■ENERGY ABSORBING MECHANISM

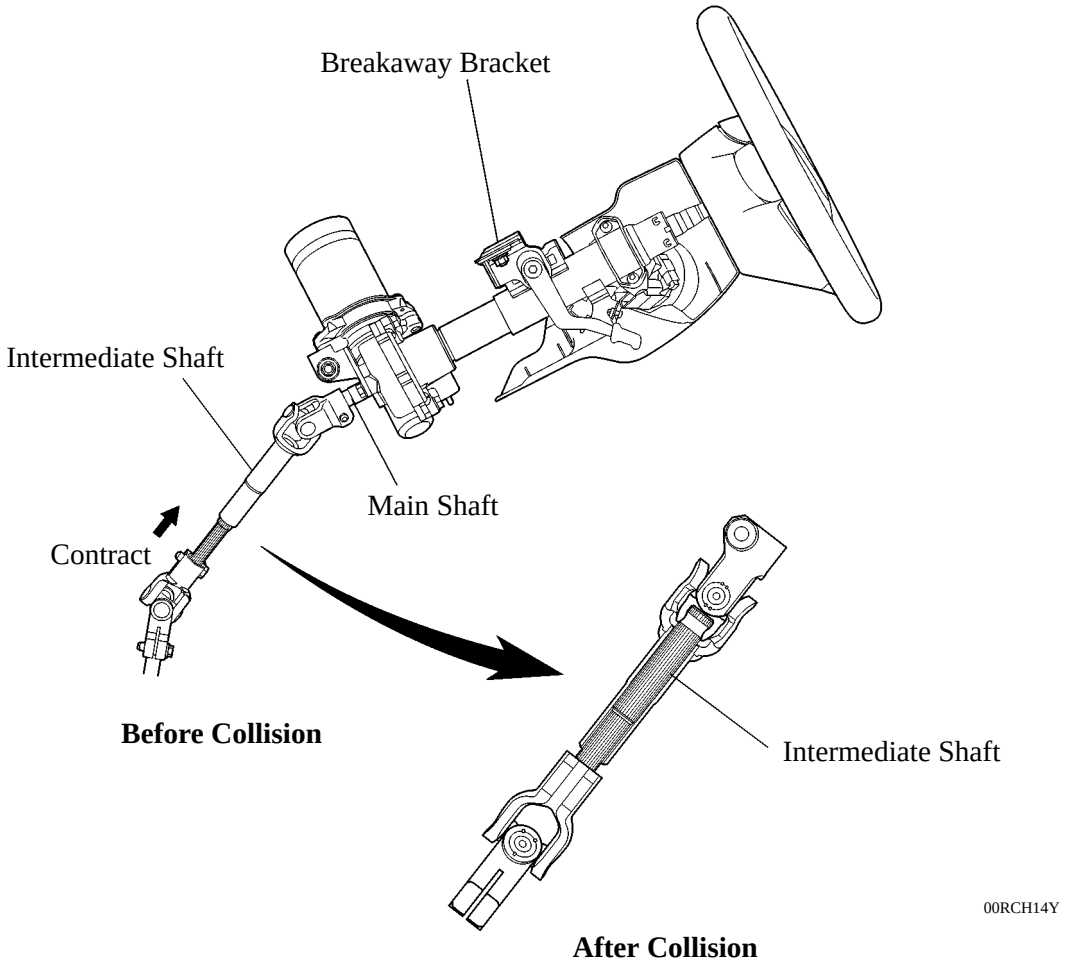
1. General

The energy absorbing mechanism in the steering column consists of breakaway bracket, intermediate shaft, pinion shaft, and column tube. The steering column is mounted on the instrument panel reinforcement via a breakaway bracket. The steering column and the steering gear box are connected with a contractile intermediate shaft.

