PREVOST

SAFETY RECALL

Sr97-25

CERTIFIÉ-CERTIFIED ISO 9001 PREVOST

DATE: December 1997	**SECTION: 16**
SUBJECT:	**ADDING REINFORCEMENTS TO THE DIFFERENTIAL CROSS-MEMBER**

APPLICATION:

Model	VIN
H3-41, H3-45 and H3-45 VIP with drive axle equipped with drum brakes only _____ Model Year: 1994 - 1998	From 2P9H33495R1001012 up to 2PCH33494W1012248 incl. **except:** 2P9H33410S1001113, 2PCH33494V1012068, 2PCH33495W1012145 2P9H33415S1001138, 2PCH33496V1012072, 2PCH33499W1012147 2P9H33495S1001209, 2PCH33491V1012075, 2PCH33490W1012148 2P9H33492S1001264, 2PCH33493W1012094, 2PCH33492W1012149 2PCH33418T1011349, 2PCH33499W1012102, 2PCH33492W1012152 2PCH33414T1011350, 2PCH33490W1012103, 2PCH33494W1012153 2PCH33497T1011476, 2PCH33493W1012113, 2PCH33496W1012154 2PCH3349XT1011486, 2PCV33490W1012119, 2PCH33498W1012155 2PCH33415T1011504, 2PCH33493W1012130, 2PCH33491W1012157 2PCH33497T1011560, 2PCH33499W1012133, 2PCH33491W1012160 2PCH3349XV1011635, 2PCV33490W1012136, 2PCH33495W1012162 2PCH33491V1011636, 2PCH33496W1012137, 2PCH33497W1012163 2PCH33418V1011967, 2PCH33498W1012138, 2PCH33416W1012164 2PCH33411V1011969, 2PCH33498W1012141, 2PCH33490W1012165 2PCV33494V1012039, 2PCH3349XW1012142, 2PCH33492W1012166 2PCH33495V1012063, 2PCH33491W1012143, 2PCH33498W1012169 2PCH33492W1012183

DESCRIPTION

On the above-mentioned vehicles, the design of differential cross-member reinforcement has been found inadequate under certain rough applications. The installation of two other reinforcements will solidify the assembly and avoid that a crack occurs on reinforcement already in place. The probability that a crack occurs is more important on vehicles on which the radius rod bolting procedure has not been observed thus increasing the stress on differential cross-member reinforcement. Consequently, we ask you to install two reinforcements **and** perform the verification steps described in the following procedure.

MATERIAL

Part No.	Description	Qty
171738	Reinforcement	2
502544	Hexagonal head bolt M16 x 2 x 40 Gr. 8.8	12
500781	Self-locking nut M16 x 2	6
110340	Locking tab plate	3
131420	Radius rod plate-pivot assy.	?

? The number of plate-pivot assy. required may be 0,1,2 or 3 depending on result obtained from step 2 under heading ?ASSEMBLY #1?, ?ASSEMBLY #2? and ?ASSEMBLY #3? .

Note: *Material can be obtained through regular channels*.

PROCEDURE

ADDING REINFORCEMENTS ON DIFFERENTIAL CROSS-MEMBER

Warning: *Park vehicle safely over a repair pit, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.*

Prior to working under an air-suspended vehicle, it is strongly recommended to securely support the body at the recommended jacking points.

Welding must be done only by a qualified and experienced person.

Protective shields must be placed in order to protect components against heat, welding flash, welding arc and other elements associated with welding.

Always wear the appropriate safety equipment.

Weld in clean and well-ventilated area, and always have an appropriate fire extinguisher within your reach.

The following precautions are to be taken to protect the electronic control components :

* Cut off battery power (battery master switch) from battery compartment.
* Disconnect the two wiring harness connectors located on the R.H. side of ECM (Electronic Control Module). The ECM is mounted on the R.H. side of engine close to the starter.

* For vehicles equipped with an automatic transmission, disconnect both wiring harness connectors from ECU (Electronic Control Unit). The ECU is located in L.H. side rear electrical compartment.

