

# Technical control of a vehicle:

## **Steering:**

The steering, in general must function easily, safely and quickly. The steering is self-righting, which means that the steering wheel turns from side to side without any resistance or dissonance.

### "Free play" on the steering wheel:

Free play is the piece steering wheel moves without wheels following. Newer cars do not have free play in their steering system because they are equipped with power steering fluid (a liquid that helps steering wheel to easier move around).

### How to control/check the "Free play"?

- 1) Start the engine.
- 2) Adjust wheels into straight position.
- 3) Roll the window down and get out of the car.
- 4) Steer from side to side. See if the wheels immediately follow the steering wheel movement

### How to control power steering liquid?

- a) Liquid level should follow the manufacturers' instructions.
- b) The liquid level must be between minimum and maximum.
- c) If the liquid is lacking then the bulb on the dashboard lights.

#### **Brakes:**

Foot brake must be equipped with 2-circuit hydraulic braking system (works with fluid pressure) It shall work properly on all 4 wheels slow car safe and effective at all speeds.

- Brake pedal must have a non-slippery surface.
- Brake pedal must be firm.
- Brake pedal must have app. 1cm of free play.
- The brake pedal can only be pressed half way down towards the bottom.
- The brake pedal should not sink under constant pressure.

#### How to check vacuum break amplifier/break booster?

- Pump the brake pedal 3-4 times with the engine off and keep the pressure.
- Start the engine, and if the pedal sinks then it means that the vacuum amplifier works.
- Brake fluid level should be between minimum and maximum mark.

### Parking brake (handbrake):

Must be mechanical and function on at least 2 wheels. Must be able to brake the car safely if the footbreak stops working.



## The engine and exhausting system:

- The engine must not produce unnecessary smoke and noise.
- The engine must not be obscured by leaking oil.
- Engine oil must be filled between the minimum and maximum mark.
- Coolant must be filled between the minimum and maximum mark.
- Windscreen washer fluid should be filled in sufficient quantity.
- Exhausting system must be close and stuck with braces and straps (airtight).
- Exhausting systems must be fitted with silencers, should not be broken or have any holes.

## Lights, reflexes and horn

All lights must be whole, clean and work properly. The pears must be set correctly.

#### In front:

**Color:** white or yellow.

**2 position lights:** must be seen from 300 m distance.

**2 low beams lights:** light the road at least 30 m in front without blinding oncoming traffic.

They fall 1 cm per meter (1%) and are asymmetrical to the right.

**2 high beams:** light to road at least 100 m (blue lamp is turned on at dashboard).

#### At the back:

**2 back lights:** must be seen from 300 m. distance.

**3 stop lights:** 3.5 stronger then the back lights. They must be seen in the strong sunlight.

Number plate lights: should be seen from 20 m. distance.

**Indicators:** must flash yellow light that clearly can be seen in strong sunlight.

The hazard lights/warning lights shall be able to turn on all indicators simultaneously.

**Horn:** must have a clear and constant tone.

**Reflexes:** 2 pieces shall be red and may not have a triangle shape.

# Tires and shock absorbers/suspensions

- Tires and rims must be undamaged.
- Tires must be of the same type on all wheels (summer / winter)
- Tires must have at least 1.6 mm depth in the main pattern (tread) on all wheels.
- Tire pressure should be according to the manufacturer's instructions (manual).
- Studded tires may be used from 1 November 15 April.
- 1) Press sharply over the any (4 all in all) shock absorber.
- 2) The car must immediately fall to natural position (shall not be bouncing).