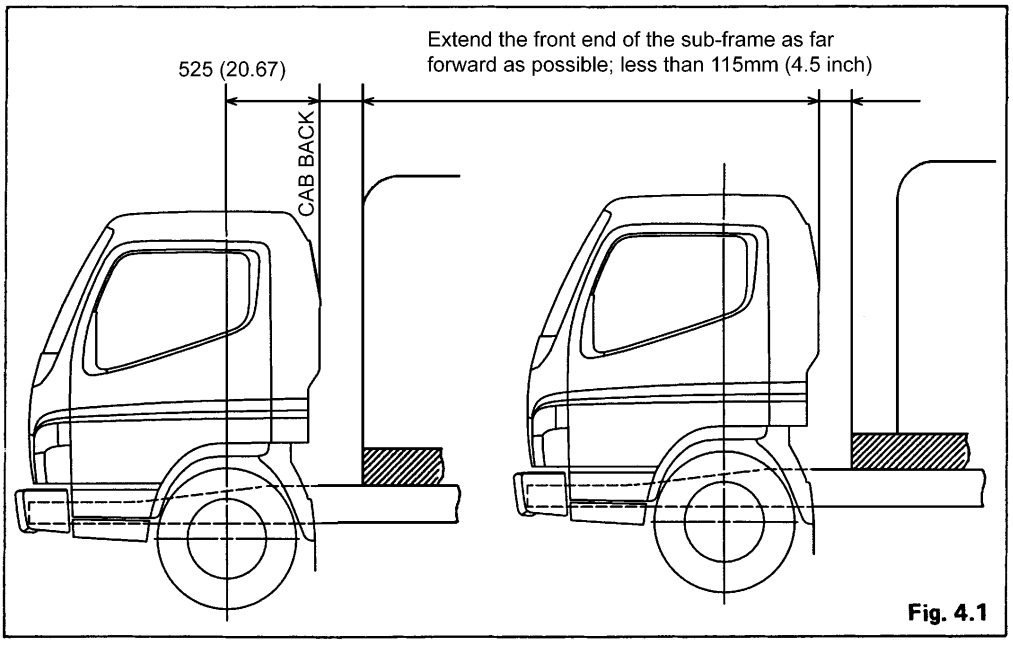
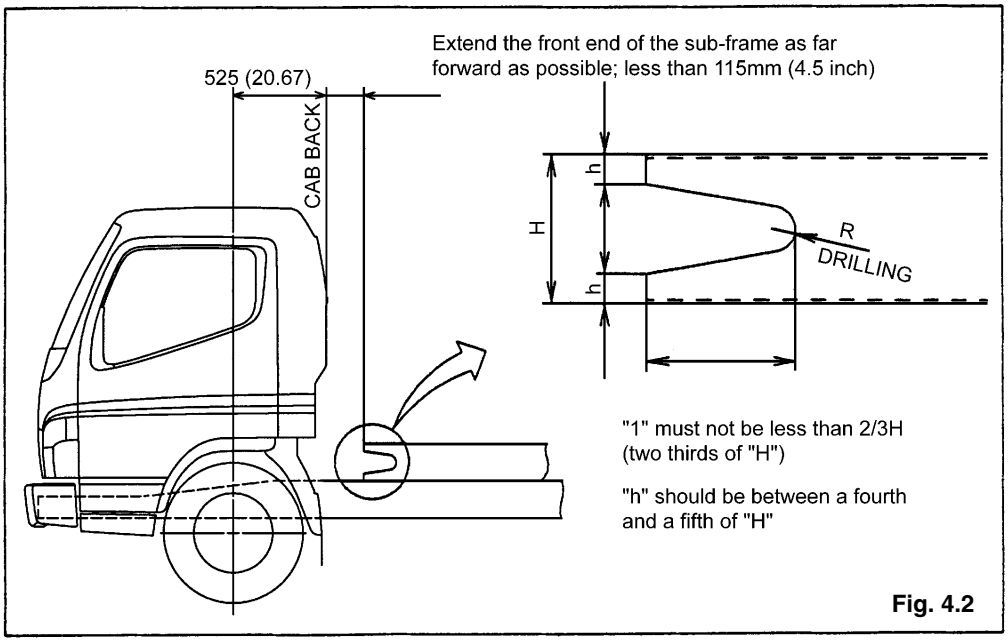
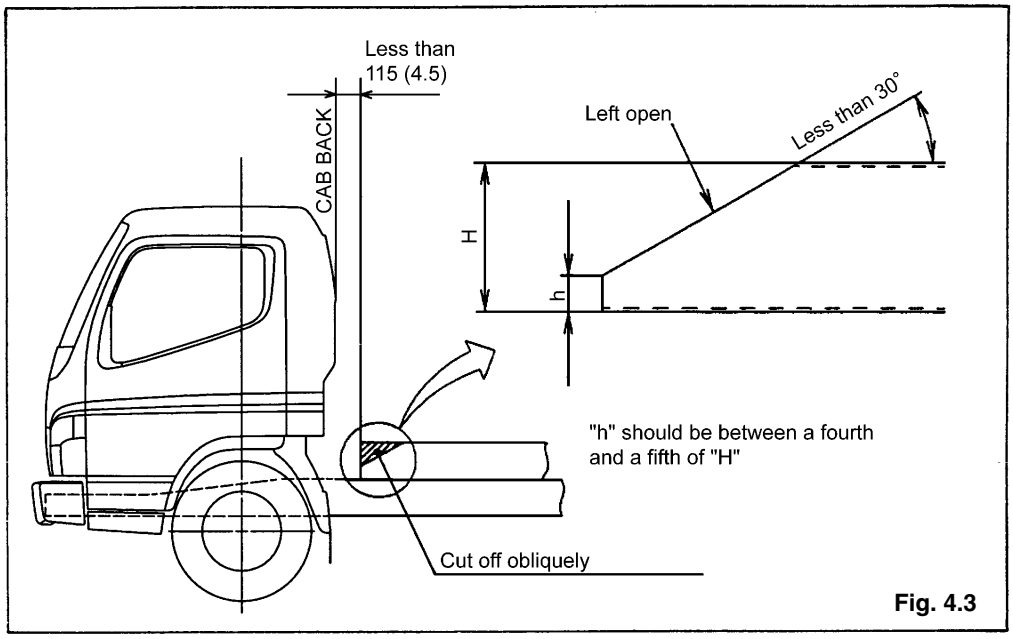
4. CAUTIONS IN MOUNTING A REAR BODY

