

Repairs and Inspection

General

Repairs

Repairs and measurements of the chassis and frame can only be made by Porsche shops which are specially equipped with the necessary measuring devices and chassis repair jigs. In the event of serious damage it is necessary to make measurements without which repairs are merely superficial and result in improper alignment.

The chassis jig serves as an accurate chassis measuring and alignment device. All structural parts of the chassis and frame must be in proper alignment and lateral location within the prescribed tolerances. The jig must seat firmly on a level surface. To insure that all four legs rest squarely on the floor, one of the legs has an adjustable foot. With only minor alterations, the Porsche chassis jig can be used for 356, 356 A and 356 B cars with either single or dual front suspension of the transmission.

Measurement

In order to measure the critical chassis dimensions, the entire under frame must be stripped including the transmission, front and rear suspension and various accessory linkage. The set screws of the chassis jig must be screwed apart to receive the car. For 356 and 356 B cars with single front suspension of the transmission, the locating blocks must be screwed apart, while for 356 A and 356 B cars with dual suspension of the transmission they must be screwed together. After placing the car on the jig, the chassis is secured in sequence starting at the rear suspension tube, then the jaws of the transmission mounts and then the front suspension tubes. Do not use force to fit the measuring bolts into the sockets in question. When the chassis is properly positioned, the screws of the gearbox-suspension jaws can be screwed into place. The depth of the front measuring bolts is shown in the form of graduated lines. The bolts are to be inserted by hand until they stop against the contact in question.

Permissible deviations are marked on the base plates of the measuring points. From these marks it can easily be determined how badly the chassis has been deformed. Small deformations can be corrected by carefully applying force to the correct places. If greater damage has occurred, it is necessary to cut out and replace entire frame sections. The chassis jig should be used only to spot weld the parts in place. Heavy welding and alignment work must not be performed on the measuring jig. As previously mentioned, the jig is not to be used with force and is principally a measuring device. The most critical dimensions are the front and rear suspension tubes, which should always be replaced as units.