

# Packard SERVICE TECHNICAL Bulletin

55T-1

Dealer 1

January 17, 1955

To: ZONES AND DEALERS

Subject: TORSION-LEVEL SUSPENSION - UNEVEN RIDING HEIGHT

A few reports have been received of uneven riding height on Torsion-Level Suspension equipped 55th Series cars. Most all reports state that the car is high on the left side.

With the car resting on its wheels on a level floor, measure the distance from the floor to the flat section near the outer edge on the bottom of the body side sill directly below the center pillar post. The correct riding height at this point should be approximately 10 inches.

If one side of the car is less than 10", that side is considered low or if one side is higher than 10", that side would be considered high, however, a 3/8" variation from one side to the other is considered normal.

Cars that are more than 3/8" higher on one side than the other can be corrected by following the procedure outlined:

1. Raise the car on a hoist to inspect the compensator torsion bar front levers for proper positioning. (These are the two levers that attach to the front ends of the short torsion bars and are connected by links to the compensator gear box.) If wrong levers are installed on the car or installed incorrectly, the load compensator will hold the car in an uneven position. When no load is being transmitted through the compensator bars, the levers should be in a vertical plane with the lower ends of both levers 1/2" inward from vertical. Operate the load compensator by grounding either the front or rear terminal on the limit switch to position the levers as described. With the levers in this position, the flat at the bottom of the short torsion bar front hex should be exactly horizontal.

The ball stud on both levers point toward the front of the car. A forging number "E494" will be found on the rear side of the left lever and "E494" will be found on the front side of the right lever. The above information is furnished for your ready reference so that you may determine if the correct levers are installed and installed properly.

2. High friction in the knee action parts will cause an uneven riding height. A simple test can be made by bouncing the front end up and down at the center of the front bumper. The front end should bounce very easily and evenly on both sides.

If the knee action friction is too stiff or uneven, loosen the upper and lower support arm inner bracket bushing nuts and bounce the front end a few times to neutralize the rubber bushings and retorque the bushing retaining nuts 70 to 75 ft. lbs.



After the preceding inspections and operations have been completed and the car height is still uneven by more than  $3/8$ ", it will be necessary to change one of the front load arm links.

3. For example, the left side measures 11" and the right measures 10" then the left side should be lowered. This can be accomplished by installing a shorter link on the left side. The links are available as follows:

445905 Front Load Arm Link Assembly (5560-80)  
#1 - 3  $1/8$ " long

445746 Front Load Arm Link Assembly (5560-80)  
#2 - 3  $5/8$ " long

445906 Front Load Arm Link Assembly (5560-80)  
#3 - 4  $1/8$ " long

445907 Front Load Arm Link Assembly (5560-80)  
#4 - 4  $5/8$ " long

Changing a link one size will raise or lower the car approximately  $3/8$ ".

4. To remove and replace a Front Load Arm Link, a special tool, No. J-6065, is required. Figure #1.

A. Place the heavy section of the tool on top of the load arm with the long end extended into the frame side channel. Insert the U part of the tool from the bottom under the load arm with the handle below and toward the center of the car. Install the pin through the U section and through the heavy section of the tool. Figure #2. It may be necessary to raise or lower the car slightly to insert the pin.

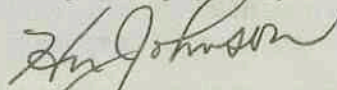
B. Raise the car with a jack in the center of the front cross member until the front wheels are clear of the floor. At this time the load arm link is free and can be lifted out by hand. Figure #3.

C. IMPORTANT: As the lubricant at the ends of the load arm links is special, wipe out the lubricant from the old links with your finger and apply it in the ends of the new links. Be sure that the lower end of the link is in its seat in the lower support arm.

WARNING: Under no circumstances should the upper, lower support arms or knuckle supports be disconnected from each other or from the frame at any time without using the Front Load Arm Holding Tool, J-6065, as shown in the illustration.

Suspension Compensator Case and Load Arm Link Lubricant, part number 474028, will be available in 1 lb. cans at the Central Parts Warehouse in the very near future.

Very truly yours,



H. N. Johnson  
Assistant Service Manager