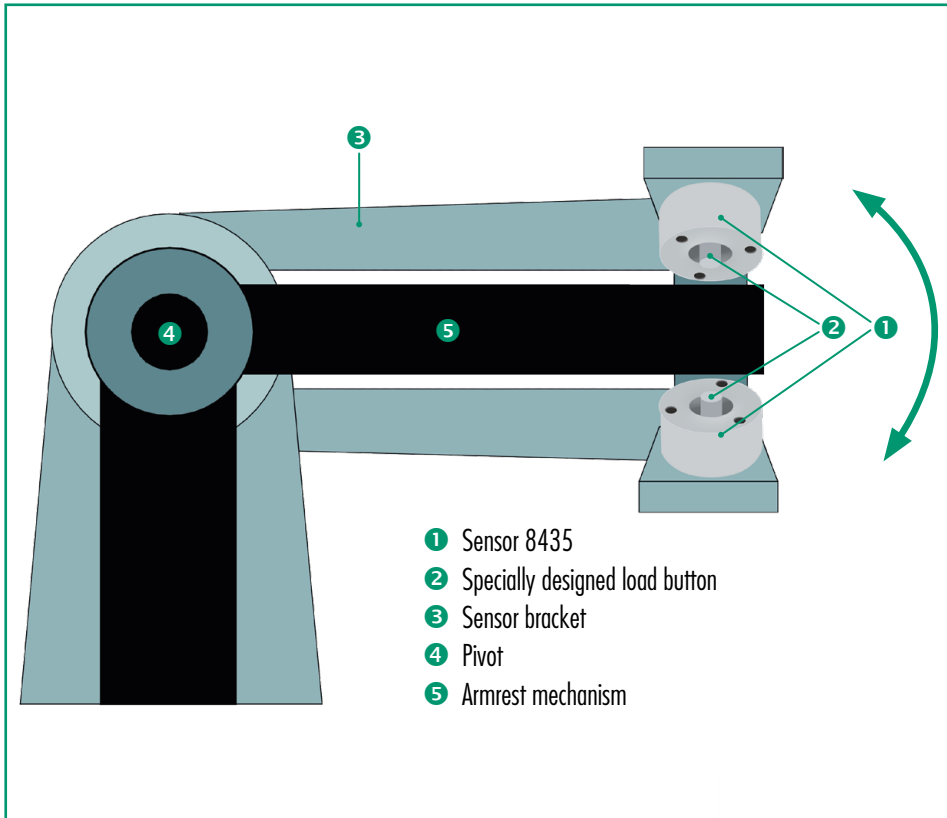


Functional testing centre arm rest



Contact

- ☎ + 49-7224/645-57 or -45

Sector

- Automotive

Product name

- Load cells

Features

- Simple screw mounting
- Inexpensive sensor from general stock
- Two sensors provide two-sided monitoring
- Force can also be displayed as a function of adjustment angle

Task

The centre armrest of a car seat needs to be tested for ease of movement or in other words inherent resistance. This test involves measuring the force with which the armrest is moved during both upward and downward motion.

Specific Requirement

Reliable detection of dynamic and static friction values in the armrest pivot. Ascertaining the damping characteristics of the structure at each limit of travel.

Solution

Two burster 8435-5500 load cells are mounted in a fork-shaped apparatus. This apparatus is driven and moves in parallel with the unit under test by rotating about a common axis. The two sensors each cover one direction to make separate measurements of the operating and adjustment forces required in each direction. To protect the readily painted and varnished armrest part under test, and to ensure that the force is applied reliably to the sensor, the part is fitted with specially designed load buttons. The screw-fit mounting of the load button means that it can be replaced quickly when the armrest model is changed.

