

To: ZONES

December 3, 1951

Attention: Parts and Service Manager Service Representatives

Subject: FRAME FRONT CROSS MEMBER CRACKS - 24TH SERIES

Occasionally you may find excessive front tire wear on the inside of the tread due to reverse camber. You may also find when attempting to correct the camber setting that you are unable to get positive camber within the limits with the adjustments provided.

If this condition exists, it may be caused by cracks spreading from the holes located in the upper section near the center of the cross member. The cracks are difficult to see with the radiator and fenders on the car, but by using a mirror, it can be determined if the cross member is cracked. A cracked front cross member will sag due to the weight of the car, thus pulling the side rails toward the center, which causes the excessive reverse camber. This condition has only been reported from territories where the road conditions are very severe.

Engineering and Service have released a reinforcing kit to correct this condition in the field. The parts necessary can be ordered from the Parts Warehouse by ordering Part Number 436317 Front Cross Member Reinforcing Kit.

The suggested time for complete installation of the frame front cross member reinforcing kit is 16 hours, which includes 4 hours for fitting and welding.

The installation procedure is as follows: (See attached photograph.)

- 1. Remove front fenders and radiator assembly.
- 2. Remove engine and transmission assembly.
- 3. Remove brake tube from rear of front cross member.
- 4. Disconnect gas line from tank, blow out the tube and bend up out of the way.
- 5. Remove front shock absorber upper nuts, grommets and retainers. Push the shock absorber stems down out of the upper bracket holes.

NOTE: The distance across from one side of the frame to the other is measured at the holes for the shock absorber stems. This measurement should be Z3-1/2", center of hole one side to center of hole on the other side. When front cross member is cracked, this measurement will probably be less than 33-1/2".

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- 6. Place a hydraulic body jack or the equivalent horizontally between the front shock absorber upper brackets down close to the base of the brackets. By operating the jack, the two side rails can be spread; spread the side rails about 5/8" beyond the 33-1/2", and then release the jack and recheck the measurement to see if it is exactly 33-1/2". If measurement is okay, reinstall the jack and spread the side rails 1/8" over the 33-1/2" measurement and leave in this position for all welding operations.
- 7. Jack up the car in the center of the front cross member just enough to take the weight off the wheels.
- 8. Weld cracks in the front cross member.
- 9. Place front half of upper channel on top of cross member; check the fit and see if any grinding is necessary to clear the lower support arm bolt upper plates.
- 10. Clamp the channel to the cross member with several "C" clamps, and hammer it down where necessary to get a smooth, tight fit.
- 11. Tack arc weld all corners and a few spots at the lower and upper edges; recheck the fit and if okay, then weld all the edges.
 - NOTE: A better job of welding may be accomplished by fitting and laying pieces of 1/4" round cold roll around lower edges; then weld to get a smoother, stronger weld. Do not weld over the two center holes in the cross member, but tack weld a spot between the two holes at the split line. All other edges must be completely welded.
- 12. Release the jack and recheck the 33-1/2" measurement across the frame at the shock absorber upper bracket holes. If it is exact, reinstall the jack and spread the frame 1/8" over the 33-1/2" measurement.
- 13. Clamp the rear half of the upper channel to the cross member with "C" clamps; hammer down to get a smooth, tight fit, and tack weld a few spots and recheck the fit. If the fit is okay, then completely weld all edges.
- 14. Allow to cool before removing the jack; recheck the 33-1/2" measurement. Redrill the clip holes for the gasoline and brake lines. Install the gasoline and brake lines. Bleed the brake system. Paint the front cross member.
- 15. Install engine, transmission, fenders, and radiator.
- 16. After all parts are installed, reset the camber, caster and toe-in.

Very truly yours,

J. A. Carr, Manager

Parts and Service Department

JAC: pam

