72185 COUNTY ROAD 3 NAPPANEE IN 46550

NEWMAR CORPORATION FAX. 800.858.4924 219.773.2007 WARRANTY DEPARTMENT

TECHNICAL SERVICE BULLETIN							
	Date Issued 02/23/00 Mod	del Year(s) Affected 1998-2000	Model(s) Affected Spartan DP's		TSB # 193		
		Brand		Туре			
ALL ()	American Star	Kountry Star	Dutch Star	All (TT	F W(
ALL (Mountain Aire	Kountry Aire	London Aire	CAC	D P	D B	
Air Conditioning & Heating Appliances & Accessories Cabinets & Furniture Chassis Components Construction Components Description of Problem Tuthill Transport Technologies TSB #991111-01 - Front ride air spring. Units affected are Spartan chass with IFS front suspension.							
		Recommend	led Solution				
See attach	ed Tuthill TSB.						



9098 West 800 South, P.O. Box 600 Brookston, Indiana USA 47923 www.tuthill.com

Dear Granning Air Suspension Owner:

Tuthill Transport Technologies (formerly Granning Air Suspensions) has determined that a defect, which relates to proper operation of motor home vehicles built between April 1, 1998 and March 31, 1999 in the Front Independent Suspension of your motor home. We have identified an air spring bumper defect in your suspension that could exist in your suspension. The problem is a defective jounce bumper inside of the air spring could collapse under the load of the coach when kneeled over time. If this condition exists, then you could see an unbalanced condition in your coach when kneeled.

To correct this failure of the jounce bumper in the air spring Transport Technologies will review your motor home for this condition. The repair location will be determined by your location across the country. Tuthill Transport Technologies will assist you in finding the appropriate repair location.

Instructions for the inspection will be sent to the repair site once a site has been found in your area at no charge to you the customer. Contact Tuthill Transport Technologies on our "Customer Service" number 800-255-7824 (ext. # 390). The labor time to review your motor home for this issue is from 2 to 4 hours depending on the repair required. Tuthill Transport Technologies will pay for this service at the repair location. Proper information will be required at each location for this review. Please be ready to provide the repair site the following information: Motor home manufacturer, vehicle identification number (VIN), and mileage. This information will assist us in completing this review on a timely basis.

The manufacturer of your vehicle has provided us with your name and address for us to contact you for this repair.

If you have sold or traded your vehicle, please furnish us complete name and address of the person (dealership) you sold or traded your vehicle to.

Contact Tuthill Transport Technologies on the Customer Service number 800-255-7824 (Ext. # 390) or send the information to Tuthill Transport Technologies, PO Box 600, Brookston, IN 47923, ATTN: Customer Service

We are sorry for this inconvenience; however, we have taken this action in the interest of your continued satisfaction of our product.

Tuthill Transport Technologies

file: ownerletter-airspring

Date: 1-27-00

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Technical Service Bulletin

SUBJECTS: 1) Front Ride Air Spring.

APPLIES TO: All Spartan chassis equipped with suspension models

IFS1320-HP, IFS1320-SP, IFS1370-HP, and IFS1370-SP manufactured between April 1, 1998 and October 1, 1999.

CONDITIONS: 1) The bumper in the air spring may collapse resulting in the

coach kneeling to far. When the vehicle is kneeled, the

tires may contact the top of the wheel well.

CAUSE: 1) The bumper in the air spring collapses allowing the vehicle to

kneel farther than specified.

CORRECTION: Applicable to both driver and passenger sides.

1) Replace air spring #8273 with air spring #700136-01.

This technical bulletin should only be used by trained technicians that have the equipment, tools, safety instructions, and training to service the suspension properly and safely. This bulletin is to inform technicians of a condition that may occur on a suspension and does not apply to all suspensions.

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SERVICE PROCEDURE:

Please read this procedure carefully and completely before servicing. The procedure is written for the left side of the vehicle and must be repeated for the right side. The allowable labor charges for 1) replacing the air springs is not to exceed 2 hours @ \$50.00/hr per suspension. If you have questions or require additional labor or material expense, contact Tuthill Transport Technologies Customer Service at (800) 255-7824 ext. 390.

PART LIST: Service Kit P/N K700286

QTY	Part Number	Description
2	700136-01	Air Spring Assy.
6	700137-01	HHB M12-1.75 x 110
1	D700284	Instructions

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9098 West 800 South, P.O. Box 600 Brookston, Indiana USA 47923 Tel 219 279-2801 Fax 219 279-2390

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Identification

Record vehicle and suspension information on the Claim Form before beginning service work.

The suspension model and serial number are stamped on an aluminum tag (See Figure 1) that is riveted to the driver side steering arm mount on the subframe assembly (See Figure 2).



