

ISO/TR 7997:2025-10 (E)

Road vehicles - Control type and layout of transmission gear shifters and drive mode selectors

Contents

Page

| | |
|--|-----------|
| Foreword..... | iv |
| Introduction..... | v |
| 1 Scope..... | 1 |
| 2 Normative references..... | 2 |
| 3 Terms and definitions..... | 2 |
| 4 Transmission gear shifter: types, layouts, locations and feedback displays..... | 6 |
| 4.1 General..... | 6 |
| 4.2 Type of transmission gear shifters..... | 6 |
| 4.2.1 Lever..... | 7 |
| 4.2.2 Dial/rotary..... | 8 |
| 4.2.3 Push button..... | 9 |
| 4.2.4 Toggle switch..... | 9 |
| 4.2.5 Steering wheel paddle..... | 10 |
| 4.3 Layouts of the shifter..... | 10 |
| 4.3.1 Alignment of layout..... | 10 |
| 4.3.2 Separation of 'P'..... | 12 |
| 4.3.3 Summary of the layouts of the shifter..... | 13 |
| 4.4 Location of the shifter inside the vehicle..... | 14 |
| 4.5 Feedback displays of drive function status..... | 15 |
| 4.5.1 Feedback display around or on the shifter..... | 16 |
| 4.5.2 Feedback display on the instrument cluster..... | 18 |
| 5 Drive mode selector: types, layouts, locations and feedback displays..... | 18 |
| 5.1 General..... | 18 |
| 5.2 Type of drive mode selectors..... | 19 |
| 5.2.1 Lever..... | 19 |
| 5.2.2 Rotary/dial..... | 19 |
| 5.2.3 Push button..... | 21 |
| 5.2.4 Toggle switch..... | 22 |
| 5.2.5 Touch screen..... | 22 |
| 5.2.6 Rocker switch..... | 22 |
| 5.2.7 Combination of controls..... | 23 |
| 5.3 Layout of drive mode selectors..... | 23 |
| 5.4 Location inside the vehicle..... | 23 |
| 5.4.1 Centre console..... | 23 |
| 5.4.2 Seat side..... | 23 |
| 5.4.3 Steering wheel..... | 23 |
| 5.4.4 Instrument panel..... | 24 |
| 5.4.5 Instrument cluster..... | 24 |
| 5.4.6 Head unit display..... | 24 |
| 5.5 Feedback display of drive mode selector status..... | 24 |
| 5.5.1 Status feedback displayed in the actuator..... | 24 |
| 5.5.2 Feedback on head unit or instrument cluster display..... | 25 |
| 5.6 Categories of drive modes..... | 25 |
| 5.6.1 On-road modes..... | 26 |
| 5.6.2 Off-road modes..... | 26 |

Annex A (informative) Benchmarking of transmission gear shifters and drive mode selectors in various passenger cars..... 28

Annex B (informative) Benchmarking of transmission gear shifters and drive mode selectors in commercial vehicles..... 48

Bibliography..... 57