



ENREGISTRÉ-REGISTERED ISO 9001 & ISO 14001



Wb03-25



DATE : NOVEMBER 2003 SECTION : 16 - Suspension EXPIRATION: NOVEMBER 2005 SUBJECT : VERIFICATION OF WELD BEADS ON 18000 LBS INDEPENDENT FRONT SUSPENSION LOWER A-ARM ATTACHMENT BRACKETS

APPLICATION

Model	VIN		VIN EXCEPTION AND A CONTRACT OF A CONTRACT O	
H3 VIP Motorhome with 18000 lbs independent front suspension	2PCV33492	<u>4</u> 101 <u>4760</u>	2PCV33490 <u>4</u> 101 <u>47</u>	773
	2PCV33494	<u>4</u> 101 <u>4761</u>	2PCV33496 <u>4</u> 101 <u>4</u>	<u>776</u>
	2PCV3349X	<u>4</u> 101 <u>4764</u>	2PCV3349X <u>4</u> 101 <u>4</u>	<u>778</u>
Model Year : 2004	2PCV33499	<u>4</u> 101 <u>4769</u>		
XLII Coach XLII Motorhome XLII Entertainer	2PCY33497	<u>4</u> 102 <u>8165</u>	2PCW33497 <u>4</u> 102 <u>8</u>	173
	2PCW3349X	(<u>4</u> 102 <u>8166</u>	2PCW33490 <u>4</u> 102 <u>8</u>	<u>175</u>
	2PCW33491	<u>4</u> 102 <u>8167</u>	2PCW33494 <u>4</u> 102 <u>8</u>	177
	2PCW33493	4102 <u>8168</u>	2PCW33498 <u>4</u> 102 <u>8</u>	179
with 18000 lbs independent front suspension	2PCW33403	4102 <u>8169</u>	2PCX33490 <u>4</u> 102 <u>8</u> 2	<u>181</u>
Model Year : 2004	2PCW33491	<u>4</u> 102 <u>8170</u>	2PCW33493 <u>4</u> 102 <u>8</u>	<u>185</u>
	2PCX33498	<u>4</u> 102 <u>8171</u>	2PCW33490 <u>4</u> 102 <u>8</u>	1 <u>89</u>

DESCRIPTION

On the above-mentioned vehicles, it is necessary to check the weld beads for undercuts at the lower Aarm attachment brackets. Part 1 describes what and where to check and part 2 describes how to repair the weld defects.

PART 1 - VERIFICATION

PROCEDURE

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

- 1. Raise the vehicle.
- 2. At the front of the vehicle, locate the 4 lower A-arm attachment brackets. (figure1).

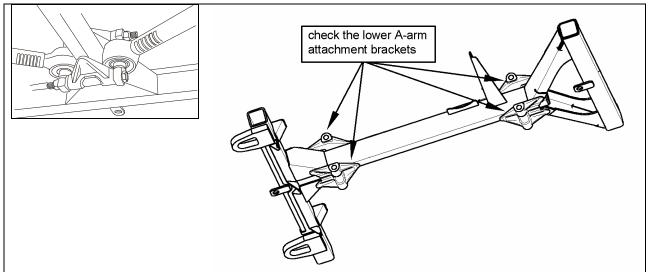


FIGURE 1: LOCATING THE 4 ATTACHMENT BRACKETS

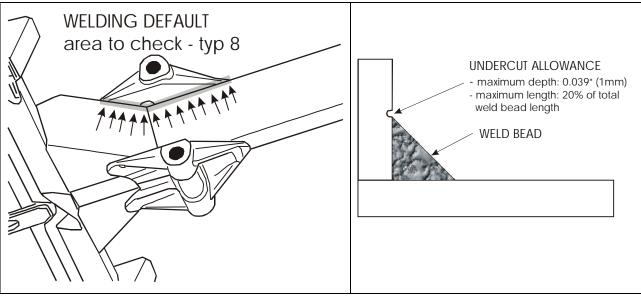


FIGURE 2: CHECK THIS AREA ON EACH ATTACHMENT BRACKETS FIGURE 3: UNDERCUT TOLERANCE

- 3. Check the weld beads each side of the attachment brackets. There are 8 weld beads to check (figure 2).
- 4. Inspect the weld bead for presence of undercuts. It is more likely to happen on the beam rather than on the attachment brackets.
- **Note:** An undercut is a groove at the toe(s) of a weld run due to a lack of metal. Undercuts may be continuous or intermittent.

- 5. If there is presence of undercut, measure the depth and the length. If the measured depth is greater than 0.039" (1mm) regardless of the length, or if the length is more than 20% of the weld bead length, regardless of the depth, the weld bead must be repaired (figure 3).
- 6. If necessary, repair the weld bead as described in part 2.

