

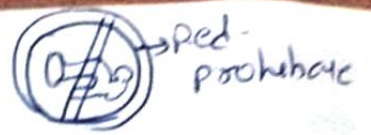
Ch-2 Construction Equipment & Maintenance of Motor-vehicle

- 1) Vehicle-length, Height, width, wt. carrying cap
- 2) Tyre-manufacturing year, price, type,
- 3) Brake-Steering
- 4) Safety-glass
- 5) Signalling Instrument
- 6) Speed-governance
- 7) Exhaust-Smoke
- 8) Noise
- 9) Chassis number / Engine number
- 10)

* General-provision regarding Construction & Maintenance of motor-vehicle.

- 1) Motor-vehicle-construction
 - 1) Braking System
 - 2) Vehicle-Tyre \rightarrow Condition.
 - 3) vehicle-horn \rightarrow
 - 4) oversteering
 - 5) Display-Unit- (speed-device)
 - 6) Head-Light-Lamp- (around 105 mJ)
 - 7) Number plate
 - 8) Night-parking at-highway.
 - 9)

proving regarding



Horn & Lamp दिवाएँ मीचीएँ

(Single-coil) (Credible & sufficient warning)

(Double-coil) Horn: अद्य, 45g, 4015g, 0.12



- 2) School / Hospital / Court
- 3) Honorable Horn
- 4) Emergency Horn (Police, Hospital / Fire-brigade)
- 5) 11:30 to 7:00
- 6) Multi-tone Horn

75 to 50 db

- ② Lamp:
- 1) 7-watt अद्य 0.12
 - 2) 1.5 M. Distance - ground-level
 - 3) 300mm - 01 Distance - Lamp
 - 4) Easily-read-able (Number-plate)

- Red - danger
- Yellow - Caution
- Amber
- 5) Fog-lamp - 60-cm अद्य 0.12 - 3211cm
- 6) Hazard पंक्ति
- 7) Displace

Green - Safe-Turn
Blue - For-upper beam turn

- ③ Brakes:
- 1) suddenly brake-0 मीच
 - 2) wheel-Fail.
 - 3) Inform- 4124 3 रका repair

- ④ Mirror:
- Rear-vehicle-0 मीच-0.12
 - (Convex) → अधिक- Rear-view-mirror
 - Education bus मी passenger मीच 400mm
 - vehicle- Left-Side-0
 - Blind-spot-mirror
 - Rear-view-mirror

windshield / Laminated
Side - Tempered glass / Rear 0.12

[Fiberglass]

5

Silencers: → 1) Less - noise.

2) Less - pressure

3) Restriction of flow & back pressure

4) silencer & ground need joint clearance

5) Drain - hole

6) Safety-glass: windshield. Laminated

Aluminosilicate-glass side-door - Tempered glass

Laminated → PVB → Poly-vinyl-butylal film

Tempered glass → glass - heats → then

quick-cools → security &

10 times stronger than Non-Tempered

↳ Example - computer monitors

→ LCD

→ oven-doors

If you wear polarized-sunglass

& tilt your head - 90° . So you

will see - Symmetrical-pattern

7) windshield-wiper:

1) Electrical-use - 12V

$cm \times 0.39 = \text{inch}$

2) 12V or 24V

$inch \times 2.54 = \text{cm}$

3) wiper-Arm → 50 cm-length &

Blade-length - 50 cm

Truck wiper: v. Arm → 50 cm & Blade-length - 65 cm

4) oscillation → 45/cm. & High-speed - 70/cm

5) Blade-angle set - 90° motor & film

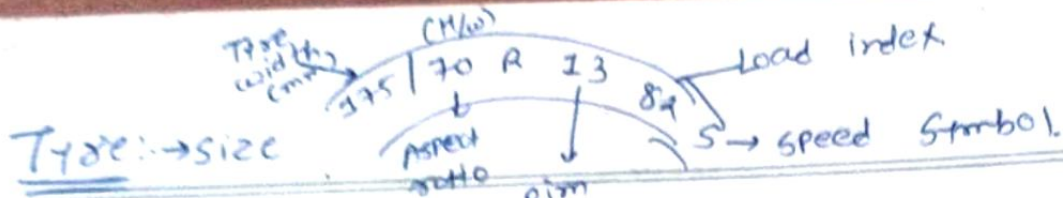
6) glass-wiper film use - 820N

7) worm-gear used 12V Dc-motor used

8) 80, 70, rotation-angle

car wiper Driver-side - 28, 26, 24 (inch)

Passenger-side - 14, 16, (inch)



Type: → size

- Ply rating
- Manufacturing year. symbol
- pressure
- Estimated Type of vehicle it is used

Speedometer: → Speed-measurement device

- Every time → odometer. use in
- easily-visible

Steering: steering ratio: → $\frac{\text{turn of steering wheel (degree)}}{\text{turn of wheels}}$

- 1) Motorcycles: 1:1 (steering wheel fixed to front wheel)
- Small-car: 15:1 to 25:1
- LMV: 15:1 to 25:1
- HMV: 20:1 to 40:1

If one complete-rotation of steering wheel 360 degree cause, wheel to turn 24 degree

$$360^\circ / 24 = 15:1$$

A steering ratio: 18:1, front wheel have maxi deflection of 25° .

$$= 18 \times 25 = 450^\circ$$

so back-side = 25°

$$= 18 \times 25 = 450^\circ$$

Lock to Lock Angle. at steering wheel = 900° .

- steering Head of Fig. 8.1
- turning Circle radius
- steering wheel circle

Public Service Vehicle Seating arrangement

1) Seating arrangement.

2) $\text{Seating} = \frac{\text{Floor area}}{\text{Area of seat}}$

3) $\text{Seating} = \frac{\text{Floor area}}{\text{Area of seat}} = \frac{1372 \text{ mm}^2}{660 \text{ mm} \times 406 \text{ mm}}$

4) $\text{Seating} = \frac{\text{Floor area}}{\text{Area of seat}} = \frac{1372 \text{ mm}^2}{660 \text{ mm} \times 406 \text{ mm}}$

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A Exhaust Smoke, vapour, gas.

1) Exhaust-passenger compartment etc. etc.

2) puc - all norms - general rule

3) 5-years / 50,000 km - CO - 4.5% in city etc.

4) Diesel-smoke etc.

5) A/F-ratio, Spark-timing, Valve-timing \rightarrow etc.

6) Complete combustion

7) NOx - 100 ppm - etc.