

ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

No.OP3/462(5)/2004-MED

Office of the VC&MD  
Mushirabad, Hyderabad.

CIRCULAR No.08/2004-MED, Dt.10.05.2004

SUB: VEHICLES:- Introduction of Eicher make passenger buses in our Corporation - Instructions on maintenance of buses - Reg.

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The Corporation has taken a decision to introduce 15 "EICHER" make passenger buses manufactured by M/s Eicher Motors Limited. These buses will be initially allotted to Kushaiguda depot in HCR & Vijayawada depot in Krishna region to evaluate their performance in comparison with Leyland/Tata vehicles respectively operating on the same route.

I. The salient features of these buses are as follows:

Sl. No.	Feature	Make	Model	Description
1.	Chassis Assly.	Eicher	C-Channel Ladder type	Wheel base-5840 MM
2.	Engine	Eicher	6 Cylinder TCI BS-II	Turbo Charged & Inter cooled Bore : 100 mm Stroke : 105 mm Maximum output DIN: 123 HP @ 3200 RPM Maximum Torque DIN: 34 Kgm @ 1600 RPM
3.	Air Cleaner		Dry type	
4.	Air compressor	Sundaram Clayton	Single Cylinder Reciprocating type, Water cooled	Gear Driven
5.	Cooling System			
	a) Water Pump		Impeller type	Pump circulated Pressurised cooling, thermostat controlled with deaeration tank
	b) Radiator with Deaeration tank	Eicher or any other make appr-		

oved by APSRTC

c) Thermostat

Wax single, Bottom  
by pass type with  
opening temperature at  
82+/-2 Deg.C & fully  
opens at 95 Deg.C  
Opening pressure  
0.5 Kg/Sq.Cm

d) Pressurised  
Radiator Cap

6. Clutch Assembly Eicher 330 MM dia

Hydraulically actuated  
single Plate dry  
friction, spring type.

Sl. No.	Feature	Make	Model	Description
7.	Gear Box	Eicher		Synchromesh, 6 forward & 1 reverse
8.	PP shaft	Eicher		No.of Propeller shafts - 3
9.	Front Axle Assembly	Eicher	Grease lubricated kingpins	Heavy duty Forged I Beam reverse Elliot type, Axle capacity 5500 Kgs.
10.	Rear Axle Assembly	Eicher		Heavy duty Fully floating banjo type with 5.875:1 gear ratio Axle capacity 9100 Kgs
11.	Gross Veh. Weight			14600 Kgs.
12.	Front Suspension	Eicher	No.of leaves-7 3-13 mm, 4-16mm with 3 spacers	Semi elliptic Laminated Leaf springs assembly
13.	Rear Suspension	Eicher	No.of leaves-12 4-13 mm, 8-18mm	Semi elliptic Laminated Leaf springs assembly
14.	Steering Assembly With Power Steering	ZF		Hydraulic Power Steering
15.	Minimum turning			9.95 Mts.

radius

16. a) Brakes	CD TVS	Dual Line Brake systems	Dual Circuit, Full air, S-Cam
b) Parking Brakes	CD TVS		Pneumatic, Hand operated acting on rear wheels
17. Self Starter	LUCAS TVS		24 Volts, Axial type
18. Alternator	LUCAS TVS		24 Volts
19. Battery			2 X 12 Volts, 21 plates 120 AH capacity
20. Tyres (Nylon)			9.00X20 SIZE 14 PLY RATING TYRE WITH BUTYL TUBE WHEEL RIM SIZE- 7.00 X 20 No.of tyres - 7

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Sl. No.	Feature	Make	Model	Description
21.	Fuel tank Capacity			220 liters
22.	Driver Seat	Haritha Grammar	Knitted type	With adjustment of bottom seat up & down, to & fro and seat back reclining mechanism.

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## II. WARRANTY TERMS:

The warranty will be in force until the expiry of a period of 24 Months from date of installation irrespective of kilometers performed on the vehicle & its aggregates supplied by M/s Eicher Motors Limited for defects in material or workmanship.