Location	Cautions
4.1 General cautions	(1) To ensure vehicle safety, reliability and maintenance, do not perform any of the following modifications or alterations to the chassis. (a) Cutting any part of the cab or welding anything to the cab. (b) Modyfing any part related to the axle, steering, brake or propeller shaft. (c) Modyfing brake hoses or vacuum lines. (Use MFTBC replacement parts only.) (d) Making any modification to the chassis other than those described in this manual. (2) Make an effort to minimize the weight of the body mounting so that it will not jeopadize the strength or rigidity of the frame. (3) Be sure to install a sub-frame securely on the chassis frame so as to evenly distribute the load on the vehicle. (4) Do not modify the engine cooling system components, such as blocking the air intakes in the front bumper, or removing the radiator seal rubber, as it may result in decreased performance or engine damage. (5) Always observe any applicable law when modifying parts related to noise suppression, such as the muffler to exhaust pipes.
4.2 Sub-frame	(1) Install the sub-frame as shown in Fig.4.1 to gradually reduce the stress concentrations in the front end. The front end of the sub-frame should be installed as close to the rear of the cab as possible. Extend the sub-frame as far toward the cab as possible when the rear body is installed far from the cab. UNIT: mm (in.)  Fig. 4.1

Location	Cautions (Continued)
4.2 Sub-frame (Continued)	(2) Examples of front-end shape of sub-frames (a) Install the sub-frame having the shape as shown in Fig. 4.2 to gradually reduce the stress concentrations in the front end. UNIT: mm (in.)  Fig. 4.2 (b) The shape of the sub-frame front end as shown in Fig. 4.2 is highly desirable. However, if there is enough room behind the cab, the shape as shown in Fig. 4.3 is also acceptable.  Fig. 4.3

Location	Cautions (Continued)
4.2 Sub-frame (Continued)	(c) If it is difficult to shape the front end of the sub-frame as described in Fig. 4.2 and Fig. 4.3, cut it to the shape as shown in Fig. 4.4 before installation.

