

Group 2 Body Structure

GENERAL: This group contains information on the basic upper shell.

SPECIFICS: As applicable

- ...Dash Panel (less instrumentation)
- ...Engine Compartment Insulation
- ...Exterior Grilles and Skirts
- ...Inside Floor Plates and Insulation
- ...Inside Trim Mouldings
- ...Inside Trim Panels
- ...Interior Headers and Trim
- ...Interior Header Insulation
- ...Outside Trim Mouldings
- ...Outside Trim Panels
- ...Shell Inner Skin
- ...Shell Outer Skin
- ...Windows and Associated Hardware
- ...Windshield and Associated Hardware



FMC Corporation
Recreational Vehicle Division
333 Brokaw Road Box 664 Santa Clara, California 95052



URGENT

ROUTINE

MANDATORY

INFORMATIONAL

Service Bulletin

DATE 2/14/73

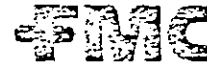
NUMBER 290240001

ATTENTION: SERVICE MANAGER	GROUP 2
This Service Bulletin serves to inform you of a possible situation that can arise with the tinted windows (excepting windshields) in the FMC 2900R. We have been informed by the supplier of these windows that the laminated glass used in the initial production vehicles may be subject to cracking. If you should find cracks in any of the windows of the subject vehicles, please inform us and we will arrange for the removal of any defective glass and installation of new glass in its place.	BODY STRUCTURE
This, of course, does not apply to glass damaged from abuse such as hits from flying debris and the like.	SUBJECT WINDOWS
	MODEL (S) AFFECTED FMC 2900R
	(Factory Use Only) Information added to: OWNER MANUAL (S)
	SERVICE MANUAL (S)
	PARTS MANUAL (S)
	WARRANTY MANUAL (S)
<p style="text-align: center;"><i>John L. Strever</i></p> <p style="text-align: center;">John L. Strever Service Manager</p> <p style="text-align: center;">F.M.C., AS OF 12/31/75, NO LONGER ONORS PARTS OR SERVICE INFORMATION AS OBTAINED IN THIS BULLETIN</p>	OTHER

FMC Corporation

Motor Coach Division
233 Brooks Road Box 864
Santa Clara California 95052
(408) 289-0111

2



December 1, 1976

Dear FMC Motorcoach Owner:

It has come to our attention through inspection and repair of various numbered motor coaches that the upper body structure to the lower frame mounting points has missing rivets or rivets that are coming loose.

The general area this seems to show up is behind the rubber boot in the forward section of the rear wheel well on the right side of the coach. While we do not feel this problem is serious, it could be if it goes unattended over the years.

Through our Engineering Dept., we have come up with a steel joint reinforcement kit that will require welding, special huck rivets, and huck rivet guns. Motor Coach Division will have to rent these guns at a premium rental fee. Due to personnel cut-back in Motor Coach Division, the high cost of the guns, and the special training required to accomplish this task, we can only come up with the few service centers as the per attached list. These centers have the equipment and service technicians that we feel are qualified to do this work. It is because of all these conditions that it will be essential to have complete cooperation of all motor coach owners.

Motor Coach Division will only honor those claims submitted for the above work until June 1, 1977, Motor Coach Division will not honor any claims for the forementioned work after this date.

Please call the nearest service center on the enclosed list for an appointment. We are thanking you in advance for your cooperation.

Sincerely,

A handwritten signature in cursive script that reads 'Harry R. Richards'.

