / Zonal office, hence payments are getting delayed.

Further, due to non-availability of man hours for the attention of damages occurred to the sub assemblies, like front end structure, rear end structure, side structure, JK door attention etc., and lot of complexity of estimating the man hours, the works were not taken up at Zonal Work Shops in a full-fledged and encouraging manner till now.

In this connection a study was conducted at KSRTC Kangeri Work Shop, Bangalore by the committee consisting of WM/BBW & AME(D) and examined the system being followed there

- a. For extensive repairs, a committee consisting of Dy. Manager (Works), Accounts Officer, Security Officer and Stores Officer with the chairman ship of Works Manager along with the contractor decide the man hours to be allocated for attending the repair works after physical examination of the vehicle.
- b. The work shop has also engaged outside agencies for fabrication of New buses and extensive repairs of old vehicles. The outside agencies provide only the labour contract and the required material, infrastructure, power and technical support is provided by K.S.R.T.C only. Around 1900 man hours are allocated for fabrication of new bodies by outside agencies and the man hour rate is decided by HO through tenders.

Even though, the above system was working effectively at KSRTC, it is proposed to adopt the similar system with a little changes i.e., by assessing the labour cost on pro-rata basis based on the extent of damages and the standard labour cost estimated and communicated by the C&B section, instead of man hours/man hour rate basis to carryout the accident repairs / mid term attention of MS/GI bus bodies /re-furbishing at Zonal Work Shops as detailed hereunder.

1. Repairing contracts shall be finalized through tenders by the tender committee consisting of WM, COS and Dy.CAO of the Zone for each activity / sub assembly. The committee shall negotiate and finalize the rate as per standard labour costs communicated for each activity / sub assembly as at Annexure–A and to have a panel of out sourcing contractors who ever matched the rates as finalized by the committee during the negotiations. However the preference shall be given to the original lowest tenderer while allotting the buses for repair / refurbishing.

2. The Depot Manager has to send the vehicle for repair/ refurbishing whenever met with the accident or required F.C attention to the Workshop in consultation with the Works Manager, along with letter covering the works to be carried.
3. Initially, the workshop Supervisor (Body Shop) shall inspect the vehicle thoroughly and enlist the works to be carried out, duly examining the requisition of the Depot.
4. A committee consisting of AWM, SO, AO, SSI and the Contractor under the Chairmanship of Works Manager shall inspect the vehicle where in it is in accordance with the list prepared by the Supervisor, and assess the labour cost for repairs of each sub-assembly on pro-rata basis considering the extent of damage and the labour cost as finalized by the committee of WM, COS and Dy.CAO for each activity / sub assembly.
5. The above committee shall release proceedings duly covering the following items, for the estimated labour cost for repairs of each bus duly examining the feasibility whether it is economical to undertake repairs at the estimated repair cost at that life or it is better to convert it into Pallevelugu / City Ordinary bus.

S.No.	VEHICLE No	MILEAGE COVERED	WORKS TO BE ATTENDED	ESTIMATED LABOUR COST TO ATTEND THE REPAIRS / REFURBISHING/ MID TERM ATTENTION	REMARKS
			1. 2. 3. 4. 5. Etc.,		

6. Basing on the estimate a formal work order will be issued by the AWM, duly indicating the time frames for completion of the job.
7. The claim shall be furnished by the Contractor, after completion of work entrusted as per work order and the same shall be forwarded to Dy.CAO by the AWM with certification of satisfactory completion of the work. WM shall inspect completed vehicles at random for ensuing quality.

8. Dy.CAOs of Zones while according concurrence and further processing for sanction shall verify the following.
 - a) Photographs of the damages of the vehicle are filed in the case along with the accident report, if any.
 - b) Whether it is economical to undertake repairs at that life or it is better to convert into Pallevelugu/City ordinary.
 - c) The Committee report on the assessment of the labour cost is filed in the case.
9. Initially, the workshop Supervisor (Body Shop) shall inspect the vehicle thoroughly and enlist the works to be carried out, duly examining the requisition of the Depot.
10. Zonal Workshops should ensure that fast moving items as listed at annexure – “b” are available without interruption, and if repair works get affected for want of any material the same shall be made available by resorting to Committee Purchase as per the procedure stipulated in SPD manual.
11. The amended Delegation of Powers item No. 39(2), Section – 6 “Purchase & Disposal of Stores” communicated through notification No. PD-09/2011, Dated: 23-4-2011 may be adopted for taking approval in individual cases.

Except above, the other instructions issued through Circular at 2 regarding infrastructure facilities to be provided and others stand unaltered and followed in toto.

Executive Directors of the Zones shall ensure carrying out the repairs works of Super Luxury buses/MS/GI High end buses at the respective Zonal workshops by end of December, 2012 and also to review the progress and cycle time involved during PRC meeting.