* For vehicles equipped with ABS (Antilock Braking System), disconnect wiring harness connector from ABS Electronic Control Unit. The ABS Electronic Control Unit is located in the front electrical compartment. For vehicle V-1779 and following, the control unit is located in the upper L.H. corner of first L.H. side baggage compartment.

1. Working underneath vehicle in the area located at center in front of differential, carefully check if there is a crack on the differential cross-member reinforcement (refer to figures 1 and 2). In such a case, grind cracked area to bare metal then fill crack with welding.

Adjust the welding machine according to the following parameters:

* FCAW (Flux cored-Arc Welding) process;
* welding rod conforms to CSA W48.5 - M1990 specifications
* E4801 - T9CH type welding rod with 0.045" diameter (1,2 mm)
* voltage: 24 @ 28 volts
* current: 325 @ 375 amperes
* wire feed rate: 280 ipm
* shielding gas: 75% argon and 25% CO^2

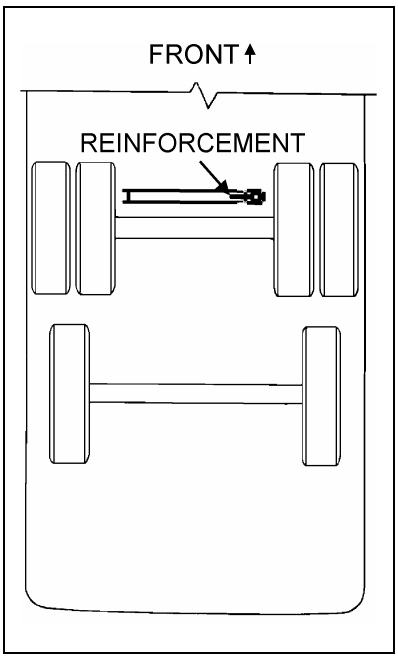

FIG. 1 TOP VIEW

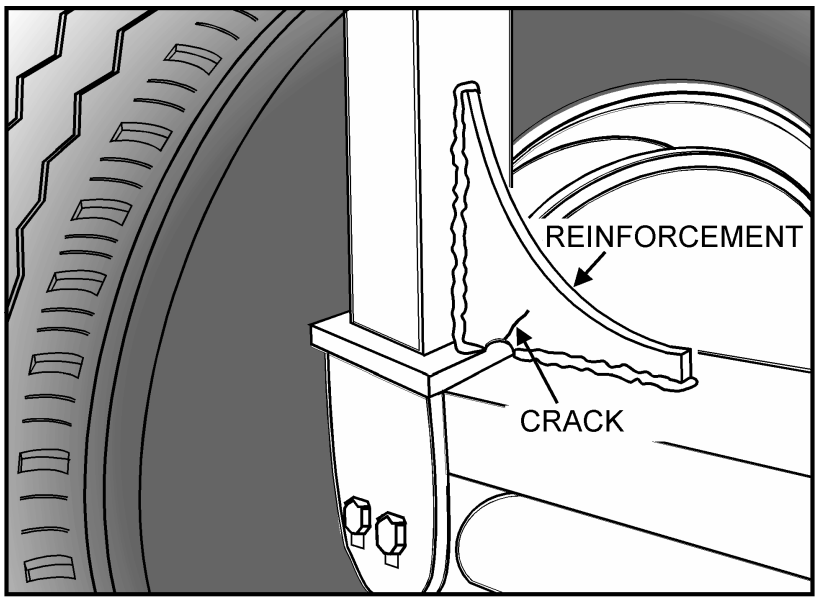

FIG. 2 VIEW FROM FRONT

2. Allow welding to cool, remove slag then paint the exposed areas with a rust preventive product.

3. Referring to figure 3, grind to bare metal the areas where the new reinforcement (#171738) will be welded.

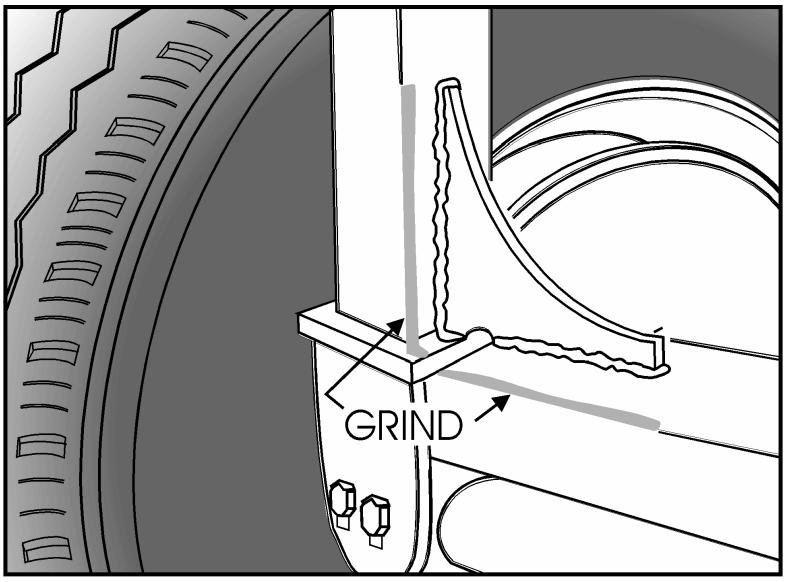

FIGURE 3

4. Position the new reinforcement (#171738), set the welding machine according to the parameters already mentioned then weld referring to figures 4 and 5.

Note: *The reinforcement welding bead must be complete on exterior joint (except facing draining hole). It must be 1'' (25 mm) minimum at top end and 2'' (50 mm) minimum at bottom end for the interior joint.*