Figure 1: Suspension Identification

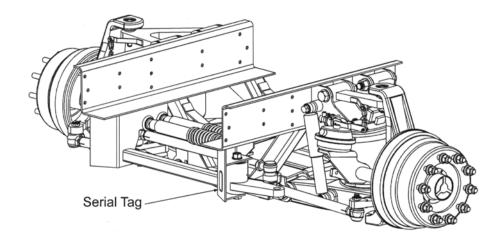


Figure 2: Suspension Identification Location

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Jack Point Locations

The recommended jack point locations are shown in Figure 3. The jack must have sufficient return stroke to lower the chassis below the suspension ride height to actuate the HCV to inflate the air springs. Placing a jack under the lower control arm or the steering knuckle can result in an unstable condition.

On vehicles equipped with hydraulic jacks, these may be used to lift to the chassis to raise the tire off the ground.

Safety stands should be placed under the chassis frame rail and the chassis should be lowered onto the safety stands prior to servicing the wheel bearings.

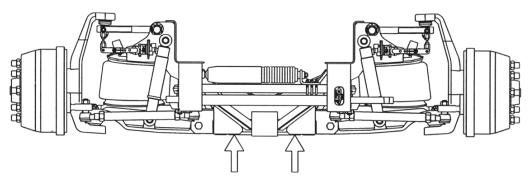


Figure 3: Jack Point Locations

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Replacing the Air Spring

Replacing air spring #8273 with air spring #700136-01.

Preparation

- 1. Set the parking brake and block the drive wheels to prevent vehicle movement.
- 2. Raise the vehicle until the front wheels are off the ground. Support raised vehicle with safety stands. Do not place jacks or safety stands under the lower control arms to support the vehicle.

WARNING: Never work under a vehicle supported by only a jack. Jacks can slip or fall over and cause serious personal injury. Always use safety stands.

3. Deflate the air springs.

Removal

- 1. Disconnect the airline at the air spring and remove the connection fitting.
- 2. Remove the nuts and washers from the upper air spring mount studs. See Figure 4.
- 3. Remove the bolts that secure the air spring to the lower control arm. See Figure 5.
- 4. Remove the air spring.

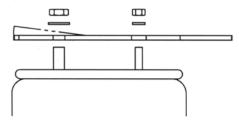


Figure 4 - Air Spring Upper Mount

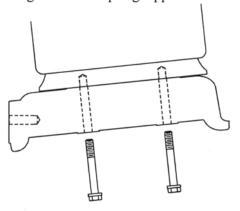


Figure 5 - Air Spring Lower Mount

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Installation

- 1. Assemble the air spring to the lower control arm using three 700137-01 (HHB M12-1.75 x 110mm). Tighten the bolts to **30-40 lb.•ft**.
- 2. Assemble the nuts and washers that connect the air spring to the upper air spring mount on the subframe. Tighten the nuts to 30-40 lb.•ft.
- 3. Install the connection fitting into the air spring. Use Permatex or equivalent thread sealant.
- 4. Connect the airline to the air spring.
- 5. Lower the vehicle frame and inflate the air springs.
- 6. Check the air fittings for leaks.



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Claim Form

Vehicle Information					
Coach Manufacturer (Chec	ck one):	Fleetw	rood 🗆	Gulfstre	am Newmar
		Other			
Chassis VIN (last five	digits only): _				
Suspension Model (Ch	eck one):				
☐ IFS1320-HP ☐ Suspension S/N (six di					IFS1370-SP
Mileage:					
Replacement Informa	ition				
Date: Co	ontact Name:				Phone:
Location:			_		
Address:			_		
The allowable labor charge \$50.00/hr per suspension. I limit. Tuthill Transport Teo oil.	Prior written ap	pproval	is require	d if labor	charges will exceed this
Labor Hours:		(At	ach copy	of invoic	e if available)
** Reimbursement for la and returned to Tuthi		rial will	not occur	r unless i	this form is completed
1	Attn: Custom RE: Air Sprin (219) 279-2390	g Repl			
9	Futhill Transp 9098 W. 800 S Brookston, IN Attn: Quality	outh 47923		es	
Call (800) 255-7824 ext. 39	90 and ask for	Custon	ner Service	e for add	itional assistance.

(200) 200 value and and the customer solving and additional assistance.

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Item ECN# Date Was Now App'd G2865 11/11/99 Initial Release TAG A n/a В G2928 1/19/00 REMOVED 8719 HCV LINKAGE TAG APPLIES TO DATE: "APRIL 1, 1998 C G2933 1/24/00 APPLIES TO DATE: "APRIL 1, 1998 TAG TO OCTOBER 31, 1999 TO OCTOBER 1, 1999 - REQUIRED PER REV B.

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