

## 2. ALIGNMENT

This section describes the methods used to perform this important segment of body repairing. In many cases of body damage, a section will require aligning as well as refinishing. Failure to properly align some body sections can be the cause of excessive rattling and vibration.

The procedures for aligning doors, fenders, and deck lids as well as information concerning the aligning of a complete body assembly are given below.

### a. Doors.

Before attempting any door aligning, make sure the body mounting bolts are tightened to the correct torque as shown in fig. 23.

To correct door misalignment, it is usually necessary to shift the door in one direction or another. Before attempting to align a door, make a visual inspection to determine in what direction the door can be shifted. As an example, a door that is sagged cannot in some cases be corrected by spreading the lower door hinge. The first step is to determine the space available between the door and the opening in the body. This will establish where and how the door can be shifted to obtain proper alignment.

A sagged door is usually caused by the door being opened beyond the limit of the hinge or check strap. This shifts the door close to the lock pillar, and it will

not close without scraping the door trim panel against the lock pillar.

The procedures given below take into account all the possible conditions and present the proper method for the correction of misaligned doors.

(1) **SAGGED DOOR.** If it is determined that the door can be shifted toward the lock pillar, place a fiber block between the halves of the lower hinge. Close the door to spread the lower hinge. Be careful not to over-spread the hinge. Repeat this operation, varying the thickness of the block if required, until the sag has been corrected (fig. 24).

If inspection reveals that the door cannot be shifted toward the lock pillar, it is necessary to work with the upper hinge. The hinge in this case must be removed and closed in (straightened to its original shape). Before reinstalling the hinge, check the hinge mounting surfaces on the pillar to make certain they are not pulled out of shape. If necessary, place a spoon against the pillar, then hammer against the back face of the spoon to bring the metal back in place. Install the door hinge, and cement the weatherstrip to the hinge pillar.

(2) **TWISTED DOOR.** If the door does not follow the contour of the body, determine what part of the door requires straightening, the upper, lower, or center portion. To do this type of repair, it is advisable to use tools

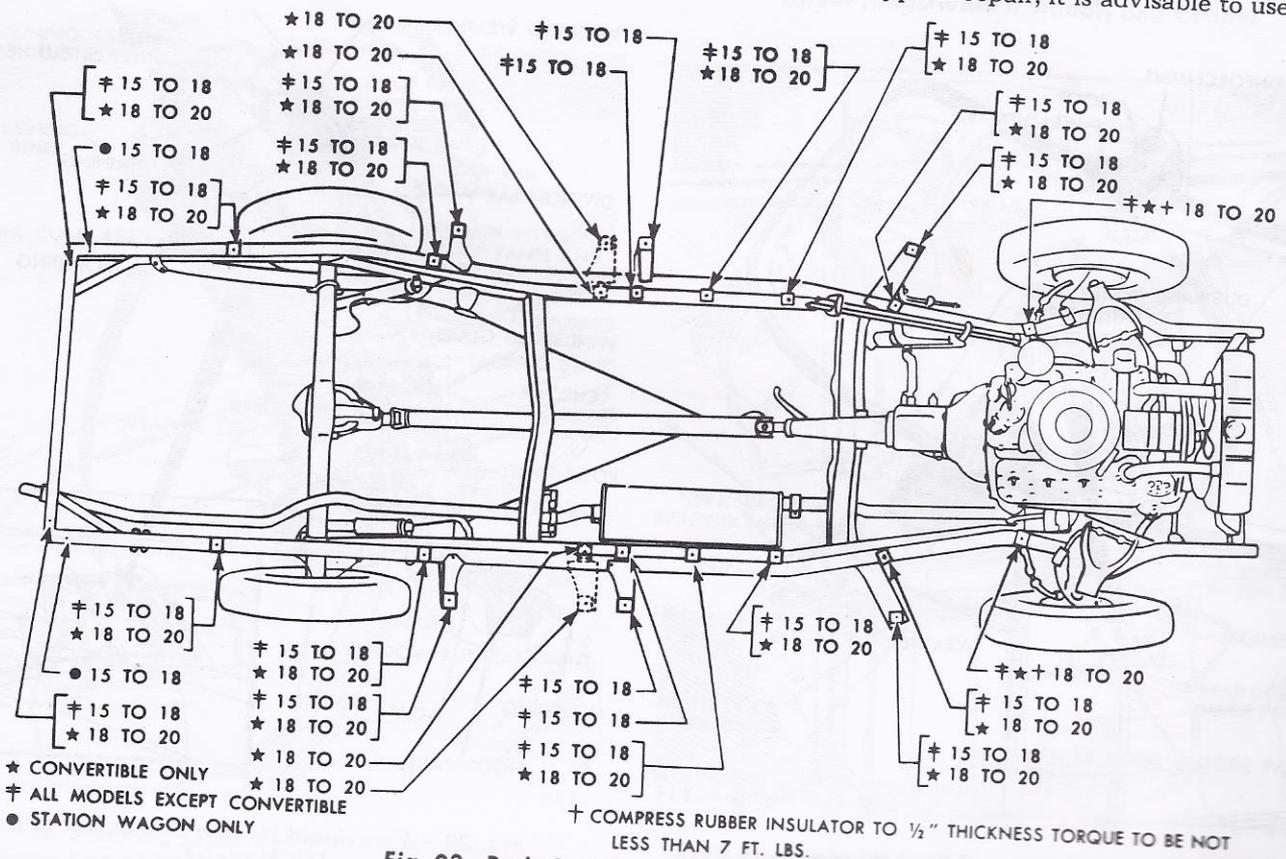


Fig. 23—Body Bolt Torque Specifications