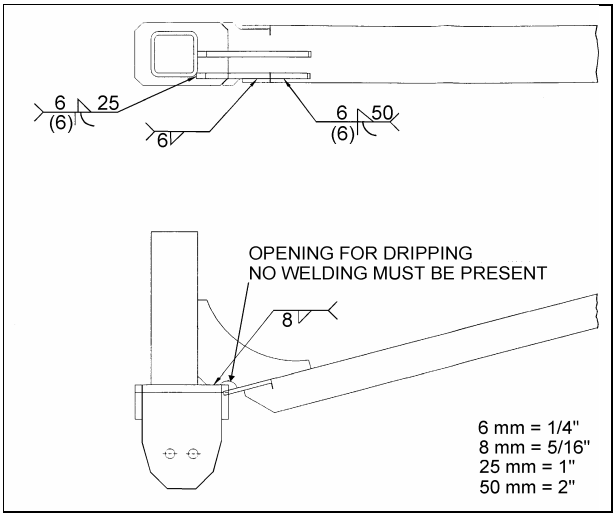

FIGURE 4

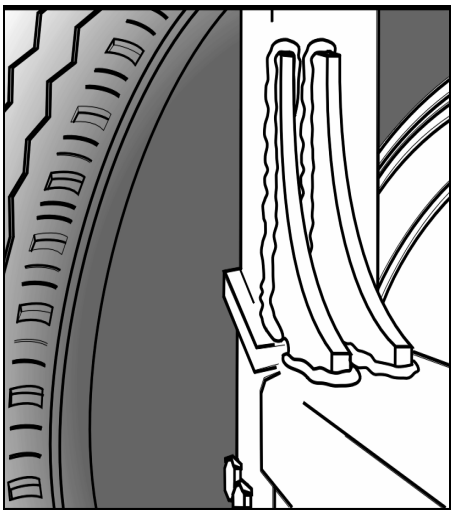

FIGURE 5

5. Repeat preceding steps 3 and 4 for the installation of second new reinforcement #171738 (figure 6).

6. Allow welding to cool, remove slag then paint the exposed areas with a rust preventive product.

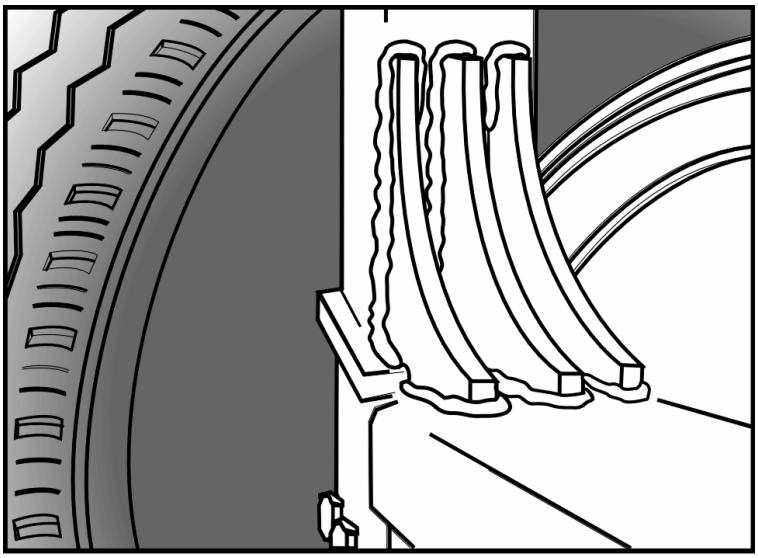

FIGURE 6

VERIFICATION OF BOLTED ASSEMBLY

ASSEMBLY #1

1. Identify just below the reinforcements previously welded, the two bolts (with nuts) fastening the plate-pivot assembly of transversal radius rod to its support (refer to figure 7).

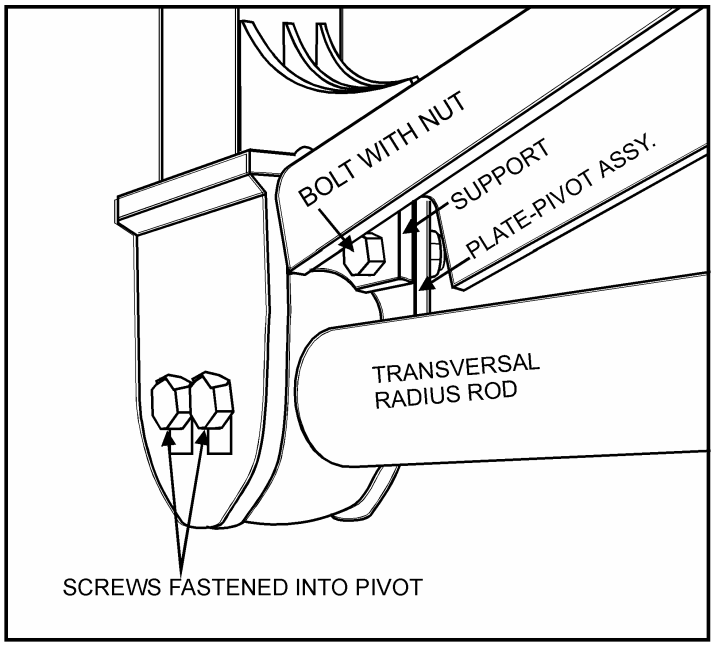

FIGURE 7

2. Using a torque wrench, check if tightening torque for each of the two bolts (with nuts) is superior to 120 lbf?ft and furthermore check if a displacement of transversal radius rod plate-pivot assembly in relation to its support occurred which would indicate that an undesirable substance (grease, rust preventive product etc.) have been left on one of these parts during assembly.

- In the case where the tightening torque is inferior to 120 lbf?ft **and** no displacement occurred, then go to step 3.

- In the case where a displacement occurred no matter the tightening torque, go to step 3 but in addition, replace the transversal radius rod plate-pivot assembly with a new one (#131420). Keep plate-pivot assembly for reimbursement.

- In the case where the tightening torque is superior to 120 lbf?ft **and** no displacement occurred, then remove and discard the two screws directly fastened into radius rod pivot (also discard the locking tab plate), tap both threaded holes (M16 x 2) of radius rod pivot. Coat both new screws (#502544) with white grease, position a new locking tab plate (#110340) then alternately tighten up to 120 lbf?ft. Fold locking tab over screw heads. Go to the verification of assembly #2 page 6.

