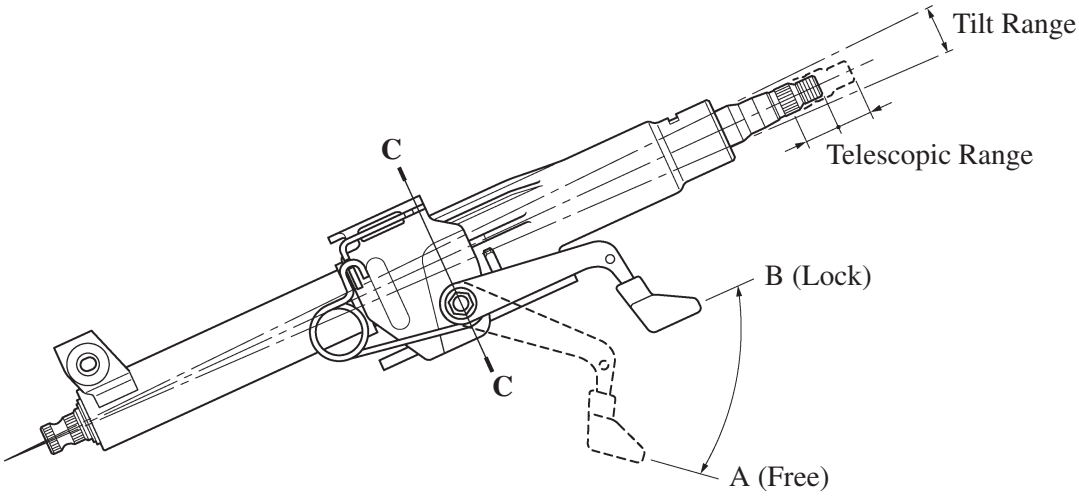
■ STEERING COLUMN

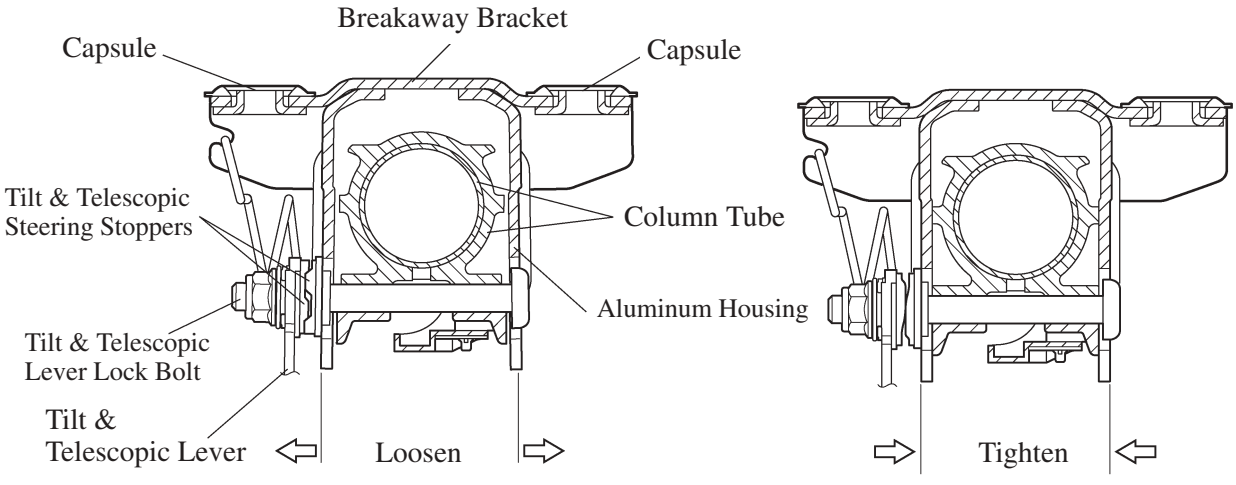
1. Tilt and Power Telescopic Steering Column

- The manual tilt and telescopic mechanism mainly consists of a tilt lever, steering column tube, breakaway bracket, tilt lever lock bolt, and tilt steering stoppers.
- The tilt lever controls the tilt and the telescope motion.
- With the tilt adjustment range of 3.2° (stepless) and the telescopic adjustment range of 40 mm (1.57 in.), the steering column can be adjusted to a position selected by the driver.
- When the tilt and telescopic mechanism is in its locked state, the tilt lever at B position causes the cam of the tilt steering stoppers to tighten the steering column tube.
- When the tilt and telescopic mechanism is in its free state, the tilt lever at A position causes the cam of the tilt steering stoppers to loosen the steering column tube.



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▶ C – C Cross Section ◀



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Free

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Lock

2. Energy Absorbing Mechanism

Construction

- The steering column has three energy absorbing mechanisms.
- The intermediate shaft and the main shaft are joined by a serrated engagement of fine vertical teeth. Energy is absorbed by the contraction of the engagement.
- The breakaway bracket is bolted to the instrument panel reinforcement via a capsule. The breakaway bracket and the capsule are held with the washer. When, due to the column tube contraction, the breakaway bracket separates from the capsule, energy is absorbed by the friction resistance generated.
- The contraction mechanism of the steering column tube absorbs energy by the frictional resistance caused by the inner tube and the outer tube.

Operation

When the steering gear box moves during a (primary) collision, the intermediate shaft contracts, thus reducing the chance that the steering column and the steering wheel protrude further into the cabin.
When an impact is transmitted to the steering wheel in a (secondary) collision, the steering wheel and the driver's airbag help absorb the impact. In addition, the breakaway bracket separates, and the column tube contracts. This sequential energy absorbing mechanism helps absorb the impact of the secondary collision.

