

## 4-1 CONSIDERATION TO PROPER LOAD

### ① Partial load and concentrated load

- When generation of partial load and concentric load in chassis frame is assumed due to structure of rear body or users loading, distribute the load by adding sub frame or main sill structure to prevent the transformation and the crack of chassis frame.
- When load is assumed to be concentrated partially such as at cab back crane, add reinforcements as needed to reduce stress.
- When installing a sub frame, allot the generated bend stress by calculating the combination beam. When installing reinforcement, do calculation same as the combination beam.

### ② Stress of chassis frame

- Upper limit of the vehicle weight at the time of rear body installing examination is GVW. Chassis frame stress should follow the below. As for GVW details, refer to "1-1PRINCIPAL SPECIFICATIONS OF THE CAB CHASSIS".

Unit: MPa {kgf/mm<sup>2</sup>}

	Light duty
Flat bed, van, etc.	58 {5.9} or less
Tipper, mixer, garbage, etc.	40 {4.1} or less
Condition of frame tensile strength	400 {41} or more

- Chassis frame is designed assuming uniformly distributed load. Frame stress may become maximum other than maximum load due to rear body feature, shipment, or rear body characteristics. Built suitable sub-frame or add reinforcement so the frame stress do not exceed limits referring to below examples.

Rear body type	Load tendency
Construction equipment carrier	Load concentrate on one part depending to the construction machine mounted.
Lengthy cargo carrier	When the shipment exceed in front or rearward, the load concentrates on front axles or rear over hang.
Garbage	Load concentrates on rear over hang for hopper weight. Further more, the load concentrates on tare meter load cell installation part.
Aerial work platform Earth auger	Load concentrates in front (cab back) part for bucket/boom weight.
Concrete mixer	Load concentrates on front and rear drum support.