## SERVICE INFORMATION

## PROCEDURE-BULLETINS-MISCELLANEOUS

## 1. FRAME ALIGNMENT

Correct frame alignment is of great importance in the smooth operation of the vehicle. Improper frame alignment is usually the result of an accident which in turn causes misalignment, placing undue strain on various parts of the entire vehicle, affecting wheel alignment and causing annoying squeaks and rattles.

Figures 1 and 3 show the various dimensions to be used as a guide for checking frame alignment. These dimensions are the true distance between the two points as measured with a steel tape.

Figure 2 shows a few of the various diagonal measurements that may be taken to check the "squareness" of the frame. Diagonal measuring will quickly determine which section of the frame is bent and where force should be applied to restore correct alignment.

To properly check a frame for alignment, diagonal measuring should be performed with the greatest of accuracy and care. When the body is removed, the frame may be easily checked for alignment by measuring diagonals shown in Figure 2 with trammels or steel tape and checking dimensions given in Figure 1. Measurements may
be taken without removing the body from the chassis, however, by using a plumb-bob and chalk line as follows:
(1) Place the car on a level floor.
(2) Attach the line of a plumb-bob to the center of one of the rear bolts. The plumb-bob should be suspended slightly above the floor. When the plumb-bob comes to rest, mark the floor directly underneath it.
(3) Then using the plumb-bob mark the floor directly underneath the center of the other body bolts shown in Figure 2. The marks made on the floor will represent various points of the frame to be checked diagonally.
(4) Move the car away so that the distance between the marks on the floor can be measured.
(5) Measure the distance between the points connected by line "A," in Figure 2. This distance should agree within $1 / 4 \mathrm{in}$. with the distance between the points connected by line "B."
(6) The distance between points connected by line "C" should agree within $1 / 4 \mathrm{in}$. with the distance between points connected by line "D."


Fig. 2-Frame Diagonal Measurements