3. Dismount the radius rod by unscrewing from one side the two bolts (with nuts) and from the other by flattening the tabs of locking plate and by unscrewing the two screws directly fastened into radius rod pivot (if needed, refer to maintenance manual). Discard screws, bolts, nuts and locking tab plate. Thoroughly clean the contact surfaces between the plate-pivot assembly and its support by removing all trace of grease or rust preventive product. Tap both threaded holes (M16 x 2) of radius rod pivot.

4. Use new bolts (#502544), nuts (#500781) and locking tab plate (#110340). Coat new bolts (and screws) with white grease, position radius rod then manually tighten bolts and screws.

Caution: *Before tightening bolts, it is extremely important that the vehicle suspension be set to the proper driving height (see maintenance manual) otherwise, the rubber bushing will become preloaded, thus reducing the life span of these parts.*

5. Alternately tighten bolts and screws up to 120 lbf?ft. Fold locking tab over screw heads.

ASSEMBLY #2

1. Identify on a similar type of assembly but this time located at the other extremity of transversal radius rod (driver's side), the two bolts (with nuts) fastening the plate-pivot assembly of transversal radius rod to its support (refer to figure 8).

2. Using a torque wrench, check if tightening torque for each of the two bolts (with nuts) is superior to 120 lbf?ft and furthermore check if a displacement of transversal radius rod plate-pivot assembly in relation to its support occurred which would indicate that an undesirable substance (grease, rust preventive product etc.) have been left on one of these parts during assembly.

- In the case where the tightening torque is inferior to 120 lbf?ft **and** no displacement occurred, then go to step 3.

- In the case where a displacement occurred no matter the tightening torque, go to step 3 but in addition, replace the transversal radius rod plate-pivot assembly with a new one (#131420). Keep plate-pivot assembly for reimbursement.

- In the case where the tightening torque is superior to 120 lbf?ft **and** no displacement occurred, then remove and discard the two screws directly fastened into radius rod pivot (also discard the locking tab plate), tap both threaded holes (M16 x 2) of radius rod pivot. Coat both new screws (#502544) with

white grease, position a new locking tab plate (#110340) then alternately tighten up to 120 lbf?ft. Fold locking tab over screw heads. Go to the verification of assembly #3 page 8.

