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**QVM Bulletin No. Q-59**

**Date: September 18, 1998**

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**Retain this Bulletin in Your Technical Bulletins Binder for Future Reference**

**F53 MOTOR HOME CHASSIS CLEAR VISION AND ALIGNMENT POLICY CHANGE**

**To:** All manufacturers of Class A Motor Home Built on the Ford F53 Motor Home Chassis

**Models Affected:** 1999 F53 Class A Motor Home Chassis

**ACTION REQUESTED**

Provide a copy of this bulletin to management, manufacturing, warranty administration, engineering, sales and service activities affected by this policy change.

**BACKGROUND**

Studies have indicated that the addition of weight to the incomplete vehicle affects toe, caster and steering wheel clear vision (the steering wheel is in the straight ahead position when the front wheels are straight ahead.)

The current **Motor Home and Transit Bus QVM Guide Book** makes the following statements regarding wheel alignment and clear vision adjustment:

Section D0411

"The final Stage Manufacturer should adopt a system to help verify that the completed vehicle is delivered to the customer with the front wheel toe and steering wheel clear vision alignments within specifications as shown in the appropriate section of the Ford Light Truck Manual".

Section D0605

"Verify that headlight aim, front wheel toe and steering wheel clear vision alignment on the completed unit agrees with the specifications in the appropriate year Ford Light Truck Shop Manual". (Specifications are found in the general suspension section of the Ford shop manual.)

**POLICY REVISION**

Previously, Ford has allowed its dealer network to correct customer concerns related to clear vision per TSB 96-24-14. However, Ford dealers will no longer be able to make clear vision adjustments under warranty effective with the 1999 F53 chassis.

**With this policy revision, the final stage manufacturer is now responsible for adjusting toe, caster and clear vision on the completed vehicle built on the F53 chassis.**

Listed below are the 1999 F53 specifications for front wheel alignment and the procedure for adjusting clear vision.

#### Front Wheel Alignment

Toe-In: 1/16"  $\pm$  1/32"

Caster: See Attachment I for a graph showing caster at different ride heights.

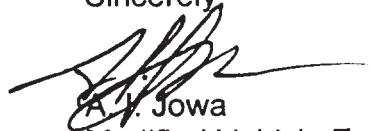
#### Clear Vision Adjustment Procedure

1. Ensure that the front wheels are in the straight ahead position.
2. Remove the bolt (T50 Torx).
3. Remove the steering wheel with a two jaw puller (OTC #205-116 or Rotunda #T77F-4220-B1).
4. Reposition the steering wheel to achieve a horizontal or level position. There are 40 splines in the steering wheel which allows adjustment within  $\pm 4.5$  degrees.
5. Install a new retaining bolt P/N N807493-S100 with a torque of  $40 \pm 6.0$  N-m [ $29.4 \pm 4.4$  lb-ft]. If the old retaining bolt is reused, apply a drop of thread locker P/N E0AZ-1954-AA to the bolt threads prior to installation.

**Note:** For the 1999 F53, clear vision should only be adjusted at the steering wheel. The u-joint phasing on the intermediate shaft has been optimized to reduce torque variation and provide a positive center feel. It is important to maintain the position of the intermediate shaft u-joints relative to the steering gear input shaft. Adjusting clear vision at the steering gear will degrade steering feel.

Address any questions to the Body Builder's Advisory Service on 1-877-840-4338.

