

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

No.EL/3.2.10/ Gen

23.5.1984.

SPECIAL MAINTENANCE INSTRUCTION NO. RDSO/ELRS/SMI/119

**PERIODIC APPLICATION OF LUBRICATING OIL ON THE BALANCE WHEEL
OF CLOCK MECHANISM OF BBC MAKE TIMELAG RELAYS, Q44, Q118, ETC.**

1. OBJECT

Sheds have observed that in BBC time lag relays the clock mechanism gets jammed due to non-lubrication of the balance wheel. The object of this SMI is to overcome this jamming problem.

2. Observations

This office has consulted BBC/Switzerland, who have advised that

- 2.1** The timing mechanism should not normally be oiled. The bearings are given a twice of oil (brand Gargoyle 797) in the factory and this resists deterioration for a long time. Only when the movement ceases to function regularly after a long service, it is advisable for the tips of the balance wheel which drives the movement to be moistened with a drop of GARGOYLE 797 oil.

3. Details of special instructions

- 3.1** As the gargoyl.797 oil is not indigenously available, procure standard good quality **-Matter not readable-**clock oil from reputed watch dealer.
- 3.2** As and when jamming is experienced, use the oil as directed by the firm vide para 2.1 above.

Note: Excessive oiling will cause sticking of the moving parts. the parts should only be moistened with a trace of oil.

4. Reference :

- 4.1** HBB's letter to CD.RLS/501/PUB dated 24.6.83 and letter No.507/PUB dated 12.3.84.
- 4.2** Item 21 (page 4) of minutes of the 13th MSG(EL) meeting held at Bhilai in February 1983 and circulated vide RDSO,s letter No. EL/2.1.8 Dt 19.4.83.
- 4.3** Electric loco shed/ Vijayawada/South central Railway,s Failure investigation in report No.5/1983.

5. **Application**
All electric locos where BBC time lag relays are used.
6. **Agency for implementation**
All electric loco sheds and POH shops.
7. **Periodicity of implementation**
During POH or whenever Jamming of the clock mechanism is observed.
8. **Distribution:**
As per mailing list.



(K. VISHWA KUMAR)
for Director General (Elect).

DA: Mialing list