

DAIMLERCHRYSLER

December 15, 2004

Mr. Ronald L. Medford
Senior Associate Administrator, Vehicle Safety
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
NVS-010
Washington, D.C. 20580

DaimlerChrysler Corporation

Stephan J. Speth

Director
Vehicle Compliance & Safety Affairs

Dear Mr. Medford:

As you were verbally informed last Friday, DaimlerChrysler Corporation (DCC) is conducting a recall on 2000 – 2003 model year Dodge Durango and Dakota four wheel drive vehicles to resolve concerns related to front suspension upper ball joint wear. DCC feels that this action is well beyond what is necessary to address the issues identified in the agency's investigation, and while it is being called a "Safety Recall" in the customer communication, it is not being conducted in accordance with the Safety Act. DCC is not declaring that this is a "safety related defect", because there has been none identified. The actions taken by ODI's staff relative to this matter in combination with the substantial prejudiced and inaccurate publicity associated with this investigation have left DCC with no choice but to proceed with this campaign to address its customers' concerns. Unfortunately, this entire episode will now result in significant customer inconvenience due to unnecessary repairs to many vehicles that do not need them.

DCC will voluntarily replace the upper ball joints on subject vehicles with a revised assemblies having improved sealing integrity. Owners who have previously paid for this repair will be reimbursed with adequate proof. This action does not constitute a defect determination.

Sincerely,



Stephan J. Speth

Enclosures: Information Report for DaimlerChrysler Corporation Recall D47
Dealer and Owner Notification Letters – Recall D47

cc: K. N. Weinstein, NHTSA
K.C. DeMeter, NHTSA
Division of Occupational Safety & Health
California Department of Industrial Relations

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Submission date: December 15, 2004**Identifying classification of vehicles potentially affected:**

| Make | Model | Model Year | Inclusive Dates of Manufacture | Vehicle Volume | Other |
|-------|-----------------|-------------|--------------------------------|----------------|-----------------------------|
| Dodge | Durango, Dakota | 2000 – 2003 | 1/7/1999 – 12/31/2002 | 592,707 | Four wheel drive (4x4) only |

The involved Vehicle Identification Number (VIN) range is:

| <u>Low</u> | <u>High</u> |
|------------|-------------|
| YF100019 | YF309376 |
| YS500022 | YS801005 |
| 1F500011 | 1F648763 |
| 1S100010 | 1S352164 |
| 2F100012 | 2F221779 |
| 2S500018 | 2S726717 |
| 3F500004 | 3F557642 |
| 3S100007 | 3S241508 |

(VIN last eight characters) – Y = 2000 model year; 1 = 2001 model year; 2 = 2002 model year; 3 = 2003 model year; F = Newark Assembly Plant, Newark, Delaware; S = Dodge City Assembly Plant, Warren, Michigan; and the last six digits = sequential number.

We caution that the above range represents only the lowest and highest VIN sequential numbers included in the recall. This range cannot be used to determine conclusively that a vehicle is involved in the recall because many vehicles with a VIN within the range are not affected by the recall.

Estimated percentage containing issue: Unknown**Description of Condition:**

If moisture leaks into the front suspension upper ball joint, evacuation of the lubricant and corrosion of the joint may cause the joint to wear progressively over an extended period of time. If multiple warning signs are ignored and not addressed in a reasonable period of time, the joint may eventually separate during a low speed, high suspension articulation maneuver.

Background and chronology:

- On June 6, 2003, a CBS reporter contacted DaimlerChrysler Corporation (DCC) about a

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wheel separation that occurred on her 2000 MY Dodge Durango fourwheel drive vehicle. The reporter provided the subject components from her vehicle to NHTSA.

