



U.S. Department of Transportation  
National Highway Traffic Safety Administration

DOT Auto Safety Hotline  
**Vehicle Owner's Questionnaire**  
To Report Vehicle Safety Defects  
1-888-DASH-2-DOT  
(1-888-327-4236)  
INTERNET: www.nhtsa.dot.gov/hotline

FOR AGENCY USE ONLY 335

Date Received **2003 APR -4** Repository   
**10-MAR-2003** **11-116**  
Reference No.  
10011185

**OWNER INFORMATION (Type or Print)**

Name [Redacted]  
Address [Redacted]  
City **TOLEDO** State **OH** Zip Code [Redacted]

Daytime Telephone Number [Redacted] E-mail Address [Redacted]  
Evening Telephone Number [Redacted]

Do you authorize NHTSA to provide a copy of this report to the manufacturer of your vehicle?  YES  NO  
In the absence of an authorization, NHTSA WILL NOT provide your name or address to the vehicle manufacturer.  
Signature of Owner \_\_\_\_\_ Date   /  /  

**VEHICLE INFORMATION**

17 digit Vehicle Identification Number (located in front of windshield on driver's side) **1J4GW58S0AC723830** Make **JEEP** Model **GRAND CHEROKEE** Model Year **1999**  
Date Purchased **10/2000** Dealer's Name and Telephone Number **Ed Schmidt 419-874-4331** Engine: **4.0** Fuel Type: **Unleaded**  
Original Owner  Dealer's City **Perrysburg** State **OH** Zip Code **43051** No. Cylinders  
Transmission Type **Automatic**  Anti-lock Brakes Powertrain  Cruise Control Vehicle Component Code **063200 ENGINE AND ENGINE COOLING:EXHAUST SYSTEM:MANIFOLD**  
Multiple Failure: 1

**FAILED COMPONENT(S)/PART(S) INFORMATION**

Incident Date(s) **02-DEC-2002** Failure Mileage **56000** Failure Speed **Exhaust man. fold gasket overheated + burnt up causing transmission torque converter to burn up causing transmission failure**

**ADDITIONAL ITEMS TO BE COMPLETED WHEN REPORTING A TIRE FAILURE**

Tire Make \_\_\_\_\_ Tire Model (Name or Number) \_\_\_\_\_ Tire Size (Example P215/65R15) \_\_\_\_\_  
DOT No. (Example: DOTM189ABC036)  Original Equipment  Prior Repair Failure Location: \_\_\_\_\_  
Tire Component Code \_\_\_\_\_ Tire Failure Type \_\_\_\_\_

**ADDITIONAL ITEMS TO BE COMPLETED WHEN REPORTING A CHILD SEAT FAILURE**

Make: \_\_\_\_\_ Date Manufactured: \_\_\_\_\_ Model No./Name: \_\_\_\_\_  
Seat Type: \_\_\_\_\_ Installation System: \_\_\_\_\_  
Child Seat Component Code: \_\_\_\_\_ Failed Part: \_\_\_\_\_

**APPLICABLE INCIDENT INFORMATION**

(Please describe in detail the incident(s), failure(s), crash(es), and injury(ies).)

Crash  Yes  No Fire  Yes  No Number of Persons Injured \_\_\_\_\_ Number of Deaths \_\_\_\_\_ Reported to Police **N**

Narrative Description of Incident(s), Crash(es), and Injury(ies).  
Please describe (1) events leading up to the failure, (2) failure and its consequences, and (3) what was done to correct the failure, i.e. parts repaired or replaced (and if old part is available).

~~THE EXHAUST MANIFOLD GASKET CAUSED THE TRANSMISSION TO BURN UP.~~

Exhaust man. fold gasket burnt up - high pitched whining sound emitted when driving  
bluish in color  
Torque converter - burnt up → Transmission Failure  
Slipped in 3rd + 4th gear  
Transfer case damage

Include, if available: Police/Fire Department Report, Photos, and Repair Invoice. ATTACH ADDITIONAL SHEETS IF NECESSARY.

The Privacy Act of 1974-Public Law 93-579 This information is requested pursuant to authority vested in the National Highway Traffic Safety Act and subsequent amendments. You are under no obligation to respond to this questionnaire. Your response may be used to assist the NHTSA in determining whether a Manufacturer should take appropriate action to correct a safety defect. If the NHTSA proceeds with administrative enforcement or litigation against a manufacturer, your response, or a statistical summary thereof, may be used in support of the agency's action.

March 24, 2003

U.S. Department of Transportation  
National Highway Traffic Safety Administration  
Office of Defects Investigation,  
NSA-10.01, 400 7<sup>th</sup> Street, SW,  
Washington, DC 20590

RE: Complaint letter sent to Daimler Chrysler  
(Revised letter-original dated February 24, 2003)

To whom this may concern,

As an owner of a vehicle made by your company I feel compelled to tell you how unhappy I am with the vehicle's quality and durability.

