

ANDHRA PRADESH STATE ROAD TRANSPORT CORPORATION

**Office of the VC & MD,
Mushirabad : Hyderabad-20.**

No.OP2/462(I D/2000-MED)

Dated : 17.07.2000.

CIRCULAR No.27/2000-MED, Dated 17.7.2000

SUB: Maintenance - Introduction of King Pins with grease lubrication instead of oil lubrication of existing system on Ashok Leyland vehicles - Certain instructions issued - Stocking of required spares - Reg.

M/s Ashok Leyland have introduced the fitment of King Pins with grease Lubrication instead of oil lubrication as a option on their vehicles with effective chassis number from 2KB 436211 (KE 228550 FRONT AXLE) in the part of product development. We have already received vehicles with provision of grease lubrication king pins and put in to operation at various depots of Leyland area.

Due to the above modification the existing spares related to King pins are not interchangeable oh the Vehicles having Grease lubrication for king pins, the Maintenance of vehicles with the fitment of Grease Lubrication system are also different to that of existing system of oil lubrication for King Pins.

The spares required for the vehicles fitted with grease lubrication for King pins and other related parts are furnished at Annexure.

**PROCEDURE FOR FITMENT OF GREASE LUBRICATED KING PIN
ARRANGEMENT ON 5 TON FRONT AXLE:**

Press in the top bush and the bottom bush in the axle are as shown in the stub axle drawing. Position the "V" seal top and bottom "V" seal as shown in the sketch.

Press the thrust button at the bottom of the king pin before assembling.

Mount the stub axle are on the axle beam.

Drive in the king pin snugly from the bottom of the beam after applying a little oil, over the king pin and into the bushes. The shoulder of the King pin should be seated firmly against the tapered surface of the axle beam.

Press the bottom thrust button in the bottom cover with grooves facing upwards.

Select shims at random and place it on the bottom cover, tighten the bottom cover bolts evenly.

Check the pre movement of the axle are as well as zero end play of the King pin. If the axle are is found to be too tight, if end play is noticed, remove shims until no end play is felt and the axle arm moves with

resistance over the king pin.

Drive in the cotter pin from the front side and lock it with a washer and self locking nut.

Fix the top cap along with the gasket.

Fix the grease nipple at top and bottom as shown in the sketch. The direction of grease nipple position at bottom cover would be facing the Centre line of vehicle. This is adjustable because the grease nipple has taper threads.

The lubrication of the top and bottom bushes are independent.

TOP BUSH: Apply grease under pressure through top grease nipple until new grease is seen coming out from the 'V' seal at the bottom of the beam.

BOTTOM BUSH: Apply grease under pressure through bottom grease nipple until new grease is seen coming out from the 'V' seal at the bottom of the beam.

RECOMMENDED LUBRICANT:

Multi purpose grease/Chassis grease

LUBRICATING INTERVAL:

At every 5000 KMs or weekly whichever is earlier.

SPECIAL NOTE (DIFFERENCES BETWEEN OIL LUBRICATION AND GREASE LUBRICATION SYSTEM OF KING PINS):

Assembly of king pin shimming is identical to the existing Arrangement.

Instead of oil seal at the top of the beam, V seal to be used. (Top bush area).

Instead of the O ring at the bottom of the beam, V seal is to be used (Bottom bush area).

Top cap without relief valve in place of oil housing with only grease nipple.

Grease nipple is provided at the bottom of the bottom cover

The new king pin length is short by 10mm compared to existing and there is no thro hole.

As a set of complete ie., King pin with bushes are interchangeable.

The Dy.CMEs of Leyland area are advised to ensure the stocking the required spares at the Depots for the Vehicles with Grease Lubrication system basing on the fleet available and depending up to on consumption pattern.

The Controller of Stores of Leyland Zones are advised to fix the limits for stocking the spares required for the vehicles with grease lubrication system duly consulting the concerned Dy.CMEs in the limits fixing committee meeting and ensure to supply to the depots as per the requirement.

The Depot Managers of Leyland area are advised to educate the staff on the maintenance of Vehicles fitted with grease lubrication system on King pins particularly lubricating activity and periodicity for checking etc. for better durability.

Encl : Annexure

Sd/-

EXECUTIVE DIRECTOR (Engg)

ANNEXURE

S.NO	DESCRIPTION	PART NO
01	SUB ASSY OF AXLE ARM	B 2512607
02	KING PIN	F 0969715
03	TOP THRUST WASHER	F 4953615
04	BOTTOM THRUST WASHER	F 4953715
05	BOTTOM COVER	F 1133311
06	TOP CAP	F 1101113
07	JOINT FOR TOP CAP	F 1731300
08	GREASE NIPPLE	F 2561010
09	V SEAL TOP	F 2754000
10	V SEAL BOTTOM	F 2700700
11	5/16"BSF SCREW	H 2050505
12	KING PIN TOP BUSH	F 0538330
13	KING PIN BOTTOM BUSH	F 0538230

KITS

S.NO	DESCRIPTION	PART NO
01	KING PIN KIT	P 0939651
02	BUSH TOP	F 05338330
03	BUSH BOTTOM	F 0538230
04	COTTER PIN	F 0914415
05	KING PIN	F 0969715
06	THRUST WASHER TOP	F 4953615
07	THRUST WASHER BOTTOM	F 4953715
08	WASHER 3/8"	F 4931210

09	NUT 3/8"	F 3650611
10	OIL SEAL	F 27544000
11	O RING BOTTOM	F 2700700
12	AXLE ARM KIT	P 0939751
13	BUSH BOTTOM	F 0538230
14	DISTANCE PIECE	F 1234322
15	O RING	F 2700700
16	SLOTTED NUT	F 3555615
17	SPLIT PIN	F 5001220
18	SHIM	F 4444010
19	SHIM	F 4444110
20	SHIM	F 4444210
21	WASHER	F 4937015