- On July 17, 2003, NHTSA opened PE03-032 alleging front suspension upper ball joint separation on 1998-2003 MY Dodge Durango vehicles.
- At the time of DaimlerChrysler Corporation's response to NHTSA on September 5, 2003, DCC was aware of 4 documented upper ball joint separations for the subject vehicles, which represented a rate of 0.45 conditions per 100,000 vehicles.
- It was established that the suspension of the Durango (DN) and Dakota (AN) vehicles uses a compression-type (at curb) upper ball joint design. This design limits the possibility of any potential separation to low speed, high articulation events and is markedly different from the lower control arm tension-type ball joints that were the subject of previous safety recalls on Chrysler Cirrus, Dodge Stratus, Plymouth Breeze, Plymouth Prowler and Jeep Liberty vehicles.
- The ball joint supplier for the 1997-1999 MY AN/DN vehicles was TRW. For the 2000 MY, the supplier was changed to New Castle Machine and Forge (NCM).
- The NCM designed ball joint utilized a two-piece bearing between the housing and ball stud. If moisture leaked between the housing and cap at the crimp seal, such a leak could result in evacuation of the lubricant and ultimately corrosive wear of the ball joint over an extended period of time.
- In January of 2003, the bearing was changed to a one piece design, which improved sealing integrity and nullified the leak potential. Additional processing changes that improved the sealing operation were also implemented.
- The NCM designed ball joint differed from the TRW design in that the housing throat opening at the ball stud was larger. In the event that an operator were to ignore the lengthy warnings associated with a severely worn upper ball joint, the NCM design may be more likely to separate than the TRW design; however, at some level of severe wear, any ball joint will separate, regardless of the size of the throat opening.
- The AN/DN Owner's Manuals provide multiple advisories regarding wear, and state that "the (front suspension) ball joints and seals should be inspected whenever the vehicle is serviced," and that once a month the operator should "check tire pressure and look for unusual wear."
- On October 27, 2003, the CBS Evening News aired the first of four prejudiced stories relative to the subject ball joints. There were dramatic spikes in the quantity of ball joint complaints following each of these stories. Evaluation showed that the majority of these complaints were related to the cost of ball joint service or to the extensive media coverage.
- The investigation was upgraded to EA03-023 on November 20, 2003 with a focus on 2000-2002 MY DN vehicles, although the Dodge Dakota was now included for the same model years as well.
- At the time of DaimlerChrysler Corporation's March of 2004 response to EA 03-023, DCC was aware of 18 additional documented upper ball joint separations for the increased scope of subject vehicles (Durango and Dakota), which in total represented a rate of approximately 1 condition per 100,000 vehicles.
- Extensive AN/DN testing by DCC has shown that the maximum tensile upper ball joint load measured in abusive vehicle testing is less than 1250 pounds, regardless of drive

configuration, and only exists for a very short duration. Additional testing has shown that the tensile load required to separate an upper ball joint is over 4800 pounds for a ball joint with nearly 0.400 inches of end play. This end play was the most extreme observed by DCC, and was over six (6) times the ball joint replacement specification of 0.060".

- Test data also showed that the low speed, high articulation events in conjunction with a rebound condition that result in the highest measured tensile loads only occurred for a very short duration of time. In all other steady state driving events, the tensile load at the ball joint is virtually zero.
- An analysis of complaint data through September 7, 2004 found 42 documented cases of AN/DN upper ball joint separation due to grinding corrosion. The vast majority of these documented cases (41 of 42) were four wheel drive vehicles as well as (41 of 42) NCM equipped vehicles. Most were registered in states classified with corrosive salt environments. The average age of these 42 vehicles was over 41 months and the average mileage over 56,500.
- Investigation showed that when compared to the two wheel drive upper control arm, the four wheel drive upper control arm is 62mm shorter in length from the pivot to the ball joint, and can have up to a 20 pound greater un-sprung mass. This potentially contributes to the higher four wheel drive separation rate, although this has not been proven.
- DCC is not aware of any substantiated injuries or multi-vehicle accidents caused by this condition in the subject vehicles.
- DCC offered NHTSA a substantial solution to resolve this issue on the basis of a field action on the oldest vehicles and an extended warranty for the remainder of the NCM upper ball joint assemblies. NHTSA rejected this offer, even though it has accepted similar settlements for similar issues in the past from other manufacturers.
- Although NHTSA has closed other ball joint investigations with separation rates at or near that of the AN/DN four wheel drive NCM population, on November 23, 2004, DCC received a letter from NHTSA requesting that DCC conduct a safety recall per 49 U.S.C. § 30118 of the NCM upper ball joints on 2000-2003 MY AN/DN 4x4 vehicles.
- On December 10, 2004, DCC responded to NHTSA's letter and declined to conduct a safety recall per 49 U.S.C. § 30118.
- This data was presented to the DCC Vehicle Regulations Committee (VRC) on December 10, 2004. To avoid a protracted dispute with the government and to address the public concerns raised as a result of the substantial publicity associated with this investigation, the committee decided to conduct a recall to replace the upper ball joint on subject vehicles with a revised assembly having improved sealing integrity. This recall will be called a "Safety Recall" in the dealer and consumer notifications, and will be included in the dealer database of safety recalls, but it will not be conducted in accordance with the Safety Act.
- This action does not constitute the determination of a Safety Defect.

