

# System Description

## Energy-absorbing Steering Column/Wheel

Both the steering column and steering wheel are designed to absorb impact energy during a collision.

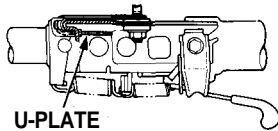
### Steering Wheel

The steering wheel absorbs the energy of a collision through the deformation of the spoke portion. Should the impact absorbing capacity of the column side decrease due to the deformation of the vehicle body during a collision, the steering wheel will help absorb the impact.

### Steering Column

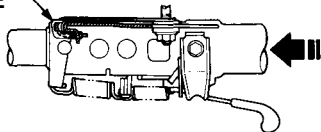
The steering column is fastened on the body through a U-shaped plate, and the lower part of the column is inserted into a lower holder. Due to this construction, the steering column will slide in its axial direction when a large impact is given in the axial direction of the column. Since the U-shaped plate is fastened to the body, the U-shaped plate is bent and deformed along the guide when the column slides in its axial direction. Through the deformation of the plate, the energy is absorbed and the column slides forward. When exposed to a greater impact, a shear pin will break and the energy is absorbed by the lower shaft.

#### UNDER NORMAL CONDITION



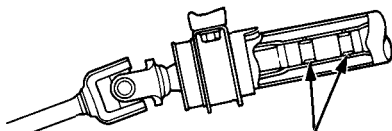
U-PLATE

#### At TIME OF IMPACT



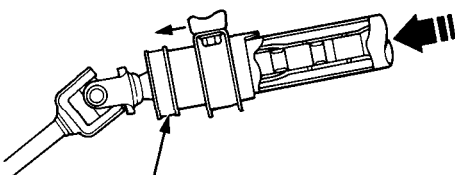
The U-plates absorb an energy while they are straightened by the upper bracket.

#### UNDER NORMAL CONDITION



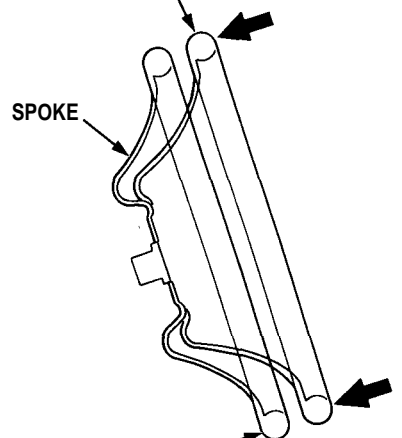
SHEAR PINS

#### At TIME OF IMPACT



STEERING JOINT

#### UNDER NORMAL CONDITION



SPOKE

#### At TIME OF IMPACT