

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION •ΜΕΧΙΣΗΑΡΟΖΗΑΙ ΟΡΓΑΗΙΙΘΕΝΑΙΟΝ ΠΟ CTAHAADATHALORGANIZATION INTERNATIONALE DE NORMALISATION

# Passenger cars — Lateral spacing of foot controls

Descriptors: road vehicles, motor vehicles, automobiles, control equipment, foot controls, layout.

Voitures particulières – Positionnement transversal des commandes au pied

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### **FOREWORD**

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3409 was drawn up by Technical Committee ISO/TC 22, Road vehicles, and circulated to the Member Bodies in February 1974.

It has been approved by the Member Bodies of the following countries:

Austria Iran
Belgium Italy
Bulgaria Japan
Chile Mexico
Czechoslovakia Netherla

Czechoslovakia Netherlands
Egypt, Arab Rep. of Poland
Finland Portugal
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Germany South Africa, Rep. of

Hungary Spain

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U.S.A. U.S.S.R. Yugoslavia

The Member Bodies of the following countries expressed disapproval of the document on technical grounds:

Australia Brazil

# Passenger cars — Lateral spacing of foot controls

#### 1 SCOPE

This International Standard lays down required characteristics concerning the positions and distances necessary to ensure sufficient lateral spacing for the operation of foot controls.

#### 2 FIELD OF APPLICATION

This International Standard applies only to the accelerator, service brake and clutch pedals (defined in 3.1, 3.2 and 3.3) for passenger cars and derivatives.

#### 3 DEFINITIONS

For the purpose of this International Standard the following definitions apply:

- **3.1** accelerator pedal: The driver-operated portion of the device whose primary function is to vary the engine power output.
- **3.2** service brake pedal: The foot-operated portion of the primary device designed to decelerate and stop the vehicle.
- **3.3 clutch pedal**: The foot-operated portion of the mechanism designed to engage (clutch) or disengage (declutch) the vehicle power unit from the transmission and road wheels.
- **3.4 transverse plane**: A plane perpendicular to the median longitudinal plane of the vehicle.
- **3.5 longitudinal plane**: A plane parallel to the median longitudinal plane of the vehicle.
- **3.6 point A**: A point on the accelerator pedal 200 mm from point B.
- **3.7 point B**: The heel point as established by the vehicle manufacturer.
- 3.8 reference plane P: A transverse plane passing through point A and perpendicular to the straight line connecting

point A to the R point (the rearmost normal driving position) (see figure 1).

#### 4 REQUIRED CHARACTERISTICS

### 4.1 Arrangement of controls

As observed from the driver's position, the controls shall be in the following order from left to right: clutch pedal, service brake pedal and accelerator pedal.

### 4.2 Distance between two pedals

The minimum distance shall be measured between the projections of the two pedals onto the reference plane P (defined in 3.8) (see figure 2).

A minimum distance shall be prescribed between

- the accelerator and service brake pedals, and
- the service brake and clutch pedals.

# 4.3 Distance between the clutch pedal and the fixed part of the body

The minimum distance shall be measured between the projection of the clutch pedal onto the reference plane P and the section given by this plane with the trim panel (see figure 2).

## 4.4 Minimum lateral space for the actuation of one pedal

The minimum distance shall be measured between the projections onto the reference plane P of the obstacles immediately on the right and left of the pedal. In addition to the adjacent pedals, steering column and fixed elements (such as transmission tunnel, wheel arches, air conditioning and ventilation systems, etc.) shall be considered.

Minimum distances shall be prescribed for

- the accelerator pedal;
- the service brake pedal;
- the clutch pedal.

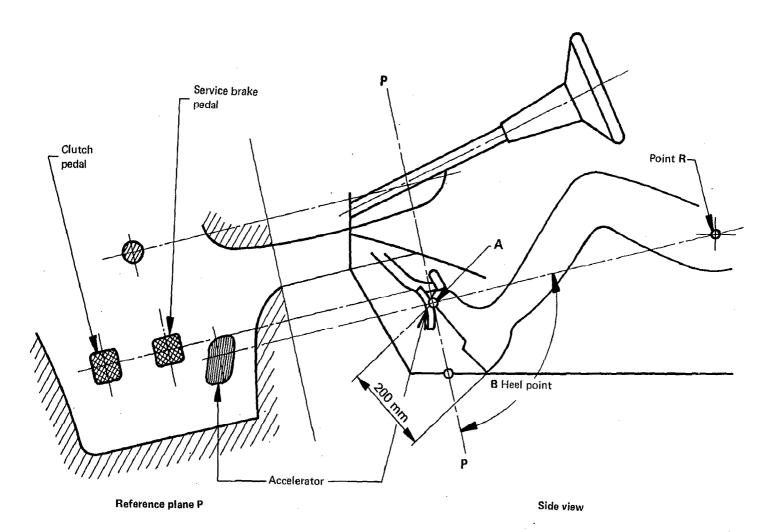


FIGURE 1

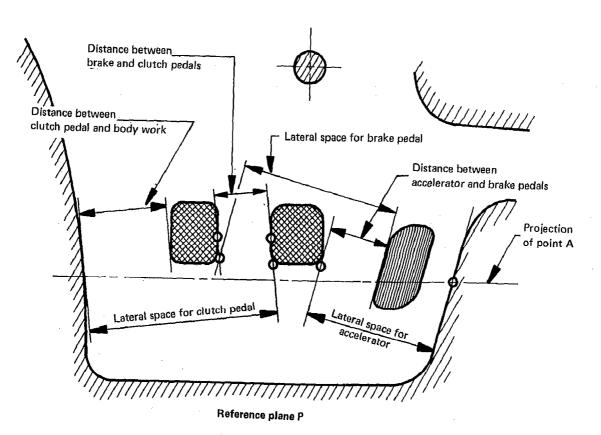


FIGURE 2