Statement of measures to be taken:

DaimlerChrysler Corporation will conduct a voluntary safety recall to replace the front

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suspension upper ball joints on all affected vehicles. DaimlerChrysler implemented dealer notification on December 14, 2004, and will begin owner notification on December 20, 2004.

DaimlerChrysler Corporation has a longstanding policy and practice of reimbursing owners who have incurred the cost of repairing a problem that subsequently becomes the subject of a field action. To ensure consistency, DaimlerChrysler Corporation, as part of the owner letter, will request that customers send original receipts and/or other adequate proof of payment to the company for confirmation of the expense.

DAIMLERCHRYSLER

*Recalls up
for Safety***SAFETY RECALL - UPPER BALL JOINTS**

Dear: (Name)

This is to inform you of a safety issue concerning 2000 through early-2003 model year Dodge Durango 4x4 vehicles and Dodge Dakota 4x4 pick-up trucks. Excessive wear of the upper ball joint may cause the front wheel to separate from the vehicle and result in a loss of control.

The problem is... Water may enter into the front suspension upper ball joints on your vehicle (VIN: xxxxxxxxxxxxxxxx), and cause corrosion and premature wear. A seriously worn ball joint may cause a "clunking" noise to develop in the front suspension. However, vehicle occupants may not always hear this "clunking" noise. Losing control of the vehicle could result in a crash.

What your dealer will do... DaimlerChrysler will repair your vehicle free of charge (parts and labor). To do this, your dealer will replace both front suspension upper ball joints. The work will take about two hours to complete. However, additional time may be necessary depending on how dealer appointments are scheduled and processed.

What you must do to ensure your safety... Simply contact your dealer right away to schedule a service appointment. Ask the dealer to hold the parts for your vehicle or to order them before your appointment. Remember to bring this letter with you to your dealer.

If you need help... If you have questions or concerns which your dealer is unable to resolve, please contact DaimlerChrysler at 1-800-853-1403.

Please help us update our records, by filling out the enclosed prepaid postcard, if any of the conditions listed on the card apply to you or your vehicle. Be sure to print the last eight (8) characters of the VIN (VVVVVVVV) and notification code D47 on the postcard.

If you have already experienced this condition and have paid to have it repaired, you may send your original receipts and/or other adequate proof of payment to the following address for reimbursement: DaimlerChrysler, P.O. Box 610207, Port Huron, MI 48061-0207, Attention: Reimbursement.

If your dealer fails or is unable to remedy this condition without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, DC 20590, or call the toll-free Auto Safety Hotline at 1-888-327-4236.

We're sorry for any inconvenience, but we are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Services Field Operations
DaimlerChrysler Corporation
Notification Code D47

How to lessen problems this recall: Federal regulation requires that you forward this recall notice to the dealer within 10 days.

DAIMLERCHRYSLER

December 2004

Dealer Service Instructions for:

Safety Recall D47 - Upper Ball Joints**Models**

2000 - 2003 (AN) Dodge Dakota 4x4 Pick-Up Truck

2000 - 2003 (DN) Dodge Durango 4x4

NOTE: This notification applies only to the above vehicles built through December 31, 2002 (MDH 1231XX).

