Packard SERVICE TECHNICAL Bulletin

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To: ZONES AND DEALERS

Subject: FRAME REINFORCEMENT AND MODIFICATIONS TO HANDLE TRAILERS - 55TH SERIES PACKARD

Several requests have been received for information relative to hauling trailers with Torsion-Level suspension 55th Series cars.

It should be remembered that the automotive industry, as a whole, design and manufacture passenger cars for the primary purpose of transporting the passenger load in comfort and safety. The present Packard Torsion-Level suspension will adequately carry six adults in the passenger compartment and 400 pounds of luggage in the trunk, and carry the car at a level height.

It is only natural if the vehicle is called upon to carry loads in excess of that for which it was designed, certain modifications must be made to the frame and to supplement the springs or torsion bars with additional springs or lifts to compensate for the additional load.

When towing a trailer which has a draw bar vertical load in excess of 500 pounds, the following modifications and recommendations should be followed:

a. Reinforce the frame side rails.

b. A suitable towing device should be used, preferably a "Canti-Lever" type that will distribute the tow bar vertical load somewhat evenly between the front and rear wheels of the towing car.

c. Auxiliary lifts or helper springs should be installed to carry the additional load.

FRAME REINFORCEMENT INSTALLATION INSTRUCTIONS

1. With car raised on hoist, clean off undercoating, dirt and grease from both frame side channel upper and lower flanges where reinforcement bars are to be installed and, also, all areas affected by the arc-welding. Place 2 x 4's or suitable jacks under the rear corners of the frame and lower the hoist slightly so that some of the car weight will rest on the 2 x 4's or jacks.

2. Place the wide curved reinforcement in position on top of the frame as shown with its forward end just clearing the body bolt cushion.

   Tighten the reinforcement to the frame with several clamps.

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CAUTION: To avoid a fire hazard, move the gasoline tube away from the welding area and protect the gasoline tube by splitting a section of heater hose and installing it over the tube.

In arc-welding the bar to the frame, start at one end on the outside edge for the first weld and then alternate the other welds from the outer to inner edges equally spaced (weld 2" and skip 3") the full length of the bar. Weld the ends of the bars to the frame as much as possible.

CAUTION: Be sure to arc-weld and not gas weld. Alternate the welds from end to end and from side to side to avoid overheating the frame. Allow the frame to cool before proceeding with other reinforcements.

3. Place the narrow curved reinforcement in position on the lower side of the frame at the kick-up, with its forward end butted against the load arm frame bracket as shown.

NOTE: Early production cars have a body bolt at the top of the frame kick-up that goes through both the upper and lower flanges of the frame, therefore, on these cars it will be necessary to drill a hole in the reinforcement to clear the end of the bolt.

Measure the distance from the rear end of the reinforcement to the rear end of the frame and cut this amount from the forward end of the center reinforcement. Butt weld this piece to the rear of the kick-up reinforcement before welding it to the frame. Grind down the butt weld so the reinforcement fits snug to the frame.

Place the kick-up reinforcement in position on the lower side of the frame as shown, tighten it in place with several clamps.

Arc-weld it to the frame as previously described, stitch weld the forward end to the load arm frame bracket.

4. Cut a small piece from the forward end of the center reinforcement and fit the piece between the legs of the rear load arm frame bracket. Weld the piece to the frame channel and to the legs of the load arm frame bracket.

5. Clamp the center reinforcement to the lower side of the frame channel with the rear end against the load arm frame bracket as shown. Arc-weld it to the frame as previously described and weld the rear end to the load arm frame bracket.

6. Both frame side channels should be reinforced in the same manner, however, it will be necessary on some models to locate and drill a 15/32" hole through the right reinforcement bar to accommodate the muffler bracket bolt. Replace the bolt with a longer bolt. After the bars have been installed and cooled, paint the bars and welded areas with black paint.

7. Raise the hoist and remove the 2 x 4's or jacks.

Lower the car onto the floor and note the fit of the doors to the body, the spacing should be the same at the top edge as at the bottom. Removing or adding body bolt shims will generally provide correct door alignment. In some cases, where the frame has become distorted, it may be necessary to correct frame alignment on a frame aligning machine to obtain the desired door fit.

