

NEWMAR CORPORATION WARRANTY DEPARTMENT

TECHNICAL SERVICE BULLETIN							
DATE ISSUED		MODEL YEAR(S) AFFECTED		MODEL(S) AFFECTED		TSB #	
3/24/08		All		All DP / DB / ME on Spartan Chassis		333	
BRAND						TYPE	
All	<input type="checkbox"/>	American Star	<input type="checkbox"/>	Mountain Aire	<input checked="" type="checkbox"/>	All	<input type="checkbox"/> T T <input type="checkbox"/>
Cypress	<input type="checkbox"/>	Dutch Star	<input checked="" type="checkbox"/>	Kountry Aire	<input type="checkbox"/>	F W	<input type="checkbox"/> C A <input type="checkbox"/>
Northern Star	<input checked="" type="checkbox"/>	Kountry Star	<input checked="" type="checkbox"/>	Essex	<input checked="" type="checkbox"/>	D P	<input checked="" type="checkbox"/> D B <input checked="" type="checkbox"/>
Scottsdale	<input type="checkbox"/>	King Aire	<input checked="" type="checkbox"/>	London Aire	<input checked="" type="checkbox"/>		
All Star ME	<input checked="" type="checkbox"/>	Ventana	<input checked="" type="checkbox"/>				
<div> <input type="checkbox"/> Air Conditioning & Heating <input type="checkbox"/> Electrical Components </div> <div> <input type="checkbox"/> Appliances & Accessories <input type="checkbox"/> Exterior Components </div> <div> <input type="checkbox"/> Cabinets & Furniture <input type="checkbox"/> Interior Components </div> <div> <input checked="" type="checkbox"/> Chassis Components <input type="checkbox"/> Plumbing & Bath Components </div> <div> <input type="checkbox"/> Construction Components <input type="checkbox"/> Windows, Awnings, Vents, & Doors </div>							
DESCRIPTION OF PROBLEM							
<p>Spartan Motors has released Tech Tip MH010908 to help technicians in the field understand and diagnose “rough ride” concerns on motorhomes equipped with Spartan Chassis.</p>							
RECOMMENDED SOLUTION							
<p>Refer to attached chassis manufacturers information for diagnosis assistance when a customer complains of poor or rough ride quality on a motorhome equipped with a Spartan chassis. Contact Spartan Motors if there are any questions.</p>							

If you have any questions regarding this T.S.B., please contact a Warranty Service Representative at Newmar Corporation.



Tech Tips

Customer Care

Tech Tip No: MH010908A

Date: January 8, 2008

REV: Release

Subject: Rough Ride Check List

Applies To: Motor Home

For Internal use only: No

Please Read the Entire Tech Tip Before Proceeding With Any Work.

Verify The Complaint:

Rough ride complaints are extremely difficult to diagnose as there very subjective and multiple contributing parts and components requiring inspection and validation to determine whether they are contributing factors to the complaint. It is extremely valuable to have the person who regularly drives the unit document the following data and to have the data available to help identify where to start.

- Determine the frequency and severity of the issue relative to a distinct pattern being felt or heard at any specific road speed.
- Determine if the noise is constant or intermittent, when only driving straight or while turning, going forward or reverse, etc.
- Determine the road condition when the issue presents itself. (Is the problem confined to certain roads ?) Identify if the roadway is an interstate, state or local highway, is it four lanes, two lanes, paved or dirt, etc.
- Determine the speed when the issue presents itself. (Is it during acceleration or deceleration, when cruise control is on / off ?)
- Determine what transmission gear the unit is in when the issue presents itself. Is the issue constant through all gears, or only certain gears ?
- Determine the weather conditions when the issue presents itself (Sunny, rainy, snowy, windy, temperature).
- Determine whether sealing strips or expansion joints in the pavement are evident.
- How many miles are on the unit ? Has the issue just started or has it always been there ?
- Has the unit been involved in any traffic accidents?

Tech Tip Bulletins are intended for use by professional technicians only. They are written to guide professional technicians in performing service to vehicles of product specific nature in conjunction with industry standards. Professional technicians are appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.



Tech Tips

Customer Care

Many times the road conditions can affect the ride performance. Potholes and patched road surfaces can contribute to, and may in fact be the cause of rough ride complaints. In other cases the unit may be test driven by someone other than the owner / regular driver and no rough ride can be felt. In these cases there may be an expectation issue (Chevy Cavalier ride versus Cadillac Deville ride).

However, if you identify a rough ride condition exists and dependent upon the data provided from the questions above, you may be able to zoom in on a singular item in the following list of chassis components and parts. Inspect each of the items below in an effort to verify / validate the complaint. Perform these items in chronological order, documenting each test, and the inspection results for each item. In the event that any of the items listed below are found to be out of specification, please validate whether any of the adjustments made in steps 1 through 6 have corrected the issue.

NOTE: The majority of the issues documented within this Tech Tip are the responsibility of the customer to maintain, please verify with Spartan prior to performing any work to assess the warrantable status of the repair.

Inspect, validate and document the following before any corrective action is attempted:

- 1) Test drive the unit. If possible, take the regular driver along with you to verify / reproduce the Complaint. Does the steering wheel is straight and does the steering system seem to seek center okay ? This is the time to observe and document when and where the noise occurs referring to the above determinations.
- 2) Weigh the unit at a certified scale, and validate coach weights at all four corners.
- 3) Check and validate that the tire pressures are correct for the actual weights.
- 4) Inspect each tire for any irregularities, deformities, damage or excessive or unusual wear. Examine both sidewalls of each and every tire looking for bulges or cuts. Unusual wear to the tread surface is seen as cupping, wear to the outer edge(s) or wear to the center only.
- 5) Inspect and validate wheel condition. Check for bent or cracked wheels, improper torque or missing lug nuts.
- 6) Inspect and validate the ride heights, both front and rear. With system fully aired up, measure ride heights at each corner of the vehicle and document. Adjust accordingly.

Contact Spartan Chassis customer service department for assistance if rough ride problems persist. Also, reference Tech Tip MH 111904A vibration checklist.

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