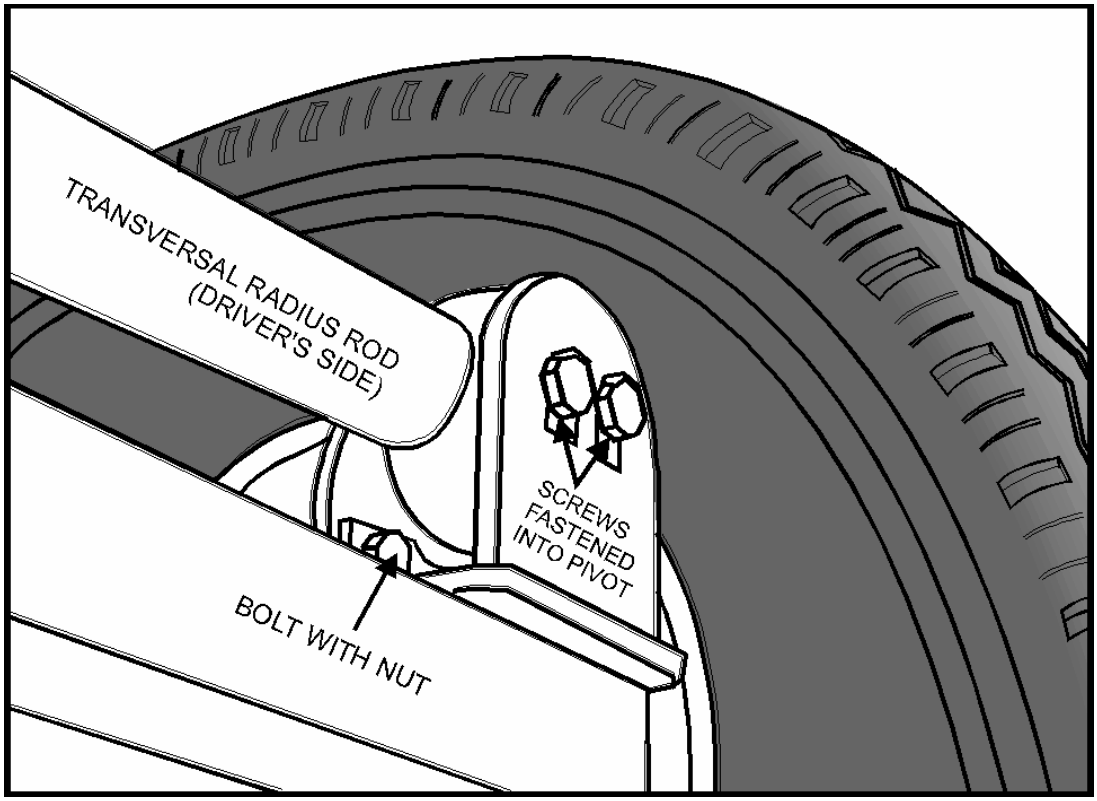

FIGURE 8 - VIEW FROM FRONT

3. Dismount the radius rod by unscrewing from one side the two bolts (with nuts) and from the other by flattening the tabs of locking plate and by unscrewing the two screws directly fastened into radius rod pivot (if needed, refer to maintenance manual). Discard screws, bolts, nuts and locking tab plate. Thoroughly clean the contact surfaces between the plate-pivot assembly and its support by removing all trace of grease or rust preventive product. Tap both threaded holes (M16 x 2) of radius rod pivot.

4. Use new bolts (#502544), nuts (#500781) and locking tab plate (#110340). Coat new bolts (and screws) with white grease, position radius rod then manually tighten bolts and screws.

Caution: *Before tightening bolts, it is extremely important that the vehicle suspension be set to the proper driving height (see maintenance manual) otherwise, the rubber bushing will become preloaded, thus reducing the life span of these parts.*

5. Alternately tighten bolts and screws up to 120 lbf?ft. Fold locking tab over screw heads.

ASSEMBLY #3

1. Identify on R.H. assembly of tag axle transversal radius rod, the two bolts (with nuts) fastening the plate-pivot assembly of transversal radius rod to its support (refer to figures 9 and 10).

2. Using a torque wrench, check if tightening torque for each of the two bolts (with nuts) is superior to 120 lbf?ft and furthermore check if a displacement of transversal radius rod plate-pivot assembly in

relation to its support occurred which would indicate that an undesirable substance (grease, rust preventive product etc.) have been left on one of these parts during assembly.

- In the case where the tightening torque is inferior to 120 lbf?ft **and** no displacement occurred, then go to step 3.
- In the case where a displacement occurred no matter the tightening torque, go to step 3 but in addition, replace the transversal radius rod plate-pivot assembly with a new one (#131420). Keep plate-pivot assembly for reimbursement.
- In the case where the tightening torque is superior to 120 lbf?ft **and** no displacement occurred, then remove and discard the two screws directly fastened into radius rod pivot (also discard the locking tab plate), tap both threaded holes (M16 x 2) of radius rod pivot. Coat both new screws (#502544) with white grease, position a new locking tab plate (#110340) then alternately tighten up to 120 lbf?ft. Fold locking tab over screw heads, then go to the step concerning the verification of suspension components page 9.