HARRY R. RICHARDS
Customer Service Manager

HRR/laf

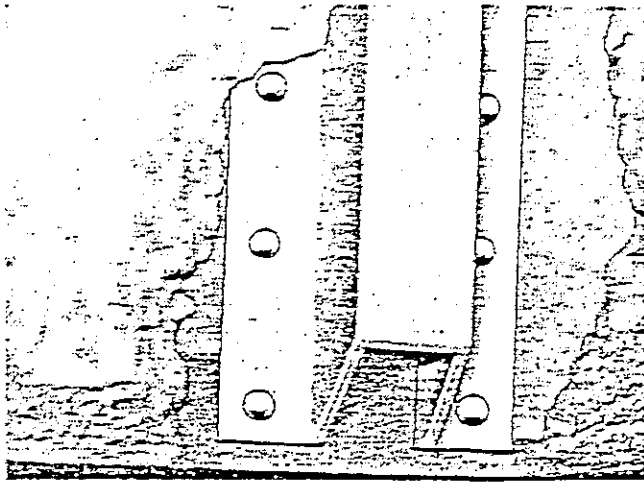


Service Bulletin

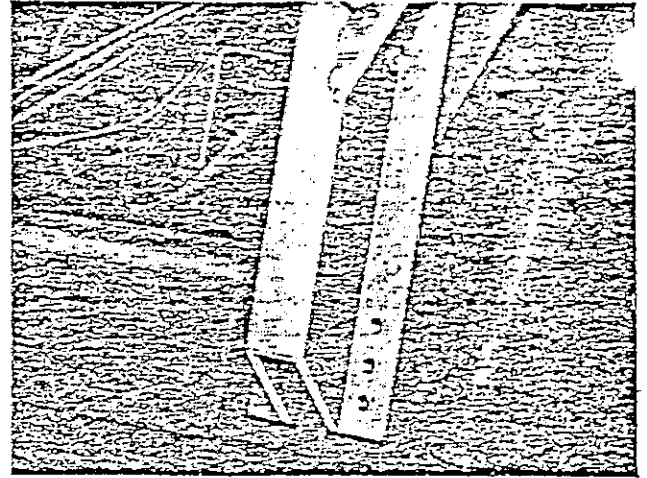
DATE December 1, 1976

NUMBER 2902-30001

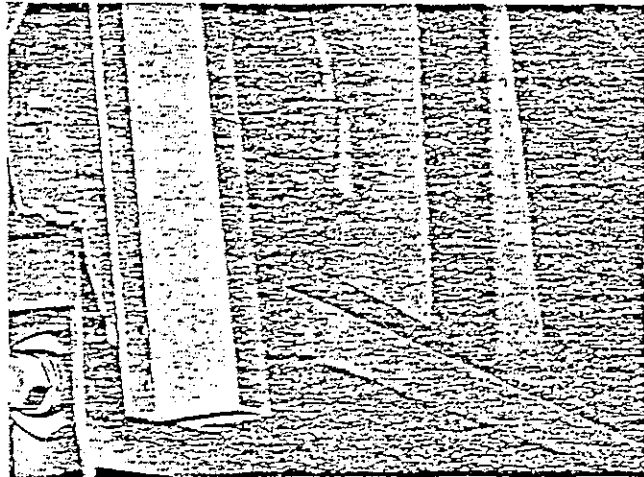
ATTENTION: SERVICE MANAGER		GROUP 2																																	
<p><u>DESCRIPTION</u></p> <p>This bulletin provides instructions for inspecting and reinforcing the upper body structure to lower frame mounting points. Inspection is to be accomplished on all motor homes within serial range as indicated.</p> <p><u>COMPLIANCE</u></p> <p>Owners should take their coach to one of the participating service centers listed as an attachment to the owners notification letter. FMC will reimburse for labor provided that this bulletin is accomplished no later than June 1, 1977.</p> <p><u>PARTS REQUIRED</u></p> <table border="1"> <thead> <tr> <th>Qty.</th> <th>Part Number</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>5109097-01</td> <td>Angle</td> </tr> <tr> <td>16</td> <td>5109247-04</td> <td>Fastener (colored Red)</td> </tr> <tr> <td>24</td> <td>5109247-05</td> <td>Fastener (colored Yellow)</td> </tr> <tr> <td>8</td> <td>5109247-07</td> <td>Fastener (colored Brown)</td> </tr> <tr> <td>25</td> <td>M25029</td> <td>Rivet-Fiberglass to Frame</td> </tr> <tr> <td>35</td> <td>M25032</td> <td>Rivet-Shear Panels and Door Frame</td> </tr> <tr> <td>25</td> <td>M25044</td> <td>Rivet-Exterior Door Molding</td> </tr> <tr> <td>20</td> <td>M25090</td> <td>Rivet-Rub Rail Trim Molding</td> </tr> <tr> <td>50</td> <td>M25099</td> <td>Rivet-Fiberglass Panels Upper</td> </tr> <tr> <td>50</td> <td>M25104</td> <td>Rivet-Fiberglass Panels Lower</td> </tr> </tbody> </table> <p><u>TOOLS & EQUIPMENT</u></p> <p>One special "Huck" gun for fasteners</p> <p>Zinc Chromate primer for aluminum to steel interface</p> <p>Steel welding capacity and welding rod 3/32 O.D., alloy 7015, 7016, or 7018.</p> <p><u>MANPOWER</u></p> <p>Estimated accomplishment times per coach will depend upon coach condition as shown in Figures 1 and 2 and will vary from coach to coach. FMC/MCD will reimburse for labor per the following provided that WORK IS COMPLETED NO LATER THAN June 1, 1977.</p>		Qty.	Part Number	Description	6	5109097-01	Angle	16	5109247-04	Fastener (colored Red)	24	5109247-05	Fastener (colored Yellow)	8	5109247-07	Fastener (colored Brown)	25	M25029	Rivet-Fiberglass to Frame	35	M25032	Rivet-Shear Panels and Door Frame	25	M25044	Rivet-Exterior Door Molding	20	M25090	Rivet-Rub Rail Trim Molding	50	M25099	Rivet-Fiberglass Panels Upper	50	M25104	Rivet-Fiberglass Panels Lower	<p>SUBJECT</p> <p>Frame Reinforcement Instructions</p> <p>MODEL (S) AFFECTED</p> <p>All Motor Homes 00001 to 01050 Model 2900R</p>
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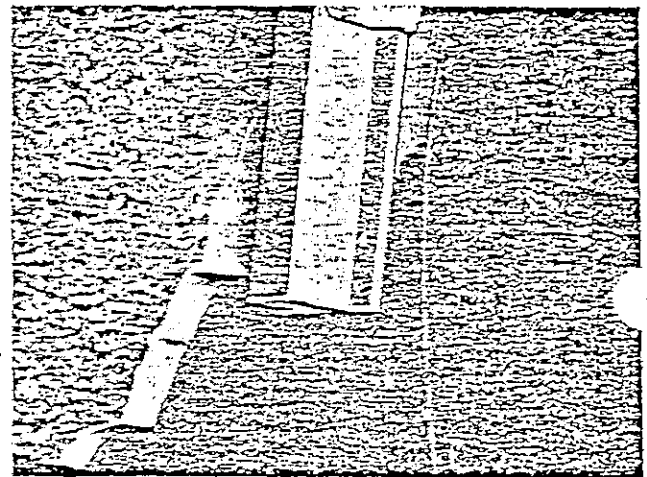
(A) Good section at frame proper cut-away of foam for rivet inspection