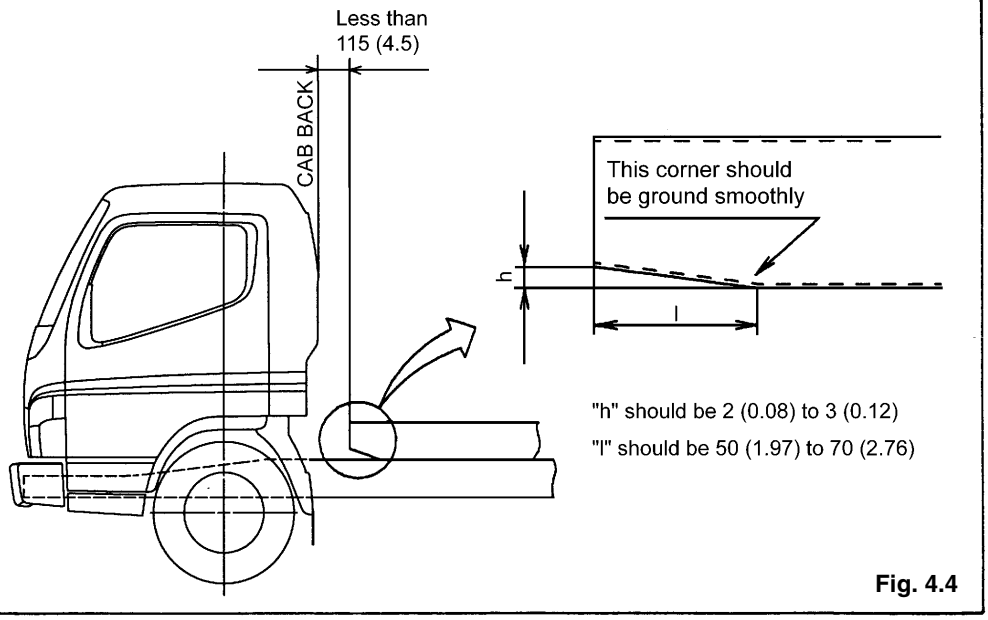
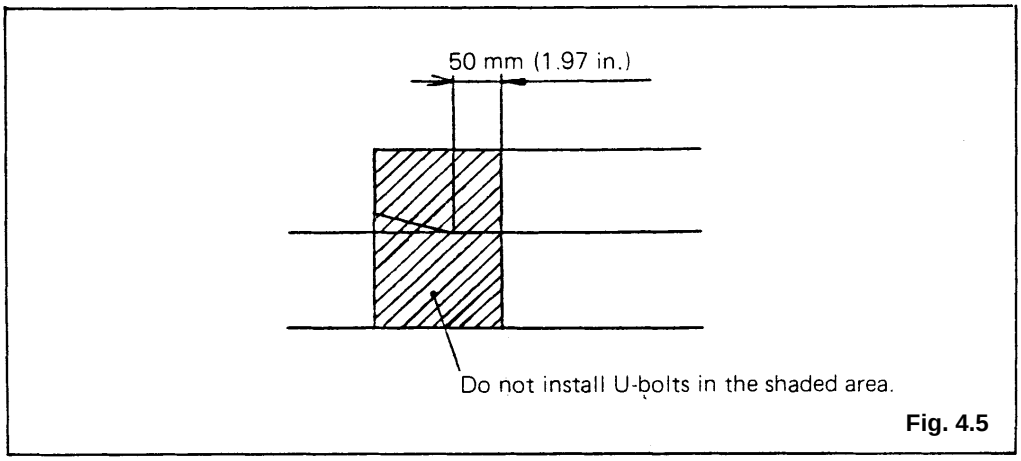