2. Operation

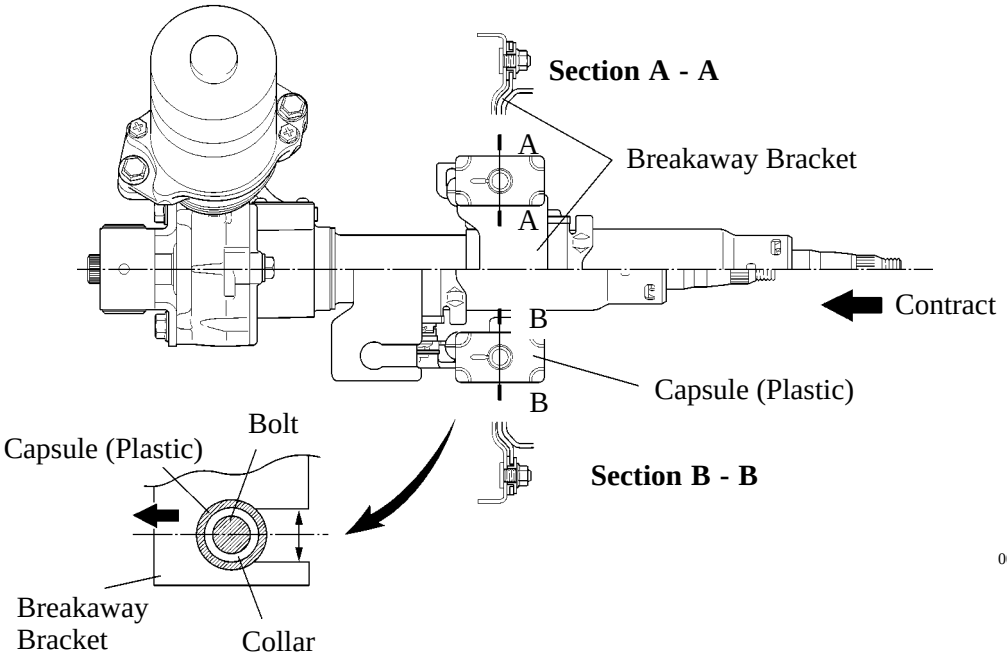
- When the steering box moves during a collision (primary collision), the intermediate shaft contracts, thus helps reduce the possibility of the steering column and the steering wheel protruding into the cabin.

▶ Primary Collision ◀

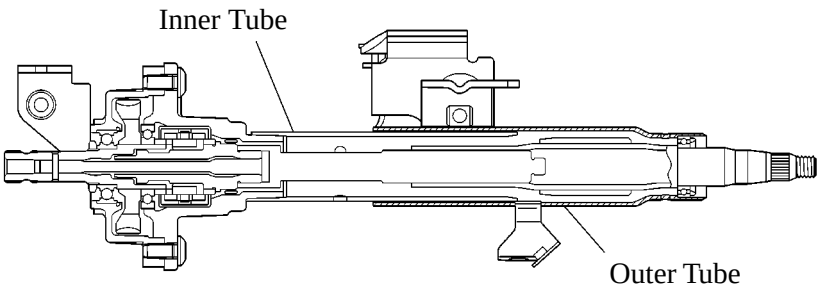


- When a collision impact is transmitted to the steering wheel (secondary collision), the steering wheel and the driver's airbag help absorb the impact. In addition, the breakaway bracket separates, and the column tube contracts. At this time, the friction resistance of the sliding portion, which is staked to the column tube, absorbs the energy. This sequential energy absorbing mechanism helps absorb the impact of the secondary collision.

▶ Secondary Collision ◀

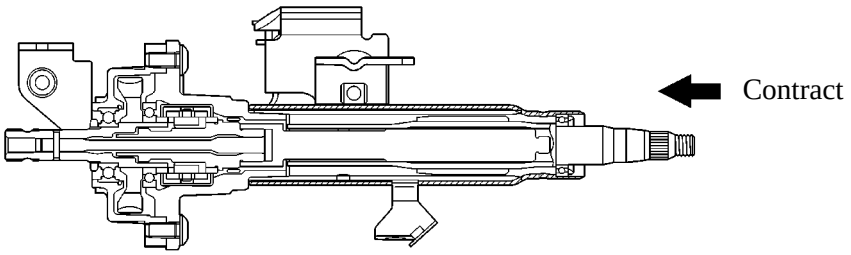


00RCH15Y



00RCH16Y

Before Collision



00RCH17Y

After Collision
(Maximum Contraction)