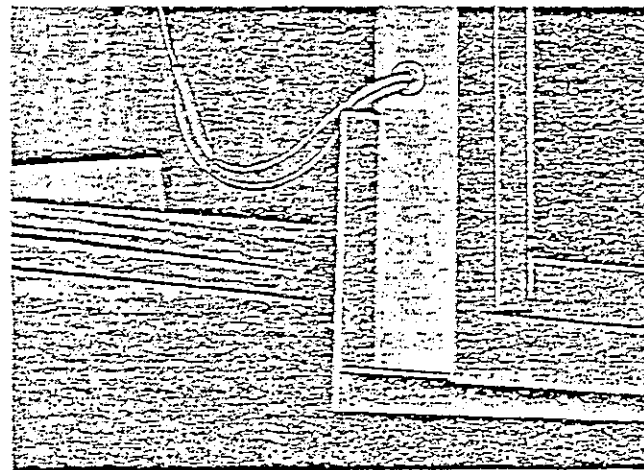
(B) Right front section with missing rivets



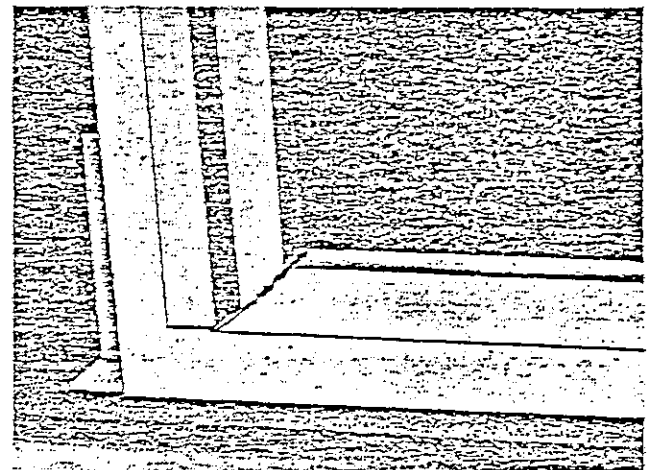
(C) Right rear support section pulled away from lower frame



(D) Left rear support section pulled away from lower frame



(E) Passenger door frame pulled away from lower frame



(F) Hairline crack lower aft corner of passenger frame

FIGURE 1. TYPICAL SECTION AND FRAME CONDITIONS.