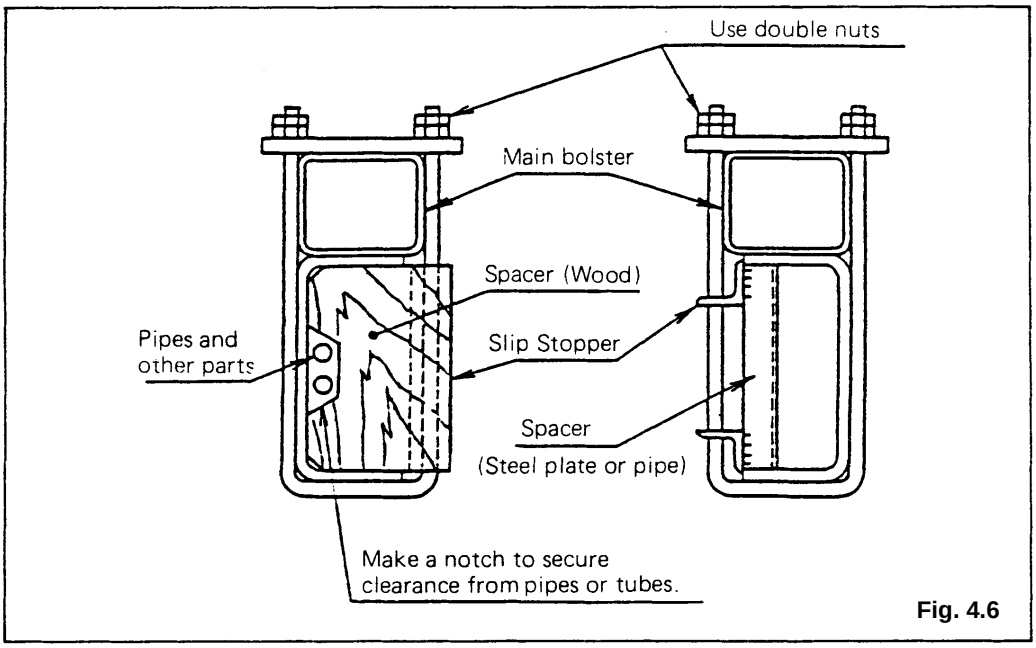
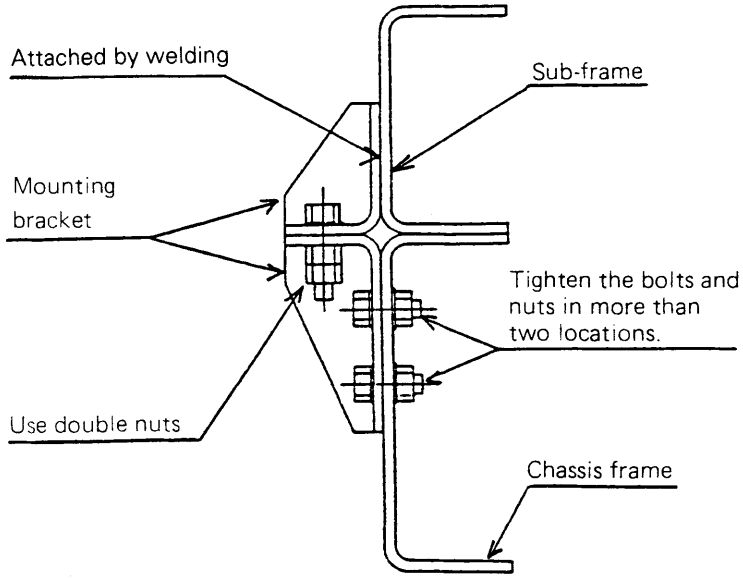


