

NO. LRM-1 (2)/66

Dated the 27th April, 1963

To

The Addl. Chief Engineer (Roads), PWD (B&R), Lucknow, U.P. The Addl. Chief Engineer (East), L.R.P., P.W.D. (B & R), Bihar, The Addl. Chief Engineer (West), L.R.P., P.W.D. (B & R), Bihar, The Addl. Chief Engineer, L.R.P., P.W.D., West Bengal, The Addl. Chief Engineer & Secretary, P.W.D. (R & B), Assam.

Subject : Basic records of construction equipment in Lateral Road Project

A substantial quantity of costly construction equipment is being procured for use in the Lateral Road Project. In any large scale operation of construction equipment it is essential to have a minimum number of basic equipment records. These records serve a variety of purposes, the more important of which are :

- (a) to lay down a well planned system of operation, maintenance, repairs and overhaul.
- (b) to provide a continuous record of the condition of equipment so that repairs can be planned in advance, and the capacity of equipment for future use can be estimated.
- (c) to reveal useful statistics on performance and unit rate for objective review and also for use in future estimations.

2. It is suggested that two basic documents viz. Driver's Log Book and History Book for each item of construction equipment may be maintained.

3. Five specimen copies of these two documents are enclosed herewith. Suitable dimensions have also been shown for the various columns in the specimen copies. To ensure uniformity these documents may be got printed to the same size according to dimensions given in the specimen in a book form with the card board/rexins cover.

4. Each equipment would have two Drivers' duty Log Books-One for even months with a green cover and the other for odd months with a yellow cover. When one of the two Log Books is submitted to Divisional Office for scrutiny at the end of the month, the other Log Book would be in use during the subsequent months. At the end of each month an abstract of operating hours and P.O.L. consumption would be prepared from the Log Book and posted in the History Book in the section "Monthly Data". Abstracts of output, consumption of stores, operating hours, idle hours, sickness hours etc. can then be made out for working out the unit rates.

5. Whenever equipment is transferred, it would be accompanied by the Driver's Duty Log Book and History Book duly completed. The officers handing over and taking over should sign in the section "Record of Transfer of Machine" in the History Book.

6. In view of the importance of having a permanent record of basic statistics, History Books should be kept in duplicate. The original History Book would remain in the custody of the Division maintaining and operating the equipment and the duplicate copy in the Chief Engineer's Office. It is suggested that every 3 months an Officer from Chief Engineer's Office may go round the work sites and get the duplicate copy brought up-to-date. Alternatively the History Books could be called from the Field Divisions for posting the duplicate copies in the Chief Engineer's office.

7. It is requested that necessary action may please be intimated to introduce these documents on the lines as above at the very earliest.

**GOVERNMENT OF INDIA
MINISTRY OF TRANSPORT & AVIATION
DEPARTMENT OF TRANSPORT SHIPPING & TOURISM
(ROADS WING)**

**LATERAL ROAD
PROJECT**

HISTORY SHEET

NOMENCLATURE OF MACHINERY/EQUIPMENTS :

PLANT NO. :

INDEX

| <i>Sl. No.</i> | <i>Details</i> | <i>Pages</i> |
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COMPONENT MAIN ASSEMBLIES

(Where different manufacturer's assemblies are mentioned, full details with manufacturer's number should be furnished)

| Name of Assembly | Make | Model | Voltage | Sl. No. | Any other information |
|-----------------------------|------|-------|---------|---------|-----------------------|
| 1. Fuel Injection Equipment | | | | | |
| 2. Generator | | | | | |
| 3. Starter Motor | | | | | |
| 4. Torque Converter | | | | | |
| 5. Hydraulic System | | | | | |
| 6. Air Compressor | | | | | |
| 7. Turbo-Charter | | | | | |
| 8. Any other information : | | | | | |

PARTICULAR OF EQUIPMENT

- Brief description of machine :
- Dimensions :
Overall length :
Overall width :
Weight of equipment :
Transportation weight :
- Project Identification No :
- Date of receipt/purchase :
- Supply Order No. :
- Name of supplier and bill details :