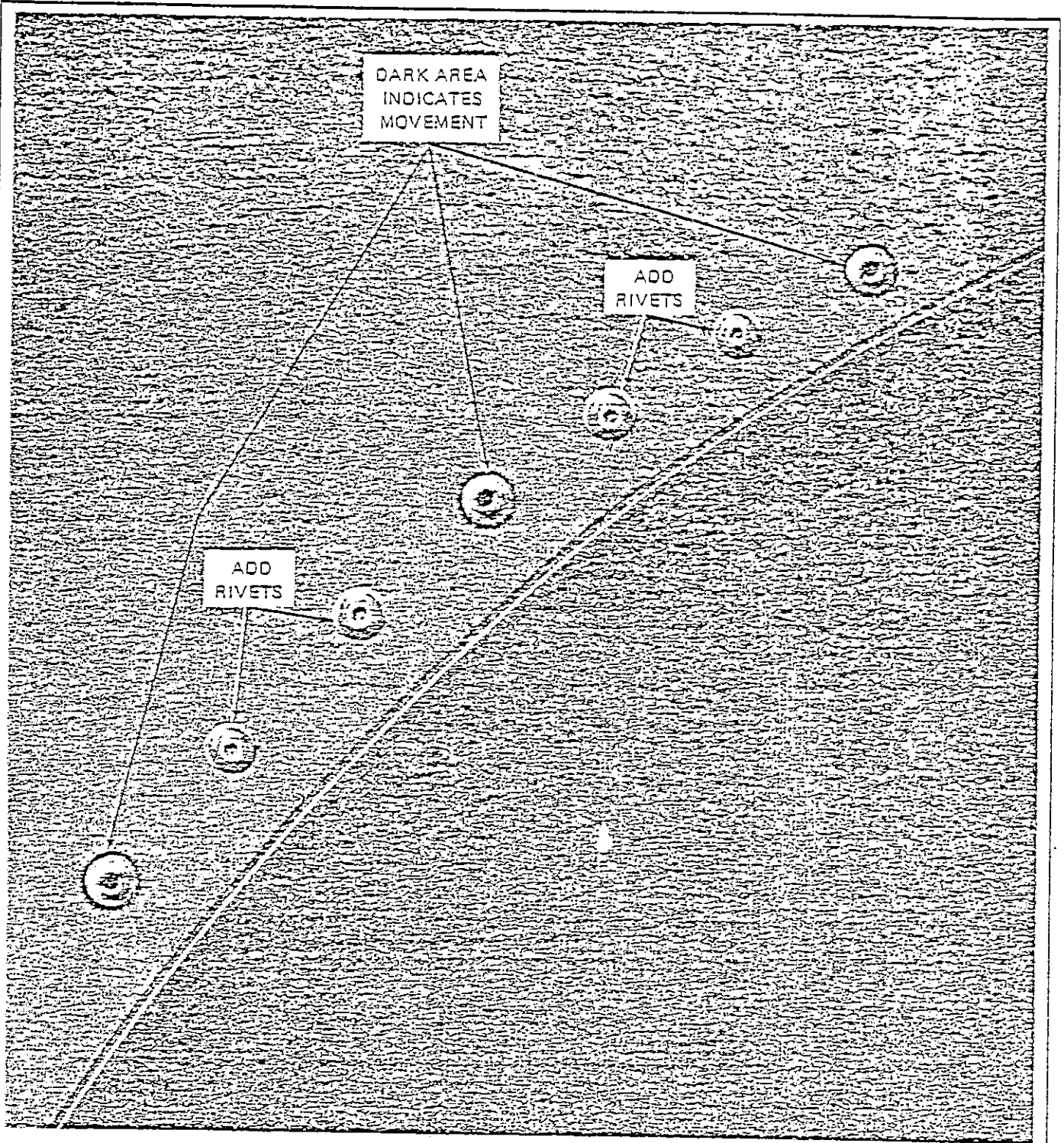


FIGURE 2. SHEAR PANEL TO WHEEL WELL CONNECTION.



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<p>ATTENTION: SERVICE MANAGER</p>	<p>GROUP 2</p>
<p>Condition 1 - Right and left sections forward of rear wheels (positions L4 and R4 in Figure 3) need reinforcement ---4 man hours. Please note that it is not necessary to completely remove coach panels to reinforce for this condition (see Joint Reinforcement Figure 5).</p>	<p>SUBJECT Frame Reinforcement Instructions</p>
<p>Condition 2 - Right and left sections forward of rear wheels (L4 and R4) and all right side sections between rear wheel and front wheel (R3, R2 and R1) plus shear panels in front and rear right side wheel wells (see Figure 3) need reinforcement---8 man hours.</p>	<p>MODEL (S) AFFECTED All Motor Homes 00001 to 01050 Model 2900R</p>
<p>Condition 3 - Right and left sections forward of rear wheels (L4 and R4), all right side sections between rear wheel and front wheel (R3, R2 and R1) plus shear panels in front and rear right side wheel wells and left side sections rear of front wheel (L1, L2 and L3), plus shear panels in front and rear left side wheel wells (see Figure 3) need reinforcement. Call factory service representative 408-289-3665 regarding warranty reimbursement <u>before</u> proceeding with the work.</p>	
<p>Condition 4 - Right and left sections forward of rear wheels (L4 and R4), all right side sections between rear wheel and front wheel (R3, R2 and R1) plus shear panels in front and rear right side wheel wells and left side sections rear of front wheel (L1, L2 and L3), plus shear panels in front and rear left side wheel wells, and all four corners of passenger door frame (see Figure 3) need reinforcement. Call factory service representative 408-289-3665 regarding warranty reimbursement <u>before</u> proceeding with the work.</p>	
<p><u>INSPECTION</u></p> <p>A thorough inspection of each coach is essential before proceeding with the work to determine if all parts and equipment are in stock and to determine extent of frame reinforcement required.</p> <ol style="list-style-type: none"> 1. Release lower edge of fiberglass side panels on left and right sides of coach (see Figure 5). 2. Cut away foam insulation just enough to inspect all rivets on body sections and shear panels (Figure 1A). 	