Fig. 4.4

Location	Cautions (Continued)
4.3 Attaching with U-bolts	(1) Allow sufficient clearance so that the U-bolts for tightening sub-frames or main bolsters do not come in contact with pipes, hoses, wires and harnesses. (2) Do not install U-bolts at the taper-cut position of the sub-frames or main bolster.  **Fig. 4.5** (3) Place a wooden spacer inside the flange of the side rail to avoid bending when tightening the U-bolts. (4) Use metal spacers in locations subject to heat, such as near the muffler, or other places where it is difficult to place wooden spacers.  **Fig. 4.6**

Location	Cautions (Continued)
4.4 Mounting bracket	When U-bolts cannot be used with a particular body, use mounting brackets in those positions to attach it to the sub-frame. Use the following bracket locations and installation procedures. (a) Attach the mounting brackets to the chassis frame with bolts whenever possible, and follow the procedures described in Section 3, "CAUTION IN MODIFYING CHASSIS FRAMES". Be especially careful not to damage any pipes, hoses, and wiring harnesses attached to or around the frame. (b) Do not attach brackets close to the ends of crossmembers, gussets or stiffeners. Brackets should be installed at least 200 mm (7.87 in.) away from the end of these parts.  **Fig. 4.7**

Location	Caution (Continued)
4.5 Mounting of rear body (FG only)	(1) When mounting a subframe on the 4WD frame, follow the instructions below. (a) For general uses

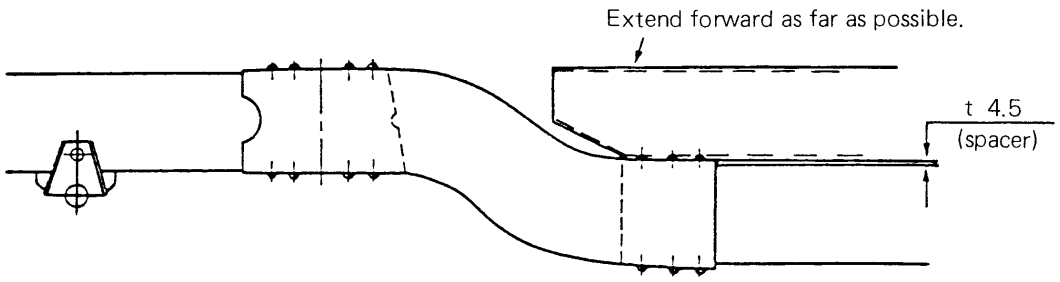


Fig. 4.8

(b) For cases where there may be stress concentration on the chassis frame or excessive input.
Reinforce the frame using an L-shaped stiffener as shown in the figure below.
Be sure to tighten the plug weld (ϕ30), existing battery, fuel tank, spare-tire hanger, etc. at the same time.

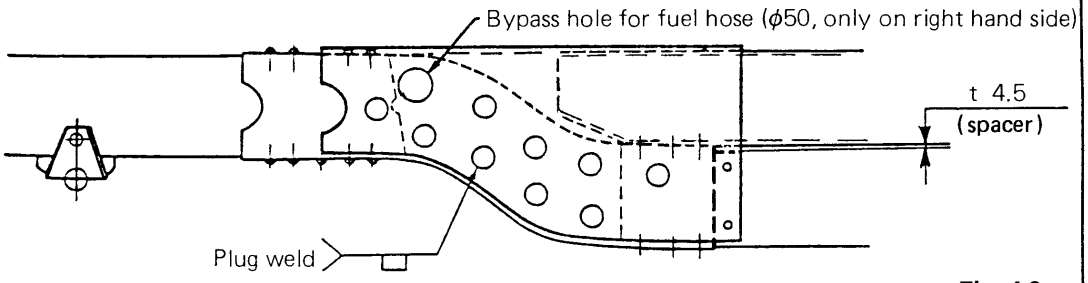


Fig. 4.9

(2) For installing a dump body, install a float control valve in the hydraulic system to avoid an abrupt dump action with heavy cargo loaded.