

*Buick*  
*Shop Manual*  
*1942*



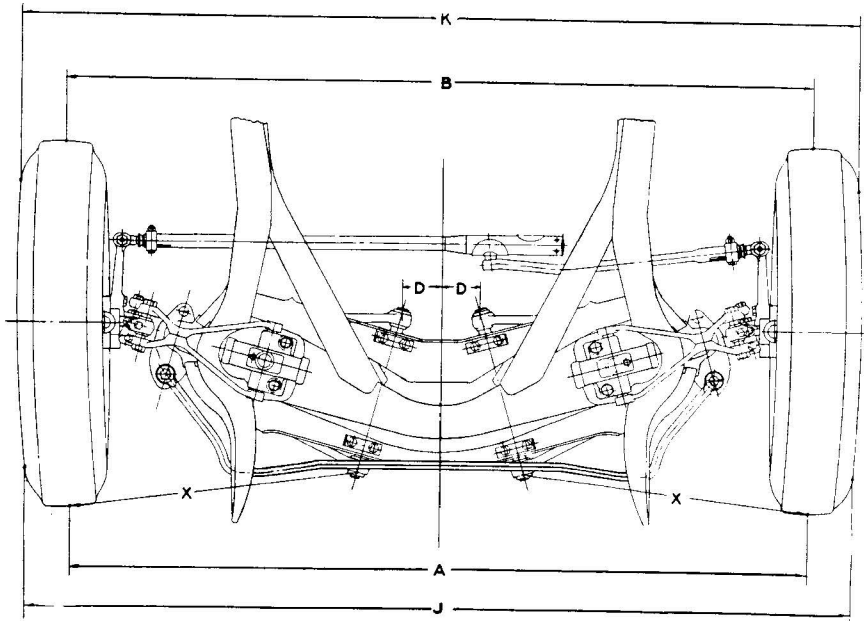


Fig. 9-11. Front Wheel Alignment

### FRONT WHEEL ALIGNMENT

With the type of front suspension used, the toe-in adjustment is much more important than caster and camber setting, in so far as tire wear is concerned. **Close limits on caster and camber are beneficial to car handling but only require reasonable accuracy to provide normal tire life.**

Maintaining toe-in adjustment (see Fig. 9-11), proper tire pressures, and interchanging wheels and tires as outlined in "Wheel and Tire" section, will afford the maximum in tire wear.

Cars which are checked on front end machines because of tire wear will not be benefited materially by adjusting caster and camber. Caster and camber need not be changed unless visual inspection shows these settings to be out or unless the customer is experiencing poor car handling on the road.

**Front suspension checks consisting of setting toe correctly, balancing all wheels and tires, interchanging wheels and tires, and inflating to proper pressures, will provide more improvement in car operation than will the usual caster, camber, and toe check as usually made on front end equipment.**

- Toe, caster and camber should be checked
- individually and not collectively.

### Rear Tires

1. Jack up rear wheels and rotate to check run-out of wheel and tire at side of tire. This should not exceed  $\frac{1}{8}$ ".
2. Check rear axle housing for straightness, by checking toe-in or toe-out and camber of rear wheels. Limits not to exceed  $\frac{1}{8}$ " toe-in or  $\frac{1}{8}$ " toe-out, or  $\frac{1}{8}$ " camber and  $\frac{1}{8}$ " reverse camber when measured at tire tread. To correct, it will be necessary to straighten or replace axle housing. Use rear axle housing alignment gauge J-1105. See "Rear Axle" section.

### WHEEL AND TIRE BALANCE

See "Wheel and Tire" section.

### DIMENSIONAL DRAWINGS

Drawings showing correct dimension of various steering parts which may be bent through accident, are incorporated in "Dimensional Drawings."

### CURB WEIGHT

**All checks for toe-in, caster angle, camber angle, king pin inclination and steering geometry should be made at curb height (no passengers, no load in car, extra tires in place,**