PART 2- UNDERCUT REPAIR

Order the following parts:

Part No.	Description	Qty
502106	Cotter pin	As required
5001252	Nut, hex stover M20-2.5	As required

PROCEDURE

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

- 1. Raise the vehicle and remove the front wheels.
- 2. Adequately support the front axle.
- 3. Remove the lower suspension A-arm. Note the position of the shims in order to reinstall the A-arm in the same conditions without affecting the front wheels alignment.

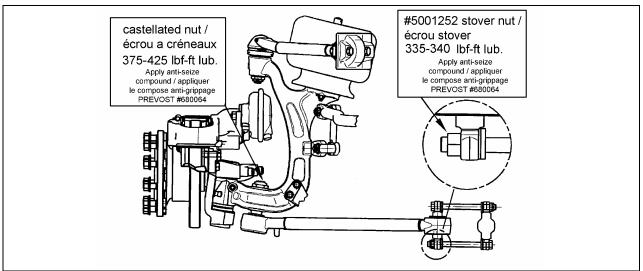


FIGURE 4: TIGHTENING TORQUE SPECIFICATIONS

- 4. Prepare the surface for welding. Remove the black anti-corrosion protector around the undercut.
- 5. Grind the undercut and repair by addition of filler metal. See the recommendations and specifications for welding.

6. Reinstall the A-arm as per torque specifications of figure 4. Tighten the castellated nut as specified then turn just enough to be able to insert the cotter pin. Use a new cotter pin #2502106. Use new stover nuts #5001252 and torque as specified. Apply anti-seize compound #680064 on threads.

WARRANTY

Part 1 verification is covered by Prévost Car's normal warranty. We will reimburse you 3/4 hour (0.75) of labor upon receipt of a completed A.F.A. form on which you must specify as per "Warranty Bulletin 03-25 **Part 1**". We will reimburse you 5 hours (5.0) of labor if a repair has been necessary upon receipt of a completed A.F.A. form on which you must specify as per "Warranty Bulletin 03-25 **Part 1 & 2**".

Parts / Waste disposal:

Discard waste according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)



PRECAUTIONS TO BE OBSERVED BEFORE WELDING AND WELDING SPECIFICATIONS

PRECAUTIONS TO BE OBSERVED BEFORE WELDING

Caution: Cut off battery power in main power compartment using battery safety switch.

1. Disconnect "Ground" cables from battery terminals.

Note: Disconnect "Ground" cables only.

- Disconnect all electronic control modules (radio & control head, HVAC, TTLT cluster Volvo). You must also disconnect alternator module located in front service compartment (main power compartment on H3).
- 3. Disconnect three wiring harness connectors from ECM (Electronic Control Module). The ECM is mounted on the starter side of the engine.
- 4. For vehicles equipped with an Allison (or ZF-Astronic) automatic transmission, disconnect three wiring harness connectors from ECU (Electronic Control Unit). The ECU is located in front service compartment (main power compartment on H3).
- 5. For vehicles equipped with WCL system, disconnect electronic controller connector.
- 6. For vehicles equipped with ABS (Anti-Lock Brake System), disconnect wiring harness connectors from ABS Electronic Control Unit. The ABS Electronic Control Unit is located in front service compartment.
- 7. Cover electronic control components and wiring to protect from hot sparks, etc.
- 8. Do not connect ground clamps to electronic control components.
- 9. Do the appropriate welding on vehicle.

Caution: Position welding machine ground clamp as close as possible to the work.

- 10. When welding is complete, reconnect ECM, automatic transmission and ABS electronic control units, etc.
- 11. Terminate by reconnecting "Ground" cables to battery terminals.

STEEL – STEEL WELDING

Caution: Before welding, disconnect electronic modules and battery terminals.

Warning: Welding surfaces must be free of scale, slag, rust, paint, grease, humidity or other foreign material that would render welding impossible.

Warning: Only a qualified and experienced person must do welding.

- FCAW (Flux Cored Arc Welding) process ;
- Electrode wire conforms to A5.20 AWS (American Welding Society) specifications ;
- E4801T-9-CH, type electrode wire with 0,045" diameter (1,14 mm);

Material Thickness	Voltage	Current	Wire Feed Rate	Shielding Gas
1/8" to ½"	26 ± 2 volts	260 Amps	450 ipm. approx.	75% argon – 25% CO2 or 100% CO2

If necessary and with great care to prevent perforating the material, it is possible to use a conventional electric arc welding machine according to the following specifications:

- SMAW (Shielded Metal-Arc Welding) process;
- Welding rod conforms to A5.1 of AWS (American Welding Society) specifications; E 7018 type welding rod with 1/8" diameter (3,2 mm).
- Current: 100 amperes to 150 amperes; optimum at 120 amps.

It is important to grind weld bead starts and stops and also to grind arc strikes from surfaces.