7. Total cost at site : _____
8. Name of manufacturer : _____
9. Manufacturer's make _____ Model _____ Sr. No. _____
10. Capacity/Pay load/Draw Bar Pull : _____
Speedal range : I Gear _____ II Gear _____ III Gear _____ IV Gear _____ V Gear _____
Reverse _____
11. Engine details :
(i) Make : _____
(ii) Model : _____
(iii) Sr. No. : _____
(iv) Type : _____
(v) H.P. : _____
(vi) No. of Cyl. : _____
(vii) Bore & Stroke : _____
(viii) R.P.M. : _____
12. Aux. Engine Details :
(i) Make : _____
(ii) Model : _____
(iii) Sr. No. : _____
(iv) Type : _____
(v) H.P. : _____
(vi) No. of Cyl. : _____
(vii) Bore & Stroke : _____
(viii) R.P.M. : _____
- Tyre Sizes :
Front _____ No. Fitted _____ Inflation Pr. _____
Rear _____ No. fitted _____ Inflation Pr. _____
- Battery :
Size _____ No. of Plates _____ Voltage _____
Capacity _____

List of tools received with equipment :

4 to 10

RECORD OF TYRES

Tyres Front

Size _____ Ply _____ No. fitted _____

Tyres Rear

Tyre changes

| Date | Tyre size | Sr. No. & Make | Changed/repared to SR No. & Make | Reason | Signature |
|------|-----------|----------------|----------------------------------|--------|-----------|
|------|-----------|----------------|----------------------------------|--------|-----------|

11-13

ALTERATIONS, ADDITIONS & MODIFICATIONS

| Date | Details of work carried out | Cost | Resasons for alterations | Authority & Signature |
|------|-----------------------------|------|--------------------------|-----------------------|
|------|-----------------------------|------|--------------------------|-----------------------|

14-

RECORD OF REPAIR

| Date | Details of breakdown | Hours/Mile Run | Approx. Oil Consumption | Date of Completion of repair |
|------|----------------------|----------------|-------------------------|------------------------------|
|------|----------------------|----------------|-------------------------|------------------------------|

AND REPLACEMENT

| Nature of repairs carried out | Parts replaced with Part No./Issue Voucher No. (valued more than Rs. 50/- only) | Remarks | Signautre |
|-------------------------------|---|---------|-----------|
|-------------------------------|---|---------|-----------|

2400/4

54-55

MONTHLY DATA

| Month | No. of Hours/ mile worked | Progressive total hours | P.O.L. Consumption | | | | Signature |
|-------|------------------------------|----------------------------|--------------------|--------|---------------|---------------------|-----------|
| | | | Diesel Oil | Petrol | Engine Oil | Other lubricants | |

56-63

RECORD OF WIRE ROPE

| Description | Specification | Length fitted |
|---------------------|---------------|---------------|
| HOIST | | |
| Derrick/Suspension | | |
| Back haul & digging | | |
| Tripping | | |
| | | |
| | | |
| | | |

WIRE ROPE CHANGES

| Date | Description | Approx. hrs./miles worked after last change | Probable cause of breakdown | Signature |
|------|-------------|--|-----------------------------|-----------|
|------|-------------|--|-----------------------------|-----------|

64-68

BATTERY CHANGES RECORD

| Date | Work done (Replacement/ Repair/Charging) | Hours worked | Reasons for Replacement/ Repair/Charging | Signatures |
|------|---|--------------|---|------------|
|------|---|--------------|---|------------|

69-70

RECORD OF TRANSFER OF MACHINE

| Date of transfer | From | To | Hours used | Present cost | Remarks | Sig. of Officer | |
|------------------|------|----|------------|--------------|---------|-----------------|-------------|
| | | | | | | Handing over | Taking over |

71-75

NOTES

LATERAL ROAD PROJECT

STATE

DRIVER'S DUTY LOG BOOK

Nomenclature of Machine _____

Plant No. _____

INDEX

| Sl No. | Details | Pages |
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PARTICULARS OF EQUIPMENT

1. **Brief description of Machine :**
2. **Dimensions :**
 Overall length :
 Overall width :
 Weight of equipment :
 Transportation weight :
3. **Project identification No. :**
4. **Name of manufacturer :**
5. **Manufacturer's Make** _____ **Model** _____ **Sr. No.** _____
6. **TYRE SIZES :**
 Front _____ No. fitted _____ Inflation PR _____
 Rear _____ No. fitted _____ Inflation PR _____
7. **Battery size, No. of plates & Voltage Capacity :**
8. **List of tools received with equipment :**

3-103

DRIVER'S DUTY

| Date | Shift | Driver's name | P.O.L. used | | | | Other materials |
|------|-------|---------------|-------------|--------|------------|------------------|-----------------|
| | | | Petrol | Diesel | Engine oil | Other lubricants | |

103

LOG SHEET

| Signature of issuer | Hour meter/Milometer Reading | | Details of work done | Signature with designation of the officer of using Deptt. | Remarks |
|---------------------|------------------------------|----|----------------------|---|---------|
| | From | To | | | |

104-109

NOTES