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 → Condition.
3) vehicle-horn →
4) overtaking
5) Display-Unit-(Speed-device)
6) Head-Light-Lamp-(ground at 105 m)
7) Number plate
8) Night-parking at-highway
9)

proving regarding

→ 20, 21, 41, 68, 70, 91, 111

Horn & Lamp સંબંધિત નિયમો

→ Red - prohibate

(Single coil / Double coil / Swirling / Air press)

(Audible & sufficient warning)

→ Blue
↳ Hill area
↳ Sharp turn

1) Horn વધુ પડતું વગાડવું નહિ.
2) School / Hospital / court X
3) Horrible Horn X
4) Emergency Horn (police, Hospital / fire brigade)
5) 11:30 to 7:00 X
6) Multi tone Horn X

75 to 50 db

(2) Lamp :
1) 7 watt ના વધુ નહિ.
2) 1.5 M. Distance ground Level ઊંચાઈ
3) 300 mm ના Distance Lamp
4) Easily read માટે (Number plate)
5) Fog lamp 60 cm ની ઊંચાઈ ...
6) Hazard parking
7) Displace
8) Revers

Red - danger
Yellower → caution
Amber
Green - safe - Turn signal
Blue - For upper beam tell

(3) Brakes :-
1) suddenly brake ન મારવી.
2) wheel Fail.
3) Inform આપવું કે તરત repair

(4) Mirror :- → Rear vehicle ને જોઈ શકે
(Convex) → ડ્રાઈવિંગ Rear view mirror
→ Education bus ના passenger માટે પણ
→ vehicle Left side ના
→ Blind spot mirror
→ Rear view mirror

windshield / Laminated
Sidem - Temperat glass / Rear ...

[Fiberglass

5) Silencer:→ 1) Less - Noise.
2) Less - pressure
3) Restrictuction ના હોવું જોઈએ backpressure ના માટે
4) silencer & ground વચ્ચે પુરતી clearance
5) Drain - hole

6) Safety - glass:- windshield - Laminated
side-door - Tempered glass
(Aluminosilicate-glass)
Laminated → PVB → Poly-vinyl- butyral film
Tempered glass → Glass - heats (1500 degree) → then
quick - cools → ઠંડકાની કરાય છે
10 time - 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 - થાય છે. cm × 0.39 = __ inch
2) 12 V or 24 V. inch × 2.54 = __ cm
3) wiper - Arm → 50 cm - length &
Blade - Length - 50 cm
Truck ની V. Arm → 50 cm & Blade - length - 65 cm
4) oscillation → 45/m. & High-speed - 70/min
5) Blade - નો Angle - set - ના કરવો, motor વાળું ફિટ છે
6) glass - ડાઈ - હીટ - દ્વાર Use - ના કરવું

7) worm - gear - used થાય છે Dc - motor - used
8) 80, 70, rotation - Angle
car માટે Driver - side - 28, 26, 24 (inch)
Passenger - ની 14, 16. (inch

Tyre wid th (mm) → 175 / 70 (H/W) R 13 84 → Load index
Aspect ratio ↑ 70; Rim Dia ↓ 13; S → speed Symbol.

Tyre :→ size

→ plyrating
→ Manufacturing year- ઓળખવું
→ pressure
→ ઘસાયેલા Tyre નો ઉપયોગ ન કરવો

Speedometer :→ speed measurement device
→ Every time → odometer પણ હોય
→ easily visible

Steering: steering ratio :→ turn of steering wheel (degree) / turn of wheels

1) Motorcycles : 1:1 (steering wheel fixed to frontwheel
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
$360°/24 = 15:1$

* Steering ratio: 18:1 , front wheel have maxi deflection of 25°.
$= 18 \times 25 = 450°$
so back side = 25°
$= 18 \times 25 = 450°$
Lock to Lock Angle at steering wheel - 900°.

→ steering Hand of fig લખવું
→ Turning Circle radius
→ સ્ટીયરીંગ સિસ્ટમ ના ભાગ

Public Service Vehicle Seating arrangement

1) Seating arrangement
2) ઊભા રહેવાના "
3) સામસામે બાજુમાં બેઠક હોય તો બે બેઠક વચ્ચે 1372 mm હોવું
   જ્યારે બેઠકો સામે હોય
4) બેન્ચ બેઠકો વચ્ચે - 660 mm થી ઓછું અંતર ન હોવું -
5) બેઠકની પહોળાઈ - 406 mm ઓછી ન હોવી

Exhaust Smoke, Vapour, grit

1) Exhaust passenger compartment માં ન જાય.
2) PUC ના Norms જળવાવા જોઈએ
3) 5-years / 80,000 km - CO - 4.5% થી વધવું ન જોઈએ
4) Diesel Smoke નો
5) A/F ratio, Spark timing, Valve timing → Maint.
6) Complete combustion
7) NOx — 100 ppm થી ઓછી રહે