No. EL/3.1.35/2   Dated 28.04.2006

Chief Electrical Engineers,

- Northern Railway, Baroda House, New Delhi-110 001
- East Central Railway, Hazipur – 844 101 (Bihar)
- Central Railway, 2nd floor, Parcel Office Bldg., Mumbai CST-400 001
- Chittaranjan Locomotive Works, Chittaranjan-713 331 (WB)

MODIFICATION SHEET NO. RDSO/2006/EL/MS/0344 (Rev.0), April 2006

1.0 **Title:** Modification in Control Circuit of 3-phase electric locomotive.

2.0 **Object:** To enable switching ON the Marker Light under locomotive dead condition.

3.0 **Existing Arrangement** with cross-references of respective design document:

As per attached drawing (ref.: Circuit Diagram, Vol. G1)

4.0 **Modified Arrangement** to replace existing arrangement as given above in 3.0:
As per attached drawing.

5.0 **Application to class of locomotives:** WAG9, WAP5, WAP7, WAG9H.

6.0 **Material Required:** Interconnecting Control Cable.

7.0 **Material Rendered Surplus:** Nil.

8.0 **Reference:** CEE/N.Rly.'s letter No. 230-Elect./TRS/92 Pt. XV dtd. 29.12.2005
and 230-Elect./TRS/92/2/12 dated 21.3.2006.

9.0 **Modification Drawing:** Attached.

10.0 **Agency of Implementation:** CLW and Loco Sheds holding 3-phase locomotives.

(N.K.Sinha) 28/4/06
for Director General/Elect.

Encl: As above

Copy to:-

1. **Secretary (Electric Traction),** Railway Board, Rail Bhavan, New Delhi-110 001
2. **Chief Electrical Loco Engineers,**
   - Central Railway, 2nd floor, Parcel Office Bldg., Mumbai CST-400 001
   - East Central Railway, Hazipur – 844 101 (Bihar)
   - Northern Railway, Baroda House, New Delhi-110 001
3. **Sr. DEE (TRS), Electric Loco Sheds,**
   - Central Railway, Ajni (Nagpur)-440008
   - East Central Railway, Gomoh-828 401
   - Northern Railway, Ghaziabad (UP)- 201001

(N.K.Sinha) 28/4/06
for Director General/Elect.

Encl: As above

MARKER LIGHT IN 3 PHASE LOCOMOTIVE

Existing Circuit

From Charger MCB-110

MCB 112
MCB 112.1
Contactor 126
MCB 310.7

2021
2094
2086
3530
2093
Battery
2050

ON OFF 316.11/1 — 3545A — White M/L Cab1
ON OFF 316.12/1 — 3546A — Red M/L Cab1
ON OFF 316.11/2 — 3545B — White M/L Cab2
ON OFF 316.12/2 — 3546B — Red M/L Cab2

Modified Circuit

From Charger MCB-110

MCB 112
MCB 112.1
Contactor 126
MCB 310.7

2021
2094
2021
3530
2093
Battery
2050

ON OFF 316.11/1 — 3545A — White M/L Cab1
ON OFF 316.12/1 — 3546A — Red M/L Cab1
ON OFF 316.11/2 — 3545B — White M/L Cab2
ON OFF 316.12/2 — 3546B — Red M/L Cab2