CANTI-LEVER TYPE HITCH

We recommend that only the Canti-Lever type hitch be used. This type hitch is adjustable to distribute the tow bar vertical load somewhat evenly between the front and rear wheels of the towing car.

Listed are various manufacturers who supply the Canti-Lever type hitches:

Rollo-o-Flex: Roll-o-Flex Trailer Coupler
3912 San Fernando Road
Glendale, California

Equal-i-zer: Mobile Equipment & Mfg. Co.
1833 S. State Street
Salt Lake City, Utah

U-Neek: Uneek Coupler Inc.
4424 San Fernando Road
Glendale 4, California

Eas-Lift: Eaz-Lift Spring Company
Box 207
Burbank, California

PresTow Hitch: PresTow Engineering Co.
1414 W. Huron Street
Ann Arbor, Michigan

Glide-A-Ride: Glide-A-Ride Mfg. Co.
7th at College
Spencerville, Ohio

Perfec Tow: The Perfec Tow Corp.
3740 San Fernando Road
Glendale 4, California

Tour Aid: Martin Industries
Box 322
Jonesville, Michigan

Gar-Bro: Gar-Bro Products Co.
827 Royal Union Building
Des Moines 9, Iowa

Installation and adjustments of the Canti-Lever type hitches are furnished by the supplier.

AUXILIARY LIFTS

At this writing, the only suitable auxiliary lifts available for the Torsion-Level suspension are the "Pneumatic Spring Boosters" which are available at Air Lift, 2330 West Main Street, Lansing, Michigan.

These boosters are adjustable by adding or subtracting air pressure to provide the desired assist when towing a trailer and yet retain almost the normal ride when not towing.

Installation instructions are furnished with the "Air Lifts."

Part number 474327, Frame Top and Bottom Reinforcement Kits, are available and may be ordered through your Zone Warehouse.

Very truly yours,

H. N. Johnson
Assistant Service Manager

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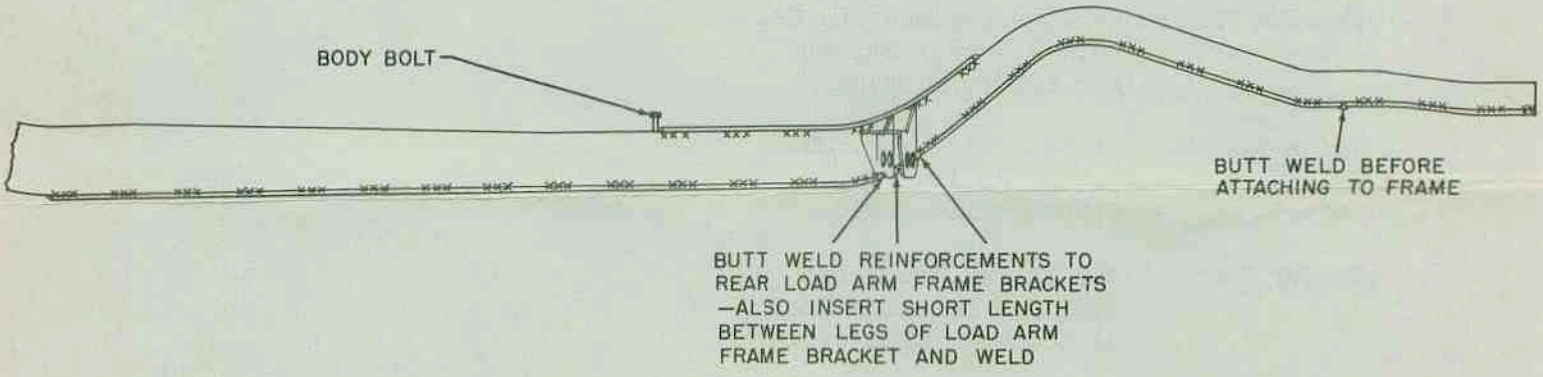

STITCH ARC WELD ONLY—DO NOT OVERHEAT FRAME

STITCH WELD BY WELDING SOLID FOR 2" THEN SKIPPING 3" ALONG BOTH SIDES AND FULL LENGTH OF REINFORCEMENTS