

# FRAME AND BODY MOUNTING

## 33 THROUGH 86 SERIES

### CONTENTS OF SECTION 2

Subject	Page	Subject	Page
FRAME . . . . .	2-1	FRAME REPAIR . . . . .	2-2
FRAME ALIGNMENT . . . . .	2-1	BODY MOUNTS . . . . .	2-2

### FRAME

All extended station wagons, convertibles, 84 and 8600 series use the boxed type frame, meaning that the side rails are boxed or two sided through the center section of the frame. All heavy duty frames are the boxed type construction using the same steel stock as used in convertibles of the same series.

When supporting car on a floor jack or floor stands, the car should be supported at the sus-

pension points only. Under no conditions should the car be supported at the extreme ends of frame or at the center of a frame side rail.

When using a frame contact hoist, the car should be lifted at the contact points as shown in Figs. 2-1 and 2-2.

### FRAME ALIGNMENT

The diagram shown in Figs. 2-1 and 2-2 can be used to check the alignment of a car frame that has been distorted.

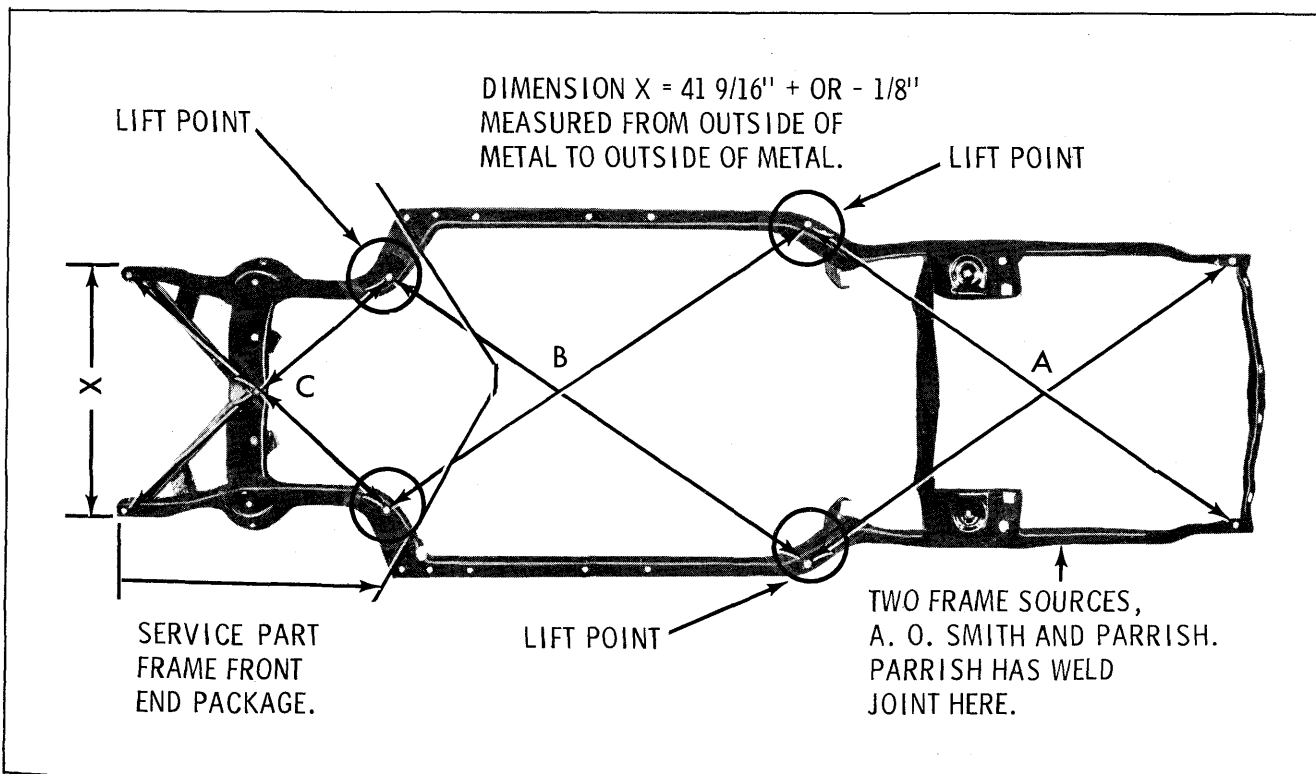


Fig. 2-1 Frame - 52 through 86 Series

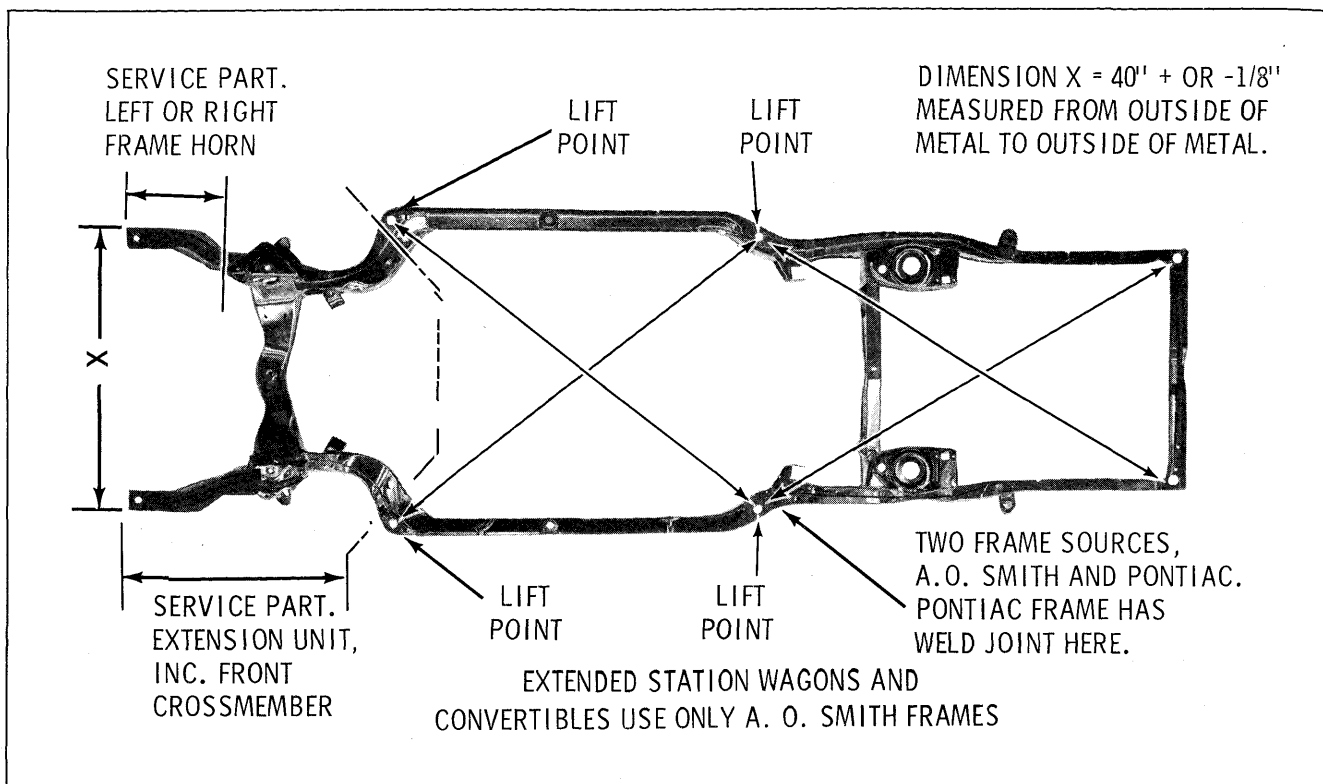


Fig. 2-2 Frame - 33 through 38 Series

The reference points indicated in the illustration are to be checked with tram gauge. The dimensions between the various reference points will show where straightening operations are necessary.

NOTE: Corresponding measurements must be equal within 1/4".

1. Measure A-A. If not equal, rear end of frame is misaligned.
2. Measure B-B. If not equal, center portion of frame is misaligned.
3. Measure C-C. If not equal, then front suspension crossmember is misaligned.

## FRAME REPAIR

In case of collision, frame members can often be satisfactorily straightened to the required limits. However, the front suspension crossmember is made to unusually close limits necessary for proper front wheel alignment; therefore, straightening of this unit may not be successful.

It is possible that the ordinary straightening methods will suffice for minor damage to the front suspension crossmember; however, in case of serious damage or fracture, the entire front suspension crossmember or the side rail extension suspension crossmember must be replaced. Be-

fore the member is replaced, it is essential that the frame alignment be checked, and corrected if necessary. The service parts package contains all necessary cutting, welding and alignment specifications.