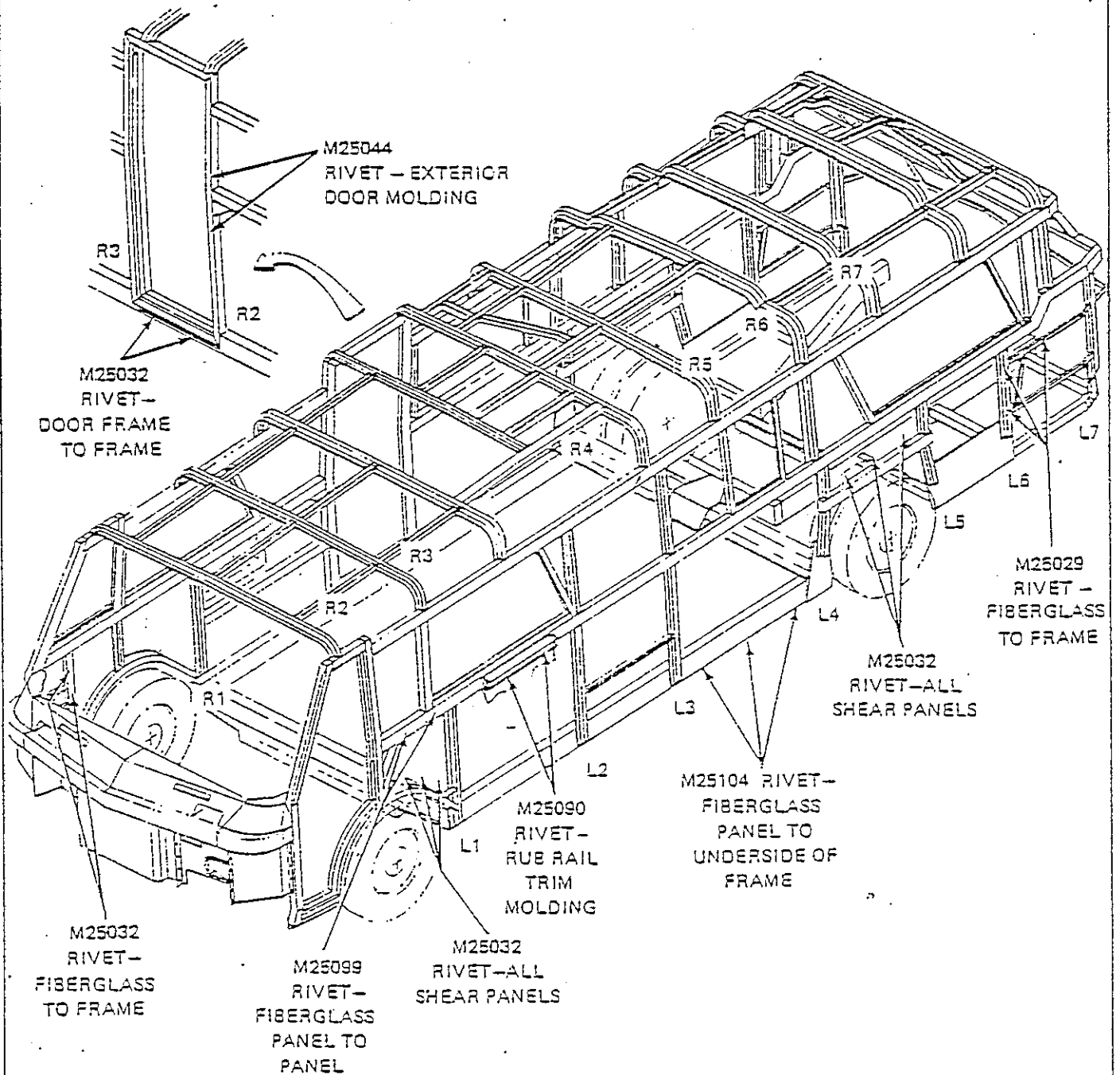
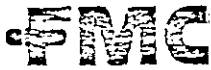


FIGURE 3. UPPER STRUCTURE TO FRAME REINFORCEMENT.



