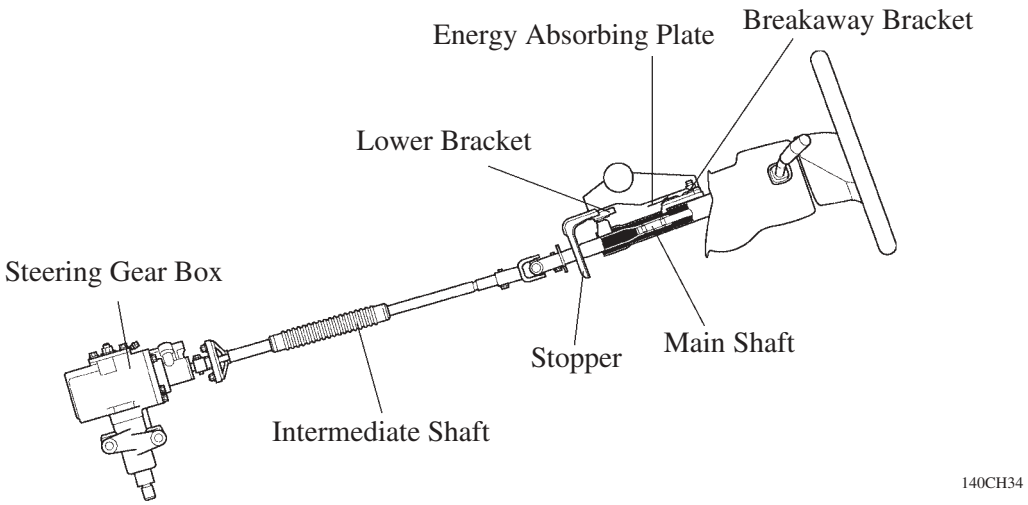
■ENERGY ABSORBING MECHANISM

1. Construction

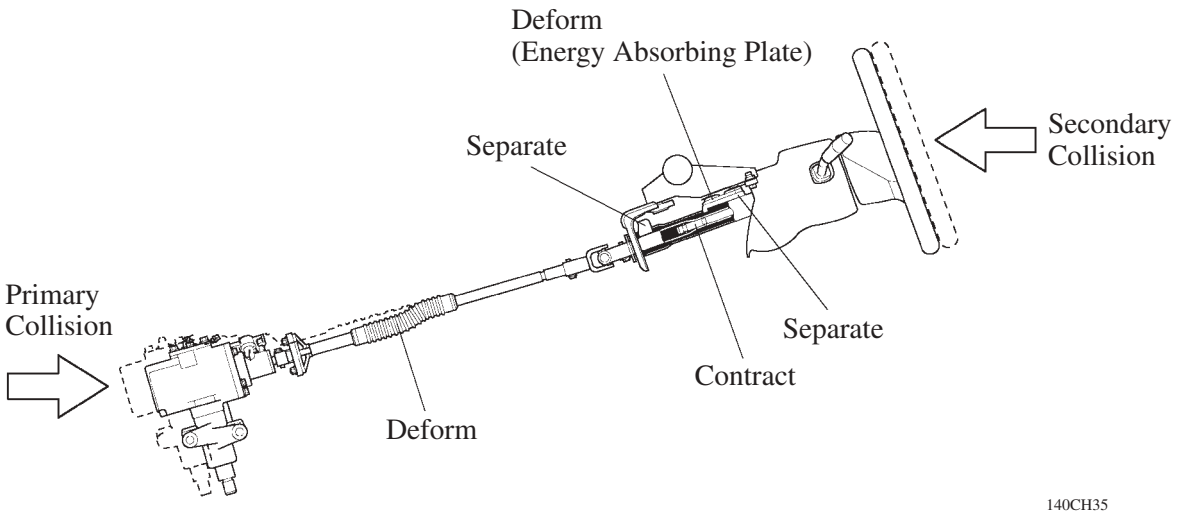
The energy absorbing mechanism in the steering column consists of a lower bracket, breakaway bracket, energy absorbing plate and a contractile main shaft. The steering column is mounted onto the instrument panel reinforcement via a lower bracket and breakaway bracket which is supported via a capsule and energy absorbing plate. The steering column and the steering gear box are connected with an intermediate shaft that contains a corrugated tube. In addition, a stopper is provided on the lower bracket to regulate the amount of stroke against the impact applied from the gear box.



2WD Power Steering Model Without Tilt Steering

2. Operation

When the steering gear box moves during a collision (primary collision), the corrugated tube of intermediate shaft deformes and, the main shaft contracts, thus reducing the steering column and the steering wheel from protruding into the cabin.
When an impact is transmitted to the steering wheel in a collision (secondary collision), the steering wheel and the steering wheel pad help absorb the impact. In addition, the breakaway bracket and the lower bracket separate, causing the entire steering column to move forward.
At this time, the energy absorbing plate becomes deformed to help absorb the impact of the secondary collision.



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