IMPORTANT: Some of the involved vehicles may be in dealer used vehicle inventory. Dealers should complete this repair on these vehicles before retail delivery. Dealers should also perform this repair on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

Water may enter into the front suspension upper ball joints on about 600,000 of the above vehicles and cause corrosion and premature wear. Excessive wear of the upper ball joint may cause the front wheel to separate from the vehicle and result in a loss of control. A seriously worn ball joint may cause a "clunking" noise to develop in the front suspension. However, vehicle occupants may not always hear this "clunking" noise. Losing control of the vehicle could result in a crash.

Repair

Both front suspension upper ball joints must be replaced.

Safety Recall D47 – Upper Ball Joints**Page 2****Parts Information****Part Number Description****CEXMD471 Upper Ball Joint Package****Each package contains the following components:**

| <u>Quantity</u> | <u>Description</u> |
|------------------------|---------------------------|
| 2 | Upper Ball Joints |
| 6 | Bolts |
| 6 | Nuts |
| 2 | Cotter Pins |
| 2 | Castle Nuts |

Each dealer to whom vehicles in the notification were invoiced will receive **TWO (2)** upper ball joint packages.

Special Tools

The following special tool applies to this service procedure:

➤ **MB991113 Ball Joint Separator**

Safety Recall D47 -- Upper Ball Joints

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Service Procedure**Replace Upper Ball Joints**

1. Raise the vehicle on an appropriate hoist.
 2. Remove the front wheel and tire assemblies.
 3. Position a hydraulic jack under the left side lower control arm and raise the jack to unload the rebound bumper.
 4. Remove the cotter pin from the upper ball joint castle nut.
 5. Remove the upper ball joint castle nut from the upper ball joint stud.
 6. Using a die grinder equipped with a cut-off wheel, grind an "X" through each of the three upper ball joint rivet heads (Figure 1).
- CAUTION:** Do not grind into the control arm.
7. Using an air chisel, chisel the three rivet heads off of the upper ball joint.
 8. Punch out the rivets using a drift and hammer.
 9. Separate the upper ball joint from the steering knuckle with special tool MB991113.
 10. Remove and discard the old ball joint.
 11. Using 100 grit emery cloth, lightly sand the top surface of the steering knuckle to remove any rust and/or scale from the steering knuckle (Figure 2).