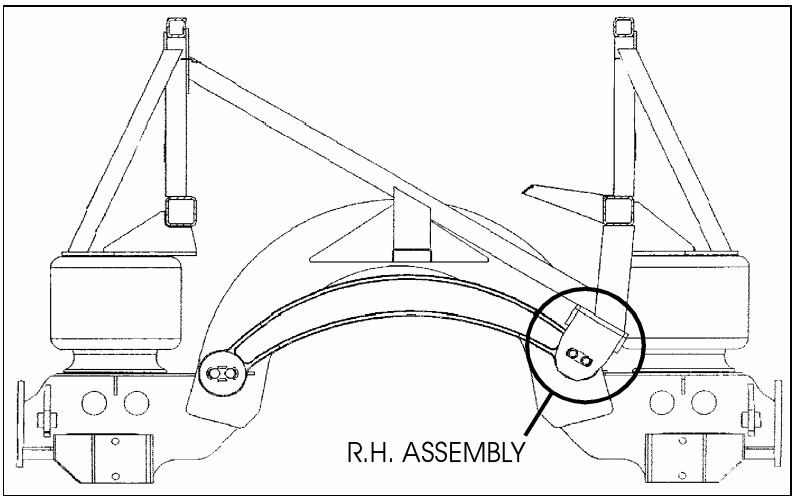

FIGURE 9 TAG AXLE - VIEW FROM REAR

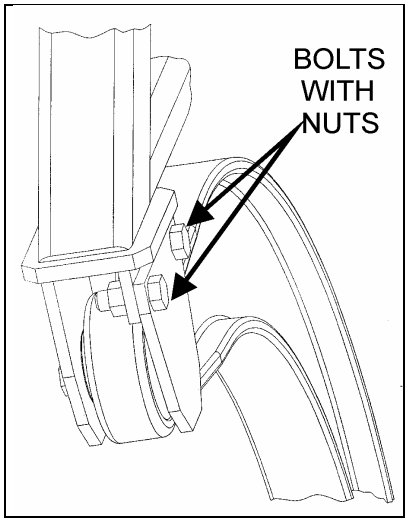

FIGURE 10 - VIEW FROM FRONT

3. Dismount the radius rod by unscrewing from one side the two bolts (with nuts) and from the other by flattening the tabs of locking plate and by unscrewing the two screws directly fastened into radius rod pivot (if needed, refer to maintenance manual). Discard screws, bolts, nuts and locking tab plate. Thoroughly clean the contact surfaces between the plate-pivot assembly and its support by removing all trace of grease or rust preventive product. Tap both threaded holes (M16 x 2) of radius rod pivot.

4. Use new bolts (#502544), nuts (#500781) and locking tab plate (#110340). Coat new bolts (and screws) with white grease, position radius rod then manually tighten bolts and screws.

Caution: *Before tightening bolts, it is extremely important that the vehicle suspension be set to the proper driving height (see maintenance manual) otherwise, the rubber bushing will become preloaded, thus reducing the life span of these parts.*

5. Alternately tighten bolts and screws up to 120 lbf?ft. Fold locking tab over screw heads.

VERIFICATION OF SUSPENSION COMPONENTS

Visually inspect on entire vehicle, the possibility of loose bolts on radius rods, cracks at reinforcements or structural attachments level, as it is periodically recommended to do during regular maintenance.

- Reconnect components mentioned at the beginning of this bulletin.

WARRANTY

This modification/inspection is covered by the manufacturer's normal warranty. We will reimburse you the parts and four hours (4,0) of labor upon receipt a completed A.F.A. form on which you must specify as per "Safety Recall 97-25." **You also have to fill the ?Safety Recall Notification? card provided with this bulletin and return it with your A.F.A. form to be reimbursed.**

Parts disposition:

- If plate-pivot assemblies (#131420) have been replaced, return them to Prévost Car with the A.F.A. form for a complete reimbursement.

PREVOST

Safety Recall Certification Sheet (Ref: Sr 97-25)

CERTIFIÉ-CERTIFIED ISO 9001 PREVOST

SERIAL NUMBER:_____

PERFORMED BY		OWNER/OPERATOR	
We hereby certify that Safety Recall Instructions with regards to Safety Recall #97-25 have been performed.			
Name:		**Name:**	
Add:		**Add:**	
Phone:		**Phone:**	
Fax:		**Fax:**	
Signature :		Signature :	
Date:		Date:	

If the information mentionned above is incorrect or you are not the owner of this vehicle anymore, please fill up this section and return to sender..

NEW OWNER: _____

BUSINESS: _____

ADDRESS: _____

_____

_____

TELEPHONE: _____ ***FAX:*** _____

Please return this completed document with your A.F.A. form