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<p>ATTENTION: SERVICE MANAGER</p>	<p>GROUP 2</p>
<p>3. Inspect all body section to frame mounts and door for missing rivets, possible movement or disfiguration of rivets (Figure 2) or movement of body section or door frame away from lower frame (Figures 1 and 3).</p> <p>4. Inspect shear panels for missing rivets, possible movement or disfiguration of rivets (Figure 2) or movement of shear panel away from upper body sections. Note: If rivets show signs of movement, add two new rivets between each pair of existing rivets as shown in Figure 2.</p> <p>5. If all upper body section to lower frame rivets are in place and show no signs of deterioration, no reinforcement is necessary <u>except</u> at the right and left body sections (L4 and R4, Figure 3) forward of the rear wheels. New frame reinforcing angles will be added at these points regardless of the condition of the existing section and rivets.</p>	<p>SUBJECT Frame Reinforcement Instructions</p>
<p><u>ACCOMPLISHMENT INSTRUCTIONS</u></p> <p>A. <u>Hull Section to Frame Angles</u> (Figure 3, positions L4, R4, R2 and R3)</p> <ol style="list-style-type: none"> 1. Make certain coach is level at all four jacking points. Jack up body until distance from horizontal strut (just forward of right rear wheel) to bottom of frame is 39 to 39 1/4" as shown in Figure 4. 2. Realign rivet holes as close as possible. 3. Close gap between upper body section and lower frame with C clamp. 4. Cut out shear panel only as necessary to install reinforcing angles. 5. Grind or file off existing rivet heads to make angles flush with shear panel. 6. Apply zinc chromate primer to reinforcing angles in all areas that come in contact with aluminum. 7. Place reinforcing angles (5109097-01) against the body section and flush with lower frame. Secure with C clamps. 	<p>MODEL (S) AFFECTED</p> <p>All Motor Homes 00001 to 01050 Model 2900R</p>

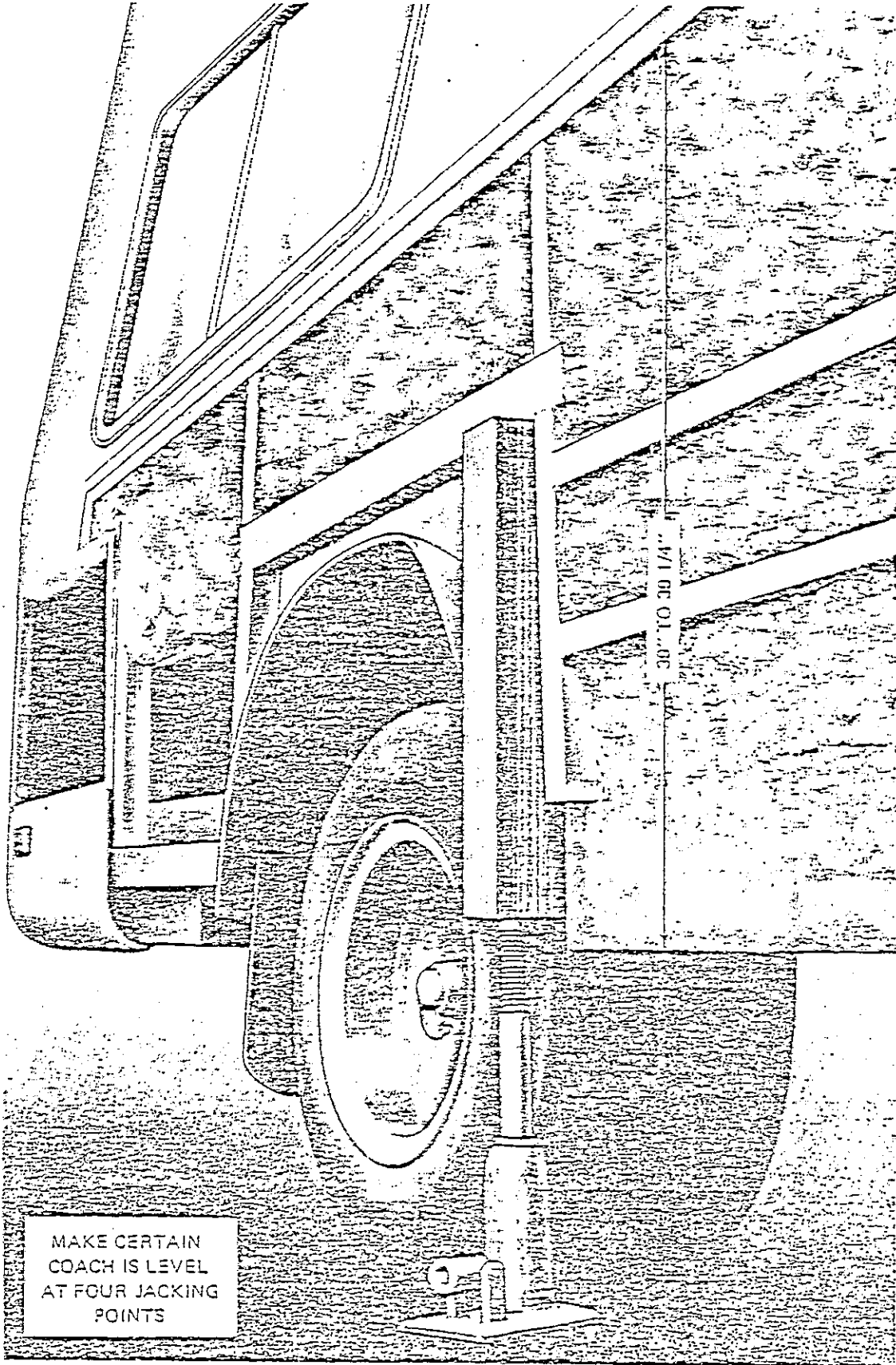


FIGURE 4. BODY TO FRAME DIMENSION.