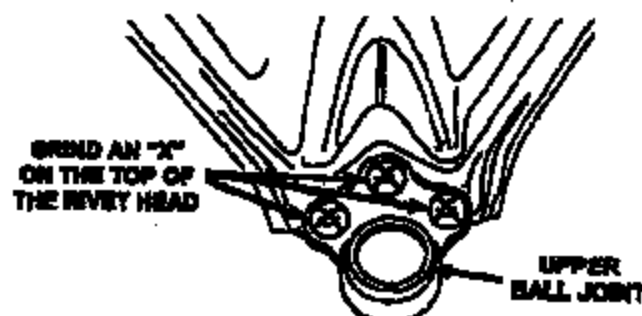


Figure 1

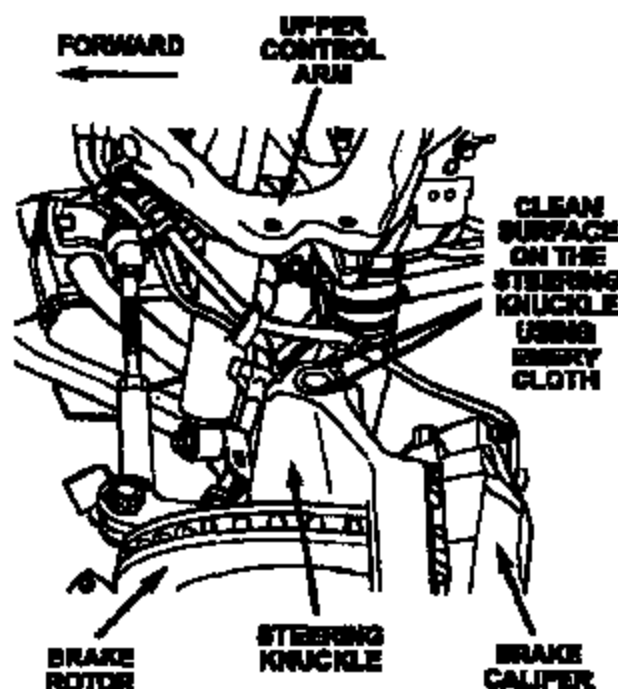


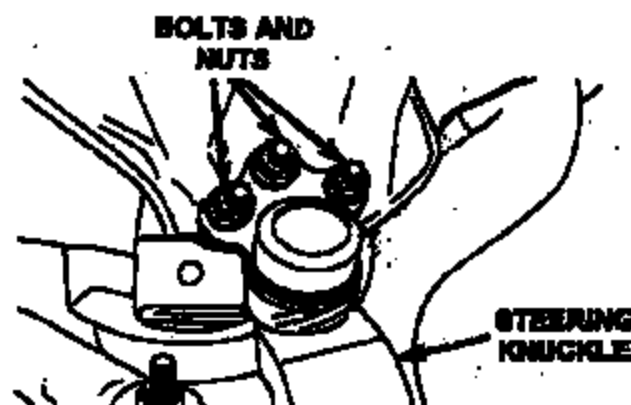
Figure 2 – Left Side Shown

Safety Recall D47 -- Upper Ball Joints

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Service Procedure (Continued)

12. Insert the bolts supplied with the ball joint package from the bottom side of the control arm (Figure 3).
13. Place the new ball joint onto the control arm and install retaining nuts (Figure 3). Tighten the nuts to 50 ft. lbs. (68 N-m).
14. Position the steering knuckle onto the upper ball joint stud.

**Figure 3**

15. Install the castle nut onto the ball joint stud. Tighten the upper ball joint castle nut to 60 ft. lbs. (81 N-m).

NOTE: If the castle nut slots do not line up with the cotter pin hole in the ball joint stud, continue tightening the nut until the next set of castle nut slots line up with the cotter pin hole. Do not loosen the nut.

16. Install the cotter pin through the castle nut and secure it by bending the arms of the pin.
17. Install the wheel and tire assembly. Tighten the lug nuts to 100 ft. lbs (135 N-m).
18. Repeat Steps 3 through 17 on the right side of the vehicle.
19. Lower the vehicle from the hoist.
20. Place the vehicle on an alignment rack.
21. Install the wheel alignment equipment onto the vehicle per alignment equipment manufacturer's instructions and set toe to $+ 0.10^{\circ}$ ($\pm 0.06^{\circ}$).

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Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims submitted will be used by DaimlerChrysler to record recall service completions and provide dealer payments.

Use the following labor operation number and time allowance:

| | <u>Labor Operation Number</u> | <u>Time Allowance</u> |
|--|-----------------------------------|---------------------------|
| Replace right and left upper ball joints (includes toe adjustment) | 02-D4-71-82 | 1.6 hours |

Add the cost of the parts package if necessary plus applicable dealer allowance to your claim.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete claim processing instructions.

Dealer Notification

All dealers will receive a copy of this dealer recall notification letter by mail. Two additional copies will be sent through the DCMMS. To view this recall on DealerCONNECT, select TechCONNECT on the Service tab, click on "Search Bulletins/Recalls", enter the recall code and then click on the "Search" button.

Owner Notification and Service Scheduling

All involved vehicle owners known to DaimlerChrysler are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification postcard to allow owners to update our records if applicable.

Safety Recall D47 -- Upper Ball Joints

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Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed. Involved dealers were also mailed a copy of their vehicle (VIN) list with the dealer recall notification letter.

GRS provides involved dealers with an updated VIN list of their incomplete vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the "Service" tab and then click on "Global Recall System." Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers must perform this repair on all unsold vehicles before retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services Field Operations
DaimlerChrysler Corporation