Whenever possible, frame members should be securely fastened with hot rivets. In case riveting equipment is not available, finished bolts snugly fitted in reamed holes may be used. The nuts should be securely tightened and lockwashers used, care being taken that washers do not spread. (Cold driven rivets are not recommended unless the heavy power press equipment necessary to make secure fastening is available.)

After frame members are riveted or bolted securely, all welded joints and areas that were cut to permit removal of a frame member should be welded.

When the frame repair is completed and inspected, the various parts of the suspension may be assembled.

## BODY MOUNTS

To minimize vibration and noise, the body mounts must be properly torqued. Body mounts which are not tightened sufficiently will cause body "chucking" and damage to the cushions. If body mounts are tightened excessively, the cushioning effect of the cushion is impaired, resulting in squeaks and body "drumming". Torque body

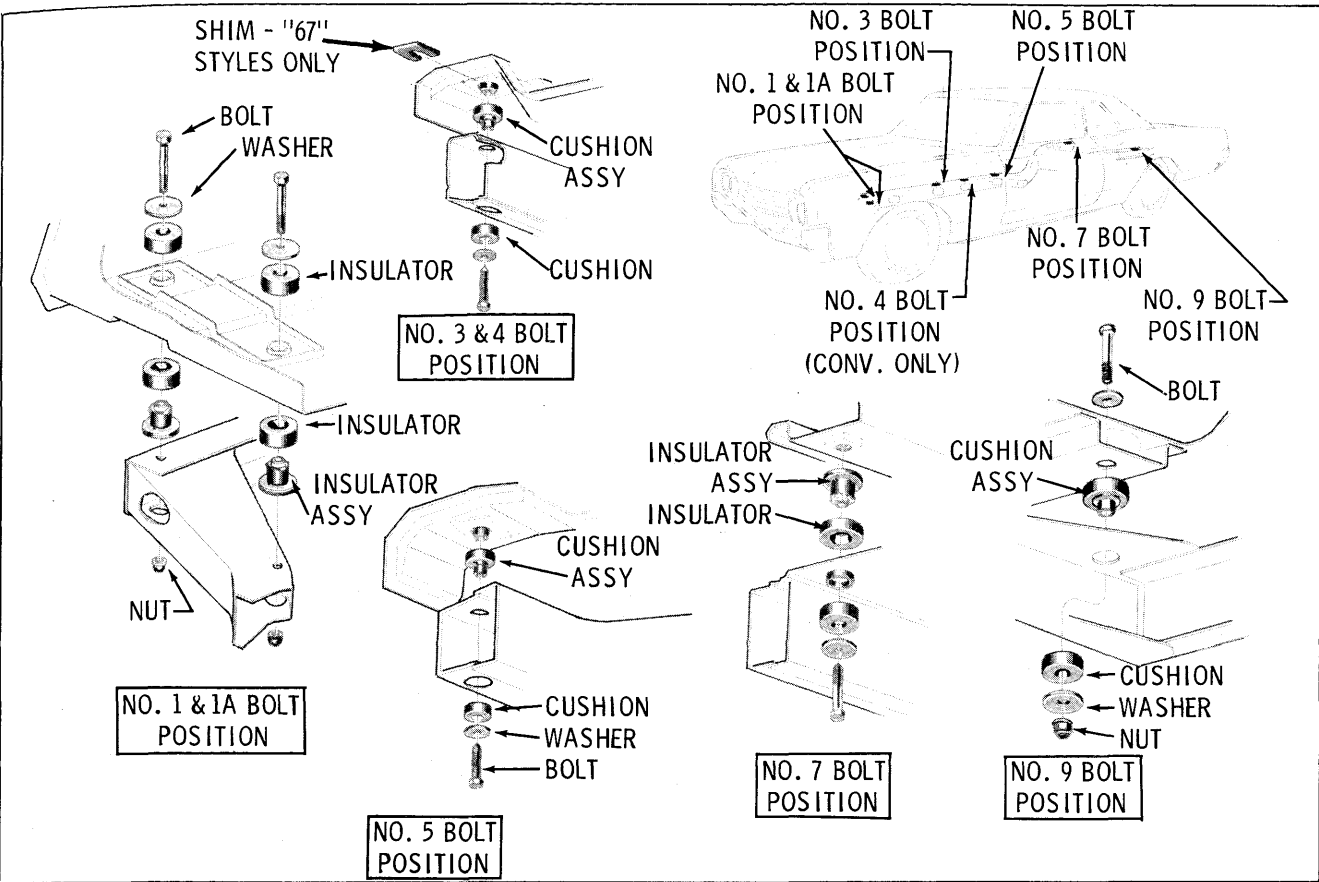


Fig. 2-3 Body Mounting - 52 through 86 Series

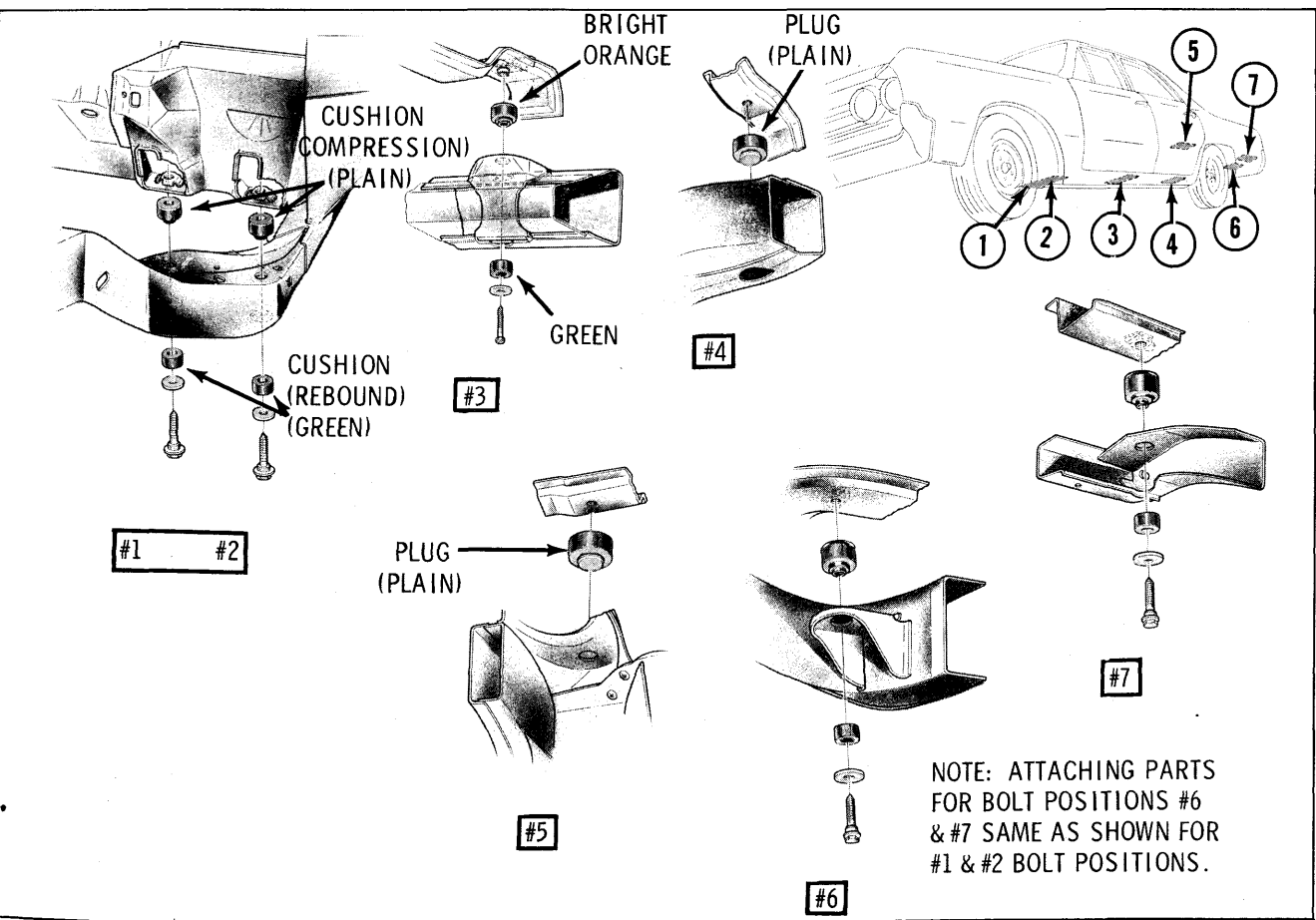


Fig. 2-4 Body Mounting - 33 through 38 Series

mount bolts to 35 ft. lbs. for 33 through 38 Series. For 52 through 86 Series, torque bolts to 45 ft. lbs.

Figure 2-3 illustrates the use of shims at No. 3 and 4 body mount locations on 56, 58 and 84

Series convertibles. The shims are used to obtain correct door alignment, a maximum of two shims for each of the mount locations.

For installation of body mounts, refer to Figs. 2-3 and 2-4.