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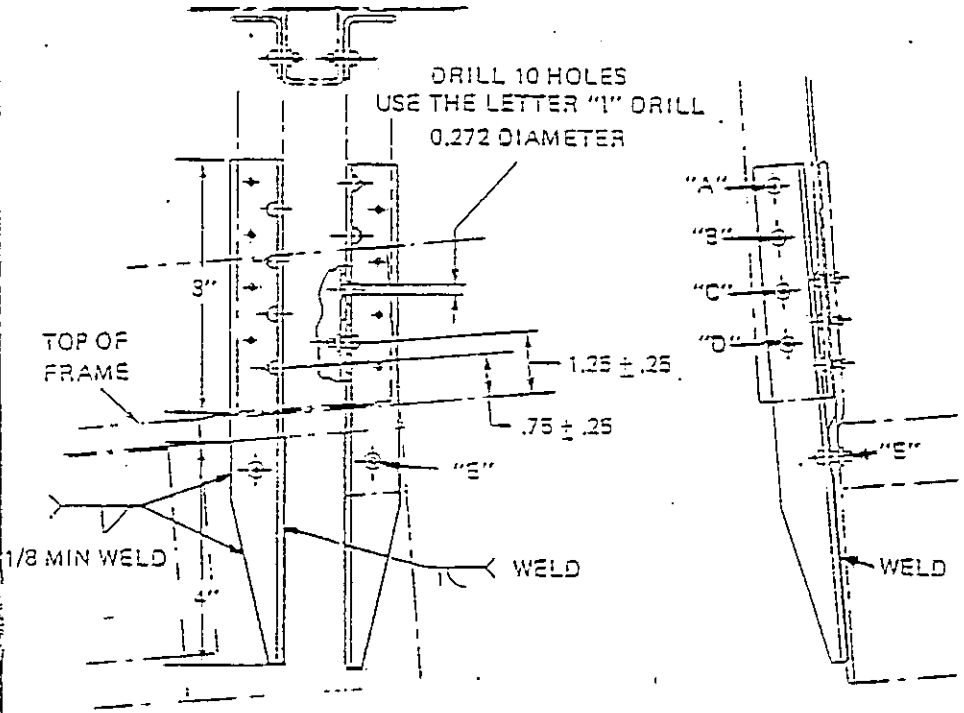
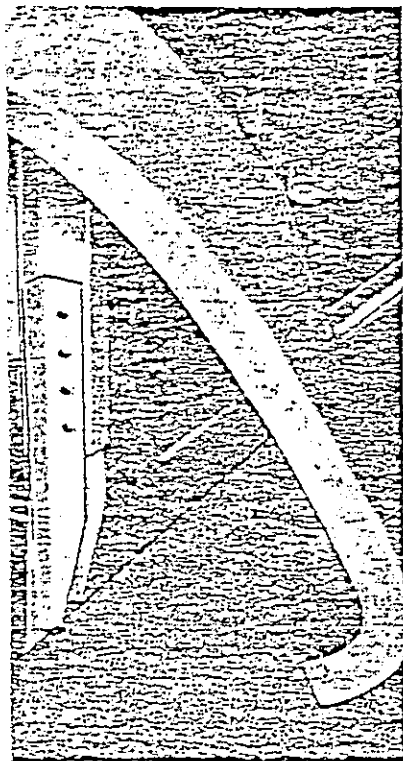
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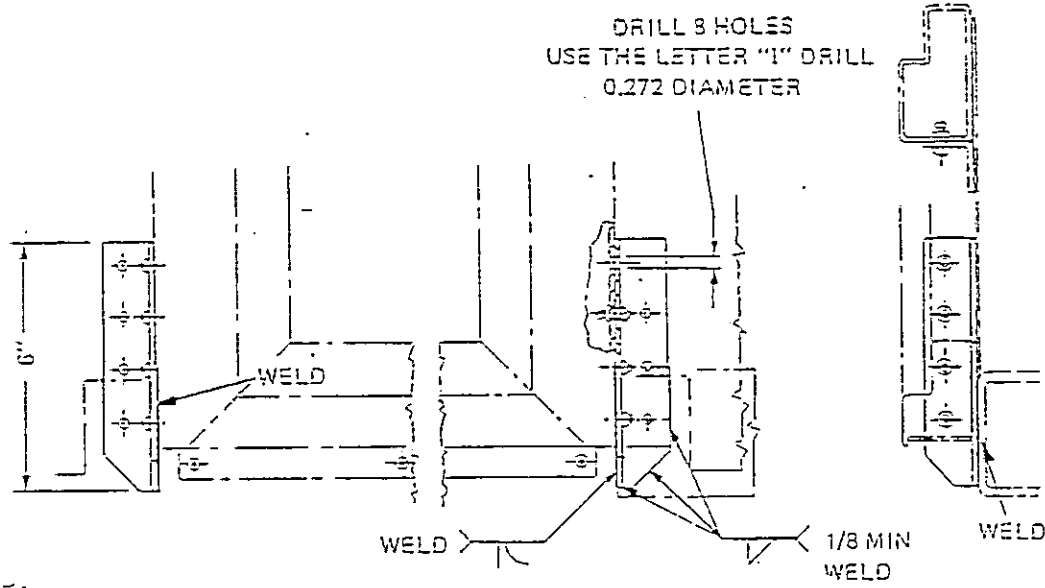
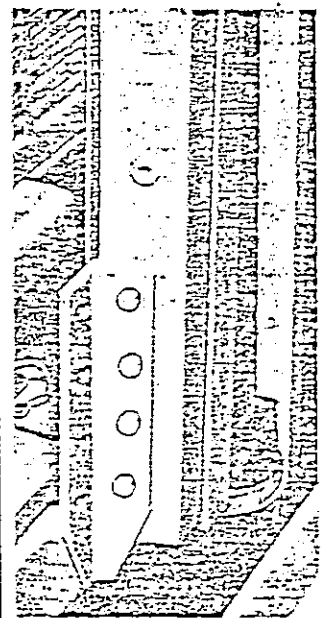
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ATTENTION: SERVICE MANAGER	GROUP 2						
<p>8. Drill two holes through each angle, one into body section and one onto the lower frame at points "D" and "E" in Figure 5. Use an "I" size drill.</p> <p>9. Install one fastener (5109247-04, colored red) through body section and lower hole of angle ("D" in Figure 5) to secure each angle. Use special "Huck" gun on fastener.</p> <p>10. Install one fastener (5109247-05, colored yellow) through frame and lower hole of angle ("E" in Figure 5) to secure angle at position L4 only (see Figure 3).</p> <p>11. Install one fastener (5109247-05, colored yellow) through frame and lower hole of angle ("E" in figure 5) to secure angle at position R4 only (see Figure 3). Use special "Huck" gun on fastener.</p> <p>12. Drill three holes through each angle into body sections for positions "A", "B" and "C" in Figure 5. Use an "I" size drill.</p> <p>13. Install fasteners (5109247-04, colored red) through body section to secure each angle. Use special "Huck" gun on fastener.