

ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

No:TL/574(7)/2003-MED

O/O the Managing Director,
Mushirabad, Hyderabad- 20.

CIRCULAR NO. 11/2003-MED, DATED 08-04-2003

**Sub: MAINTENANCE -Introduction of Volvo B7R A/C buses in APSRTC
Instructions on maintenance of buses issued - Reg.**

Corporation has purchased 10 Nos. Volvo B7R AC Coaches. The coaches will be introduced on the following routes.

S.NO	Route	No. of buses	Allotted to depot
1.	Hyderabad - Goa	2	Hyd-I
2.	Hyderabad - Mumbai	2	Picket
3.	Tirupathi - Bangalore	2	Alipiri
4.	Nellore - Bangalore	2	NLR-II
5.	Hyderabad - Vijayawada	2	VJA

All the buses are likely to be commissioned during April/ May 2003.

FEATURES: The special features of Volvo B7R AC Coaches are indicated hereunder.

ENGINE: DB7 260 type, 260 H.P., 4 stroke, 6 cylinder, Rear Mounted engine with turbo charger and inter-cooler. This engine conforms to 'Euro-II' emission norms.

GEAR BOX: ZF S6-85 Synchronmesh gear box with 6 forward and one reverse gear with electro magnetic retarder on the output end for effective breaking and enhanced life of brake linings.

CLUTCH: Pull type single plate dry friction type of 1753 sq.cm. friction area.

SUSPENSION: Full air_ suspension on front & rear with stabilizer and double acting telescopic type shock absorbers.

STEERING: Integral hydraulic power steering of Volvo make with adjustable steering wheel.

BRAKES: Dual circuit, full air 'S' Cam brakes supplemented with exhaust and parking brakes.

ELECTRICAL SYSTEM: 24V electrical system with 2 x 165AH batteries with Bosch Make Alternators (80 Amps) and Bosch Make Self Starter.

TYRES: Steel disc wheels with 10 studs mounted with 11.00 x 20 size steel radial tyres.

FUEL TANK: 300 liters capacity.

WHEEL BASE: 6200mm wheel base with a minimum turning circle radius of 11500mm.

STANDARD ACCESSORIES:

- 1) 21" ONIDA Colour TV,
- 2) Video/ Audio CD Player with speakers
& Public Address System.
- 3) Power Inventor.

WARRANTY: Warranty shall be applicable for a period of 12 months against defects in material/spares from the date of delivery to APSRTC.

I. SCHEDULED PREVENTIVE MAINTENANCE:

The daily maintenance at depot shall cover the following items of work.

- 1) Checking inflation of tyres.
- 2) Checking oil levels
- 3) Internal and External Warning lamps functioning.
- 4) Coolant level checking.
- 5) Driver seat belt condition.
- 6) Rear view mirror "adjustment functioning.
- 7) Functioning of wiper

Upkeep of bus:

The bus is having vinyl flooring and carpet lining from crib level to waist level and for ceiling. The vinyl flooring must be swabbed with a wet cloth duly taking care not to wet the seats and carpet. The carpet shall be cleaned once in a week with vacuum cleaner.

The head rest covers are of Rexene type and need not be washed. They should be wiped with soap water on daily basis to remove traces of oil.

The window glasses should be thoroughly wiped with dry cloth after washing to prevent formation of dark spots.

The firm M/s Volvo have agreed to carry out preventive maintenance on the buses as follows:

- 1) For the first six months from the date of commission or 1,50,000 Kms, whichever is earlier M/s Volvo will, carry out preventive maintenance of all the buses on free of cost, basis which includes cost of spares and consumables.
- 2) After the expiry of 6 months or 1,50,000 Kms, the firm will carry out preventive maintenance of the buses duly charging Rs. 12,500/- per month per bus including cost of spares and consumables for the next six months applicable for a maximum of 3,00,000 Kms since commissioning, whichever is earlier.

The following items will be covered under the above preventive maintenance agreement.

- a) The first service is carried out at 10,000 Kms after which the further services are carried out at intervals of every 25,000 Kms viz., 35,000, 60,000, 85,000 Kms and so on.
- b) At each of these services Bye pass filter, fuel filter are replaced and engine oil, Bye pass filter oil and Power steering oil are replaced.
- c) Water separator is replaced at 60,000 Kms and at further intervals of every 50,00 Kms.
- d) At intervals of every One lakh Kms all filters and oil including rear axle and gear box oil

above agreement is enclosed at Annexure. It may be ensured that the above specified periodical works are executed by the firm without fail.

After the expiry of the above maintenance agreement, these buses will have to be maintained by our own mechanics/artisans in the depots for which necessary training programs for imparting skills to supervisors/ mechanics/ artisans of depots to which these buses will be allotted has already been taken up by M/s Volvo.

Hence during the above period of agreement, it is necessary to monitor and maintain record for the works carried out and the problems faced during the maintenance of these buses. Necessary record of problems faced, repairs and replacements carried out by the firm on the vehicles shall have to be maintained in a register so as to arrive at the consumption pattern of spares, frequent troubles on units etc., to take corrective actions at later stages.

The Volvo product Supervisors/ Mechanics/ Artisans of the depots who have been trained by M/s Volvo have to be actively involved in the preventive maintenance works carried out by M/s Volvo during the first one year so as to gain adequate practical knowledge about the maintenance of these buses.

During the period of this maintenance, the depots may come across certain chronic complaints/ defects on vehicles from drivers or passengers including defects' in Body/AC. Such defects/ complaints shall immediately be brought to the notice of M/s Volvo & Dy.CME(C&B) section of H.O. & action should be taken to ensure such defects are attended satisfactorily during the warranty period/

preventive maintenance contract period with out fail. The contact personnel at M/s Volvo are:

BANGALORE:	At Volvo factory Yalachahally, Tavarekera Post, Hosakota Taluk Bangalore - 562 122	Mr. Anil Dhareshwar/Mr. Shankar, Mobile: 98451 72075 Phone: 080-7962603 Fax : 080-7965280/81 Mr. Sabu Issac, Service Manager-Bus Mobile: 98451 85248 Mr. Ravi Chandra - Parts Mobile: 98451 85162
HYDERABAD:	2-26/2, Hydernagar, Kukatpally, HYDERABAD.	Mr. Srinivas Phone: 040-23058949/23050910
MUMBAI:	Mumbai - Nasik Road,	Mr. Senthil Bhiwandi By Pass, Mobile : 98212 44089 Dopada Village, Mankoli Naka, Phone : 025222-66689/90 Near Anju Petrol Pump, Fax : 025222-66707 Bhiwandi, Thane-421 302.

The HSD KMPL, Lub KMPL, RGs/Log Sheet complaints/ Break Downs/ Complaints on A/c etc., on these vehicles are to be separately recorded and monitored and necessary feed back shall be given to Head Office at monthly intervals for each vehicle.

All Depot Managers are, therefore instructed to implement the above instructions scrupulously and furnish necessary feed back as cited.