



MAINTENANCE SCHEDULE OF TRACTION MOTORS

Periodical maintenance is essential to ensure safety, reliability and continuous operation of traction motors over long time periods.

Following maintenance schedules shall be followed for traction motors type 6FRA 6068 & 6FXA 7059 as per RDSO letter no. EL/ 3.1.35/ 16 dtd. 30.03.2007.

Schedule	Freight locomotives WAG9	Pass./ Mail/ Exp. Locomotives WAP5/ WAP7
TI	Every 45 days	3000 kms. or one trip whichever is latter
IA	90 days	90 days
IB	180 days	180 days
IC	270 days	270 days
AOH	After 18 months	After 18 months

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TI Schedule

- Examine all traction motors for signs of damage caused by ballast. Check air outlets are not obstructed in any way.
- Check traction power cables, speed sensor and temperature sensor cables are not chafed or damaged in any way.
- Check the condition of bearing by seeing the grease, which comes out from grease inlet. Check the condition of grease too.
- Check the condition of spheriblocks. Replace if required.
- Measure inductance at TM power cable terminals of SR-1 and SR-2.
- Check end shield bolts tightness.
- Visually check TM support plate lugs for any damage/ crack.
- Attend logbook/ PPIO bookings if any.

IA / IB Schedule

In addition to TI Schedule carry out the following activities:

- Open TM junction box at body side and check the tightness of connections.
- Check the intactness of junction box cover and bolts.
- Check the condition of bellows and replace if required.
- Check grease nipple on DE & NDE sides.
- Check for oil falling on traction motor from under frame.
- Check for proper tightness of cable with Din Rail for cable connection and tie up with cotton tape for additional protection.
- Check rubber grommets of power cables, earthing connection with traction motor body and earthing screw.
- Check and tighten NDE cover bolts.
- Measure resistance of speed sensor at SR electronics.



IC Schedule

In addition to IA/IB Schedule carry out the following activities:

- Before greasing, open NDE speed sensor cover. Take grease sample for checking ferrous content.
- Check the condition of speed pulse generator unit on traction motor (NDE) for any grease ingress.
- Lubricate TM bearing with specified grease (Kluber Isoflex Topaz L 152) DE-50 storke (150 gms), NDE- 25 storkes (75 gms)
- Check the suspension tube bearing grease (NDE) and do the greasing.
- Open TM junction box at TM side and check the tightness of connection and water ingress.
- Check the condition of DE side stator winding for any abnormality from DE side net.

AOH Schedule

In addition to IC Schedule carry out the following activities:

- Measure the resistance of traction motor temperature sensor, speed sensor, winding inductance and IR value.
- Check the condition of bearing grease sample.
- Check base tangent of pinion and conduct UST.
- Change DE side 'O' ring.
- Check tightness of PGR and NDE lock bolts.
- Check and ensure temperature sensor modification as per RDSO/MS/350 or latest.
- Check tapping of traction motor bellow plate holes.
- Check terminal connection of traction motor by opening terminal box.
- Check traction motor temperature sensor and speed sensor wiring crimping.
- Replace the gasket of temperature sensor.