</p> <p>14. Remove paint and scale in areas to be welded. Degrease using small disc sander or wire brush prior to welding.</p> <p>15. Weld angle to lower frame as indicated in Figure 5. A metal to metal fit is desirable. If gap exists, make two welding passes.</p>	SUBJECT Frame Reinforcement Instructions						
<p>B. <u>Hull Section to Frame</u> (Figure 3, positions L1, L2, L3, L5, L6, L7 and R1, R5, R6 and R7)</p> <p>1. Drill out old rivets and replace with "Huck" fasteners per table listed below:</p> <table border="1" data-bbox="292 1575 1136 1722"> <thead> <tr> <th><u>Position</u></th> <th><u>Fastener</u></th> </tr> </thead> <tbody> <tr> <td>L1, L2, L3, L5, L6, L7</td> <td>5109247-05, colored yellow</td> </tr> <tr> <td>R1, R5, R6, R7</td> <td>5109247-07, colored brown</td> </tr> </tbody> </table> <p>2. Realign rivet holes as close as possible.</p> <p>3. Close gap between body section and lower frame with C clamp.</p>	<u>Position</u>	<u>Fastener</u>	L1, L2, L3, L5, L6, L7	5109247-05, colored yellow	R1, R5, R6, R7	5109247-07, colored brown	MODEL (S) AFFECTED All Motor Homes 00001 to 01050 Model 2900R
<u>Position</u>	<u>Fastener</u>						
L1, L2, L3, L5, L6, L7	5109247-05, colored yellow						
R1, R5, R6, R7	5109247-07, colored brown						



JOINT REINFORCEMENT - POSITION L4-R4 ONLY (FIGURE 3)



PASSENGER DOOR REINFORCEMENT - POSITION R2 AND R3 ONLY (FIGURE 3)

FIGURE 5. REINFORCING ANGLES.