# Government of India Ministry of Railways Research, Designs & Standards Organisation Manak Nagar, Lucknow - 226 011

### **ELECTRIC DIRECTORATE**

No.EL/3.2.29 Dt. 05.02.1996

MODIFICATION SHEET NO. WAG-5/20

(New No. WAG5/233)

# REPLACEMENT OF GREASE BEARING BY SEALED BEARING IN NON-DRIVING-END OF BLOWER MOTOR OF EATON MAKE DBR

#### 1. <u>OBJECT OF MODIFICATION</u>

- 1.1 The existing blower motor in the Eaton make DBR are provided with Grease Bearings both on the driving-end and non-driving-end. It has been observed that the grease from the non-driving-end bearing oozes out and disintegrates into soap and oil due to heat from the resistor elements ( above the bearing ). This oil trickless towards end shield and as the motor is totally enclosed type, the dust from the carbon brushes accumulates on the end shield over the oil resulting in low IR/earth fault of the blower motor.
- 1.2 It order to overcome this problem, It has been decided that the non-driving-end grease bearing of the motor should be replaced with sealed bearing. Trials have been conducted in the Electric loco shed, Waltair of SER using sealed bearing of the non-driving-end of the Eaton DBR blower motor and the performance is reported to be satisfactory.

#### 2. WORK TO BE CARRIED OUT

- **2.1** Dismantle the blower motor from the Eaton make DBR;
- 2.2 Remove the grease bearing No.6209 on the non-driving-end.
- 2.3 Provide sealed bearing No. 6209 2Z (C3 clearance)
- **2.4** Reassemble the blower motor in the DBR.

#### 3.0 <u>APPLICATION</u>

All locomotives fitted with M/s. Eaton make DBRs.

#### 4.0 MATERIAL REQUIRED

One SEALED bearing No.6209 2Z (C 3Clearnce).

#### 5.0 MATERIAL RENDERED SURPLUS

One grease bearing No.6209 2Z (C 3Clearnce).

# 6.0 PERIODICITY OF REPLACEMENT OF SEALED BEARING

The sealed bearing No. 6209 2Z(C3 clearance) to be replaced in IOH.

#### 7.0 PRECAUTIONS DURING USE OF SEALED BEARING

During periodic greasing of the grease bearing (driving-end) of the blower motor, care should be taken NOT to pump grease in the grease nipple on the non-driving-end of sealed bearing.

## 8.0 REFERENCE

- **8.1** M/s. Eaton.
- **8.2** Mission Report No. 10 of Maintenance Study Group Meeting of South-Eastern Railways.

## 9.0 MODIFICATION DRAWING NO.

NIL.

Encl: As above

#### **10.0** AGENCY OF IMPLEMENTATION

All Electric loco sheds ana shops for AC Electric locomotives.

#### 11.0 DISTRIBUTION

As per list enclosed.

(ARUN SRIVASTAVA) for Director General/Elect.