## III. MAINTENANCE OF VEHICLES :

The daily maintenance checks that have to be carried out on the vehicle are as follows:

1. Check Engine oil level
2. Check Coolant level
3. Check Air Cleaner condition (Visual Inspection)
4. Check Clutch fluid level

5. Check all V-belts condition for slipping etc.
6. Discharge of water from water separator
7. Check Wheels & tyres
8. Check Tyre Inflation pressure
9. Check Control panel switches and indicators for any malfunctioning
10. Check for any water, fuel and oil leak
11. Check quality of fuel filled for any contamination
12. Check Door locks, Hinges etc.
13. Check Air gauges for any air leak
14. Check hand brake condition.
15. Check head lamp condition
16. Clutch, Brake and accelerator pedal play
17. Any abnormal operating condition.

The inspection & maintenance schedules of these buses is given at Annexure-1.

IV. M/s Eicher Motors have come forward to carry out total maintenance of these first batch of 15 buses at Kushaigudda & Vijayawada Depots respectively. The AMC includes daily & periodical maintenance of vehicles, oil changes, replacement of wear & tear items including springs, brake linings, clutch disc etc.,. The details of the AMC will be communicated separately.

V. EVALUATION OF PERFORMANCE :

The DMs of the Depots to which these buses are allotted shall operate these buses on the routes in which AL/TATA buses of the same type are also operated for comparison & evaluation. The daily operation particulars of the Eicher buses type wise & similar type buses of Leyland/Tata operating on same route shall be entered in a separate register together with Daily RGs & any major repairs carried out on Eicher buses for evaluation and necessary action.

The performance particulars of these buses, type wise, together with comparative data of Leyland/Tata buses operating on same route shall be furnished in the following format once in a week to CME(O).

Sl.No.	Vehicle No.	Type City Ord./ District Ord./ Hitech	Make Eicher/ Leyland/ Tata	Route	KMs operated	
					during the week	upto the week
(1)	(2)	(3)	(4)	(5)	(6)	(7)

HSD oil cons.	HSD KMPL	LUB oil cons.	OR	Breakdowns	Major
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during the week	upto the week	during the week	upto the week	for top up during the week	upto the week	For the week	on vehicle during the week if any	Complaints on vehicle
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)

The DMs of the depots are advised to involve themselves personally and arrange to furnish the above information periodically without fail which will facilitate fair comparison of the new buses with our regular fleet.

The DVMS & Dy.CMEs are advised to ensure implementation of the above instructions with out fail.

The RMs are advised to review the implementation of the above instructions scrupulously at the Depots and arrange to furnish the information as cited above regularly.

Encl - As above.

EXECUTIVE DIRECTOR (E)

Similarly a monthly statement indicating the consumption of important spares on the Eicher buses & AL/Tata buses (chosen for comparison) shall be furnished in the following proforma.

Item	Date on which Changed	Mileage at Which changed	Qty. Consumed	Veh. No.
(1)	(2)	(3)	(4)	(5)

1. Spring Blades
2. Clutch discs & Pressure plates
3. Brake linings
4. Hub bearings
5. Fan belts
6. Hoses
7. Coolant
8. Gaskets
9. PP shafts or CJ bearings /Beds
10. Shackle pins, Brackets or links

The performance particulars of these buses, type wise, together with comparative data of Leyland/Tata buses operating on same route shall be furnished in the following format once in a week to CME(O).

Sl.No.	Vehicle No.	Type City Ord./ District Ord./ Hitech	Make Eicher/ Leyland/ Tata	Route	KMs operated	
(1)	(2)	(3)	(4)	(5)	during the week (6)	upto the week (7)

HSD oil cons. Major	HSD KMPL		LUB oil cons. for top up	OR For	Breakdowns on vehicle	
during the week (8)	upto the week (9)	during the week (10)	upto the week (11)	the week (12)	if any during the week (13)	during the week (14)

The DMs of the depots are advised to involve themselves personally and arrange to furnish the above information periodically without fail which will facilitate fair comparison of the new buses with our regular fleet.

The DVMS & Dy.CMEs are advised to ensure implementation of the above instructions with out fail.

The RMs are advised to review the implementation of the above instructions scrupulously at the Depots and arrange to furnish the information as cited above regularly.

EXECUTIVE DIRECTOR (E)

Sl.No.	No. of Vehicle	Type City Ord./ District Ord./ Hitech	Make Eicher/ Leyland/ Tata	Route	KMs operated during the week
(1)	(2)	(3)	(4)	(5)	(6)

HSD oil consumed during the week	HSD KMPL	LUB KMPL on Top up	OR For the Week	Breakdowns on vehicle during the Week	Major Complaints on vehicle if any during the week
(7)	(8)	(9)	(10)	(11)	(12)