Regional Managers, Dy.Chief Mechanical Engineers and Depot Managers, henceforth, stop to send the Super Luxury buses to outside agencies, for repairs but to send them to the respective Zonal workshops only, if they are beyond the repairs capacity at depots.

The Works Managers shall plan meticulously to complete the repair works within a shortest possible cycle time so as to minimize the off road days at this prime product and hence revenue loss.

Please acknowledge,



VICE-CHAIRMAN &
MANAGING DIRECTOR

Copy to the following for information and necessary action.
Dir(V&S)/ED(E&IT)/ED(O,MIS&AM)/ED(A&P)/FA&CAO/ED(H&M) &
Secretary to Corporation.
All Executive Directors (Zones).
All RMs/HODs.
All Dy.CMEs/WMs/COSs/Dy.CAOs.
All the Depot Managers/Accounts Officers for necessary action.
All Depot Maintenance Incharges.

Estimation of Standard Labour cost for attending various sub-assemblies of Super Luxury Bus

SI. No	Area of attention		Particulars of work content	MATERIAL COST	Labour charges	Remarks
I	1.A	Front end structure dismantling and fabrication(Complete)	Including front end structure, dash structure prep., & FRP complete fitment excl. front windscreen glass frame	29250.66	9000.00	
	1.B	Wind screen frame preperation & fitting to vehicle	Wind screen frame preparation and welding on vehicle.	352.66	1000.00	
	2	J.K. door repairs .	Including frame preparation, panelling, mounting on vehicle & glasses fitment.	5096.26	1600.00	
	3	Driver door repair	Including frame preparation, panelling, mounting on vehicle & glasses fitment.	4279.28	1500.00	
	4	Step well repairs .	M.S.Structure fabrication, chequered sheet fitment & beeding work.	5884.64	2000.00	
	5	Driver cabin flooring under frame repaires	cabine under frame structure repaires attention including vinyl mating.	7442.99	1100.00	
	6	Cabine partition repaires	Only attending of cabin parttion, paneling and mat pasting.	4168.48	1500.00	
	7	Cabine door replacement	Removal, repaires attention and fitment on vehicle.	3559.54	1200.00	
	8	Side structure at one bay (1680 mm) repairs,including stretch panel	Structure & stretch panel replacement.	4879.10	1400.00	
	9	Skirt panels at four wheel arches repairs .	preparation and fitment of four wheel arches panels including rubber fitment	6769.29	1500.00	
	10	Flap doors (1680 mm) repairs .	Each falp door repairs attention and fitment	3952.145	800.00	
	11	Stretch panel one side repairs	Stripping, repairs attention and fitment on vehicle.	2697.27	2000.00	
	12	Rear end structure dismantling & fabrication (complete)	Complete M.S.Structure fabrication, fitment of FRP and lggage booth door fitment including paneling.	19439.5	8000.00	
	13	Rear luggage booth repairs .	Frame structure, interior panelling, vinyl pasting and beeding work	17895.35	2200.00	
	14	Floor vinyl mat replacement	Replacing of complete floor vinyl mat.	7582.16	1800.00	
	15	Interior truss panel padding (Fabric)	Pasting of padding on either side truss panels.	12955.78	1000.00	
	16	Interior Ceiling:				
	a	ABS panels (replacement charges per bus)	Replacing of ABS panels.	20634.28	3500.00	
	b	Fabric - Replacement of old fabric	Ceiling fabric pasting.	11161.2	1500.00	
	17	Battery box repairs including cradle	Battery creddle preparation & fitment	2936.53	800.00	

Sl. No	Area of attention		Particulars of work content	Labour charges	Remarks
II	1	FRP repairs cost per sq.mt. (incl. material) in Rs		1500.00	
	2	Front Wind Screen glass removal & fitment cost in Rs		1000.00	
	3	Rear end saloon glass removal and fitment cost in Rs		500.00	
	4	Window frame 1680 mm bay removal & repairs including flock channel/ shutter glasses replacement inRs.		400.00	
	5	Complete body painting charges (including structural painting & removal of old paint) in Rs		4500.00	
	6	Upholstery trimming and replacement per each Passenger Twin Seater		350.00	
	7	Each bay ceiling upholstery repairs cost per sq. mt. in Rs		201.00	
	8	Complete interior & Seats chemical wash in Rs		735.00	
	9	Wiring harness checking & replacement in Rs		3000.00	
	10	Light repairs & replacement (per light) in Rs	for each light	50.00	
	11	Wiper machine repairs	Linkage repairs	699.00	
	12	Engine bonnet repairs incl.bonnet base		1501.00	
	13	Repairs to driver seat/berth/Attendent seat each		500.00	
	14	Replacement of Plywood per Sq.mt		220.00	
	15	Hatrack repairs per bus		401.00	
	16	Luggage carrier/Ladder repairs each		600.00	
	17	Roof leakage attention		999.00	
	18	Roof hatch repairs		200.00	