

## 2-4 FRONT SUSPENSION AND STEERING LINKAGE

to be within the recommended specifications, look for possible bent or damaged components.

### PRE-ALIGNMENT INSPECTION

Before any attempt is made to change or correct the wheel alignment factors the following inspection and necessary corrections must be made on those parts which influence the steering of the vehicle.

(1) Check and inflate tires to recommended pressure. All tires should be same size and be in good condition and have approximately same wear. Note type of tire tread wear which will aid in diagnosing (Group 22).

(2) Check and adjust front wheel bearings (Group 22).

(3) Check front wheel and tire assembly for radial and lateral runout (follow the Equipment Manufacturers Instructions (Group 22).

(4) Check wheel and tire for unbalance conditions both static and dynamic which could affect steering.

(5) Inspect ball joints and all steering linkage pivot points for excessive looseness.

(6) Check shock absorbers for leaks and jounce vehicle to determine if shock absorbers have proper control.

(7) Check steering gear for roughness, binding or sticking condition and adjust as necessary.

(8) Check rear springs for cracks or broken leaves and "U" bolts for proper tightness and measure height differential between left and right sides of vehicle. (Vehicle should be on level floor or on alignment rack) with a full tank of fuel and no luggage or passenger load.

(9) Front suspension heights must only be checked after the vehicle has the recommended tire pressures, full tank of fuel, no passenger load and is on a level floor or alignment rack.

To obtain accurate readings, vehicle should be jounced in following manner just prior to taking each measurement (Height - Caster - Camber and Toe): Grasp bumpers at center (rear bumper first) and jounce up and down several times. Always release bumpers on the down cycle after jouncing both rear and front ends an equal number of times.

### WHEEL ALIGNMENT ADJUSTMENTS

Front wheel alignment settings must be held to specifications to hold tire wear to a minimum and to maintain steering ease and handling of vehicle.

The equipment manufacturers recommended procedure should always be followed. Any parts of the front suspension system should be replaced if they are found to be bent. Do not attempt to straighten any bent part.

### Height

Front suspension heights must be held to specifications for a satisfactory ride, correct appearance, proper front wheel alignment and reduced tire wear.

The heights should only be measured after the vehicle has the recommended tire pressures, a full tank of fuel, no passenger or luggage compartment load and is on a level floor or alignment machine rack.

(1) Clean all foreign material from bottom of steering knuckle arm assemblies and from lowest area of the height adjusting blades directly below center of lower control arm inner pivots.

(2) Jounce vehicle several times releasing it on downward motion.

(3) Measure distance from lowest point of one adjusting blade to floor (Measurement A) and from lowest point of steering knuckle arm, at the centerline, on same side (Measurement B) to floor (Fig. 2). Measure only one side at a time.

The difference between A and B (A always being greater than B) is the front suspension height.

(4) Refer to Specifications and adjust if necessary by turning torsion bar adjusting bolt clockwise to increase height and counterclockwise to decrease height.

(5) After each adjustment, jounce vehicle before remeasuring. Both sides should be measured even though only one side has been adjusted.

(6) Measure other side in same manner. The maximum allowable difference in suspension height from side to side is 1/8 inch on all Models.

### Camber and Caster

Access holes to loosen upper control arm cam bolt nuts have been provided for in the fender side shields (Fig. 3) of the Challenger model vehicles. The front access hole is made available by removing splash cover tapping screws and cover.

(1) Prepare vehicle for measuring wheel alignment.

(2) Remove all foreign material from exposed threads of cam adjusting bolts.

(3) Record initial camber and caster readings before loosening cam bolt nuts.

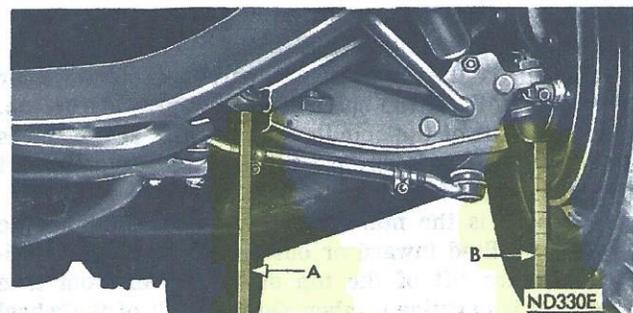


Fig. 2—Measuring Front Suspension Height