

1. FREQUENCY OF CHECKS:

Speedometers on locomotives, railcars, multiple units and any other rolling stock so fitted must be checked:

- (a) following any repairs at workshops or depots necessitating a bogie change, tyre turning or change of wheelset that affects the speedometer drive, or any change of speedometer or speedometer generator.
- (b) subsequently at intervals not greater than 6 months.

2. SPEEDS AT WHICH SPEEDOMETERS ARE TO BE CHECKED:

(a) On Pass-out from Workshops:

All speedometers shall be checked at 25 kilometres per hour and 50 kilometres per hour and as close as possible to the maximum permitted vehicle speed.

Note: Diesel shunting locomotives shall be checked at 25 kilometres per hour and as close as possible to the maximum permitted vehicle speed.

(b) During Service:

| Class of Vehicle | Check at Speeds of |
|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| (i) All locomotives regularly engaged on passenger or express goods trains : all railcars. [Goods Trains] | 50 kilometres per hour and as close as possible to maximum permitted vehicle speed. |
| (ii) Electric multiple units | As close as possible to maximum permitted vehicle speed. |
| (iii) Locomotives on Murupara Branch | 25 and 70 kilometres per hour. |
| (iv) Ds, Dsa, Dsb, and Dsc locomotives [Shunting Locos & Mobile Track Equipment] | When used on the main line, 25 kilometres per hour and [as] close [as permitted] to maximum [permitted vehicle] speed. |
| (v) All other rolling stock fitted with speedometer. | 25 and 50 kilometres per hour |

3. OFFICER RESPONSIBLE FOR CHECKS:

(a) Following repairs listed in Clause 1 (a):

The Acceptance Officer or Road Foreman in the workshop district shall check and adjust to the correct speed each speedometer on each vehicle before it is permitted to re-enter regular service.

- (b) Road Foreman shall, at intervals not greater than six (6) months, check and adjust where necessary to the correct speed speedometers on all rolling stock allocated to their respective Districts and on stock passing through their Districts on which they are aware that such checks are due.

4. TABLE OF SPEEDS:

| Speed — Kilometres per Hour | Time Required (in seconds) to Travel | | | | | |
|-----------------------------------|--------------------------------------|-------------------|------------------------|-----------------------|-------------------|------------------------|
| | ½ kilometre | | | 1 kilometre | | |
| | At Plus 3 k.p.h. * | At Exact Speed | At Minus 3 k.p.h. * | At Plus 3 k.p.h. * | At Exact Speed | At Minus 3 k.p.h. * |
| 20 | 78 | 90 | 105 | 156 | 180 | 210 |
| 25 | 65 | 72 | 82 | 129 | 144 | 164 |
| 30 | 55 | 60 | 66 | 109 | 120 | 133 |
| 40 | 42 | 45 | 48 | 84 | 90 | 97 |
| 50 | 34 | 36 | 38 | 68 | 72 | 77 |
| 60 | 29 | 30 | 31 | 57 | 60 | 63 |
| 70 | 25 | 25.5 | 27 | 49 | 51 | 54 |
| 80 | 22 | 22.5 | 23 | 43 | 45 | 47 |
| 90 | 19.5 | 20 | 20.5 | 39 | 40 | 41 |
| 100 | 17.5 | 18 | 18.5 | 35 | 36 | 37 |

* See Clause 6 (c) for permissible error.

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| Speedometer reading in Kilometer/hour | Time Required (in seconds) to travel | | | | | |
|---------------------------------------------|--------------------------------------|-------------------|-----------------------|----------------------|-------------------|-----------------------|
| | 1/2 kilometer | | | 1 kilometer | | |
| | At plus 3 K.P.H.* | At Exact Speed | At Minus 3 K.P.H.* | At plus 3 K.P.H.* | At Exact Speed | At Minus 3 K.P.H.* |
| 15 | 100 | 120 | 150 | 200 | 240 | 300 |
| 20 | 78 | 90 | 105 | 156 | 180 | 211 |
| 25 | 64 | 72 | 82 | 128 | 144 | 163 |
| 30 | 55 | 60 | 66 | 109 | 120 | 133 |
| 35 | 47 | 51.5 | 56 | 94 | 103 | 112 |
| 40 | 42 | 45 | 48 | 84 | 90 | 97 |
| 45 | 37 | 40 | 43 | 75 | 80 | 85 |
| 50 | 34 | 36 | 38 | 68 | 72 | 76 |
| 55 | 31 | 32.5 | 34.5 | 62 | 65 | 69 |
| 60 | 28.5 | 30 | 31.5 | 57.0 | 60 | 63.0 |
| 65 | 26.5 | 27.5 | 29.0 | 53.0 | 55 | 58.0 |
| 70 | 24.6 | 25.5 | 26.9 | 49.3 | 51 | 53.7 |
| 75 | 23.0 | 24 | 25.0 | 46.1 | 48 | 50.0 |
| 80 | 21.7 | 22.5 | 23.4 | 43.4 | 45 | 46.7 |
| 85 | 20.5 | 21 | 21.9 | 40.9 | 42 | 43.9 |
| 90 | 19.4 | 20 | 20.7 | 38.7 | 40 | 41.4 |
| 95 | 18.4 | 19 | 19.6 | 36.7 | 38 | 39.1 |
| 100 | 17.5 | 18 | 18.6 | 35.0 | 36.0 | 37.1 |

* See Clause 6 (c) for permissible error.]

5. RECORDING OF CHECKS:

- (a) On pass-out from workshops.
- (b) During service.

If certificate in the following form shall be forwarded to the Locomotive Supervisor on whose District the vehicle is permanently allocated.

| Address: | | | | | | | |
|---------------------------------------------------|---------------------|-----------------------|--------------------------|-----------------------------|-----------------------|--------------------------|-----------------------------|
| Date: | | | | | | | |
| To Locomotive Supervisor | | | | | | | |
| SPEEDOMETER ROAD CHECK: CODE 86. | | | | | | | |
| Vehicle Class & Number | Date of Check | No. 1 End Speedometer | | | No. 2 End Speedometer | | |
| | | Serial Number | Check Speed k.p.h. | Check Time in Seconds | Serial Number | Check Speed k.p.h. | Check Time in Seconds |
| | | | | | | | |
| Signed: Road Foreman Acceptance Officer* | | | | | | | |
| * State designation. | | | | | | | |

Results and dates of speedometer tests shall be entered in the repair books or sheets of the stock concerned.

6. DEFECTIVE SPEEDOMETERS:

- (a) If a speedometer is found defective during pass out from a workshop or depot, it shall be rectified before the vehicle is passed into service.
- (b) If a speedometer is found defective in service, immediate arrangements shall be made for repairs to be effected in accordance with Mechanical Branch Code No. 85.
- (c) The error permissible over the speed range of 15 to 100 kilometres per hour shall not exceed ± 3 kilometres per hour.

7. SIX MONTHLY CERTIFICATE:

Locomotive Supervisors shall render a certificate, every six months to their District Mechanical Engineer concerned certifying that speedometers have been checked in accordance with this Code.

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NOTE ON CODE 86

Speedometers that were originally calibrated in Miles Per Hour may retain the MPH scale but must also include a kilometre per hour scale