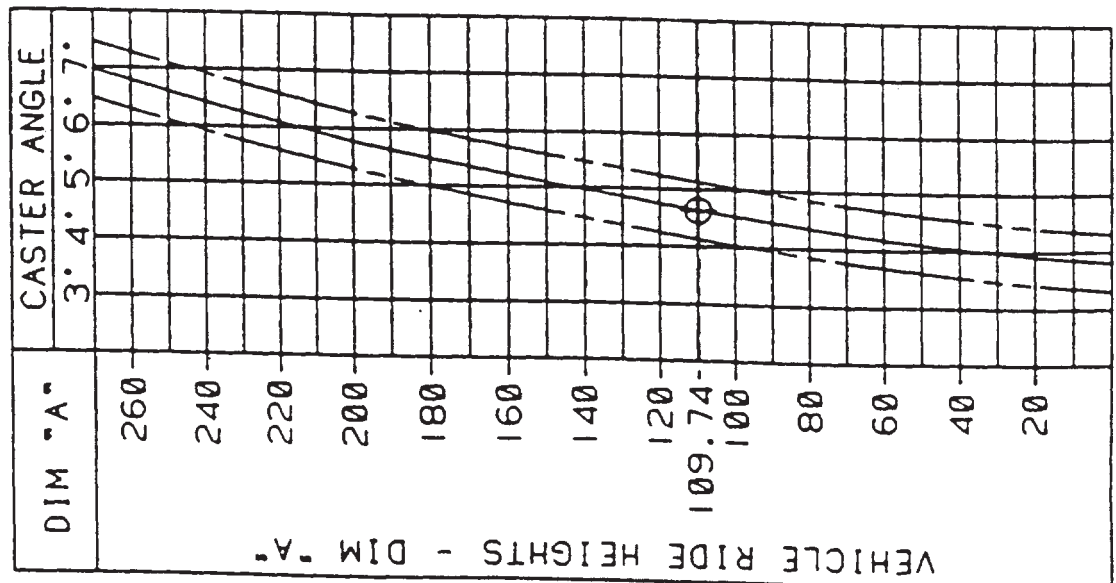
Sincerely



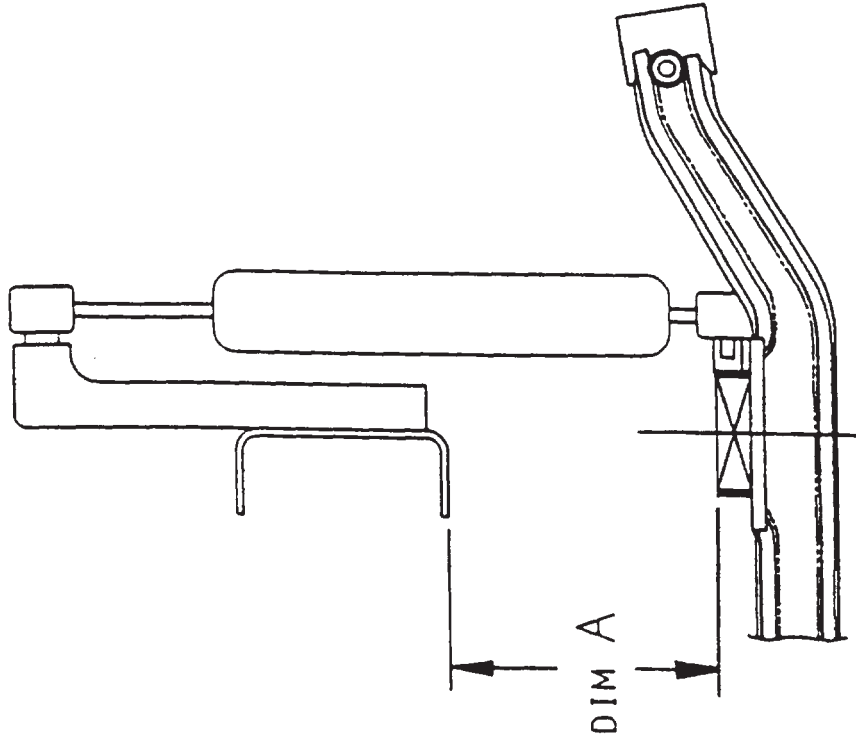
A. J. Jowa

Modified Vehicle Engineering Quality Programs  
and Body Builders' Advisory Service

# Attachment I - 1999 F53 Caster Angle vs. Ride Height



DESIGN RIDE  
HEIGHT (REF)



F SUPER DUTY STRIPPED CHASSIS 4X2  
BOTTOM OF FRAME TO  
TOP OF FRONT SPRING SHOCK  
MOUNTING PLATE