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

No.EL/3.2.1 02/9.02.1995

SPECIAL MAINTENANCE INSTRUCTIONS NO RDSO/ELRS/SMI/165

PROFORMA FOR REPORTING FAILURE OF TRANSFORMER/SMOOTHING REACTOR/LINE CONTACTOR

1. OBJECT

1.1 Whenever any locomotive equipment fails, and the failure is an identified type defect, it is desirable to maintain records of all vital details to facilitate investigations. This becomes even more important when the type defect continues to occur despite various measures based on preliminary investigations.

1.2 It is easy to note and record all the relevant details when the failed locomotive reaches the shed and repairs are carried out. Later on it becomes increasingly difficult to collect such details.

1.3 The relevance of all particulars is not always selfevident. Sometimes vital details may be missed inadvertently. Hence it is desirable to draw up a check up a check list of format, which can be filled up by the stuff. No important details are then likely to be lost.

1.4 If come details are not readily available they should be collected and added later on but the form should be filled up to the extent possible within a few days of the occurrence of the failure.

2. INSTRUCTIONS

Railways should report the failures in general format/at checklist as per enclosed Annexure-1.

3. REFERENCE

Reliability engineering study report issued by RITES.

4. INSTRUCTIONS DRAWING

NIL

5. APPLICATION TO CLASS OF LOCOMOTIVE

All ac electric locomotives.

6. AGENCY OF IMPLEMENTATION

sheds/ shops.

7. PERIODICITY OF IMPLEMENTATION

Whenever failure is identified as type defect.

8. DISTRIBUTION

All CEE`s
Encl: As above

(R.N. Lal)
for Director General(Elect.)

Annexure-1

GENERAL FORMAT/CHECK-LIST FOR REPOPTING TRANSFORMER/ SMOOTHING REACTOR/LINE CONTACTORS FAILURE

Date of failure----------
Time of failure----------
Place of failure----------
Speed at time of failure----------
Motor current at time of failure---------
Weather at time of failure----------
(Normal, rain, lighting, dusty etc.)
Locomotive No----------
Equipment NO----------
Requirement position----------
(When several equpts. of the same type are used in each locomotive e.g. MVMT, TM etc.)
Make of equipment----------
Model or type rambex as given by manufacturer----------
Month/Year of manufacture----------
Month/year of commissioning----------
Date of test IA----------IB----------IC----------
AOH----------IOH----------POH----------
Last repair on same or associated equipment:
Date----------
Work done----------
Make of associated equipment
(e.g. driven machine cooling ----------etc.)
Electrical circuit symbol---------- If any
details of components(s) which failed

- Make
- Drawing number, if any
- Name
- Position (When several components ofsame type are xx used in the equipment)
- Description of fault centre (crack, failure, puncture, melting, tracking etc.)

Status of modifications and SMIs----------

MS or SMI No.	**Date of implementation**

Photographs or sketches to show exact location and nature of fault particularly when failed component can not be retained.

Failed components should be retained, when possible, in good condition for future investigations. they should be labelled to indicate loco number and date of failure. The failed components may be discharged only when cause is determined and remedial measure proved.

whether recommendations made in previous investigations have been implemented.

RECOMMENDATION	**Date of imple**