Let me tell you why I'm dissatisfied. To begin with in the fall of 2001, the lock system of our 1999 Jeep Grand Cherokee Laredo ceased to function properly. When using the keyless entry remote to unlock the doors, I have to hit the unlock button two or more times in order for the doors to unlock, including the tailgate. Once inside the vehicle I have to hit the electronic door lock button to lock all the doors. This locks all of the doors except the driver's side door, which I have to manually lock by pressing the lock button on the door by hand. A loud synod buzz admits from the lock system when either it is locked and unlocked by the keyless remote, when the vehicle reaches a certain speed or by manually locking the doors. At the time this began, our mileage was just slightly over 36,000 miles, just past the warranty of 3 yrs or 36,000 miles. My husband contacted the dealer and was told that the repair would not be covered under the warranty and would cost us somewhere around \$400-500. My husband then contacted Chrysler and was again told that it would not be covered by warranty and no further assistance could be provided. We decided to live with the problem until we could either afford the repair or find someone to help us with the repair to keep the price down. As of today's date it still has not been repaired!

Then in November 2002, our Jeep began making a loud whining sound when driving. The sound could be heard loudly upon letting my foot up and down on the gas pedal. While raising my foot off of the pedal to decelerate it would begin and get quite loud and then it would slowly soften and stop upon putting my foot back down on the pedal to accelerate. We first notice the sound when driving speeds over 60 when on the expressway, but then the whining sound would continue even after coming to a complete stop at a light when exiting off the expressway. It started to do it more frequently even when driving at slow speeds. The sound could be heard both inside and outside of the vehicle coming from within the hood. The vehicle also started have problems laboring when accelerating. Therefore we concluded that we were probably dealing with a transmission problem. Which is absolutely ridiculous for this vehicle of only 4 years old with only 55,000 miles on it. Due to the car being off warranty and knowing the prices that dealers charge and how uncooperative for repairs they have been in the past, I was referred by many friends and family members to take the vehicle to a nearby independent garage for the repairs. The vehicle was taken to Cottman Transmission on Monday, January 27, 2003 (5250 Airport Hwy Toledo, Ohio)

Cottman Transmission initially diagnosed the problem as damage to the vehicle's transfer case. They would need to take the transmission apart to know for sure. We allowed them to do so. Upon opening up the transmission they found that the transfer case had minimal damage to it therefore they did not feel it was the culprit of the whining sound and concluded that the transfer case did not require any repair. Cottman reassembled the transfer case at no charge. But they did find that the torque converter was highly damaged and would require repair along with several repairs to the transmission parts surrounding the torque converter. They stated that parts of the transmission were a blue in color indicated that it was burning up. Cottman stated they would use rebuilt parts to repair the damage to the torque converter & transmission. (Please see enclosed Invoice). Cottman had our Jeep for two weeks working on it. On Wednesday, February 5, 2003 we picked it up and paid \$1934.02 for the repairs. On the way home the whining sound reappeared.

The next day Thursday, February 6, 2003 we took the vehicle back to Cottman. They continued to work on it and refocused again on the transfer case thinking that perhaps there was a bearing that did in fact need to be replaced which was causing the whining sound. They mentioned at that time that the sound would disappear when pressing down on the air filter bonnet. They did tests on all systems on the vehicle. One of

the Cottman's technicians sought the help and advice of a fellow transmission technician at Brondes Ford (5717 Secor Rd., Toledo) and concluded that it could be the fuel injector, which need to be replaced. On Saturday, February 8, 2003 we picked our Jeep up and again on the way home the whining sound reappeared. Back to Cottman our Jeep went on Monday, February 10, 2003. Cottman contacted us on Saturday, February 15, 2003 after another full week of working on the vehicle they have been unable to diagnose and repair what or where the whining sound was coming from so they sought our permission to send the vehicle to a Chrysler dealer in the Toledo area to work on the vehicle. Our Jeep was then sent to Charlie's Dodge (725 Illinois Ave, Maumee). Initially, Charlie's Dodge stated that they did not see anything wrong with the vehicle but due to Cottman's insistence of the problematic whining sound, Charlie's Dodge changed the throttle body. The noise still remained, Cottman had Charlie's Dodge take out the new piece and put the original throttle body back into the vehicle. The vehicle was then taken over to Kevin's Automotive & Transmission (3705 Marine Rd., Toledo). Electrical testing was run on all the systems of the vehicle and absolutely nothing could be found. The sound then disappeared for a few days while the temperature had warmed up, it was then figured out it was related to the weather temperature. The sound occurred in colder temperatures. On February 24, 2003 the temperature became colder again and the whining sound reappeared. The Jeep was taken back to Cottman's where they continued to work on it. This time refocusing again on the Fuel injection system. They replaced several other parts hoping to find a solution. Still no luck. Cottman concluded that the problem and repair was outside their realm of expertise with transmissions and decided to enlist the help of area dealers. On March 3, 2002, Cottman's dropped our Jeep off at Yark Automotive Group (Jeep-West central Ave. Toledo).

After test driving the vehicle with a Yark technician, so that the sound could be heard, Cottman insisted that Yark work on the vehicle immediately while the temperature remained cold and explained that the owners need the problem resolved quickly due to having already been through a months worth of repairs. Yark's service manager, Dave Emerine, mentioned that he had seen this problem before, he knew exactly what it was due to it, and that it was becoming a prevalent problem in Jeeps. He said that they would work on it immediately. He explained that it was due to a faulty exhaust manifold gasket, which would need to be replaced. Yark did not work on it immediately, they waited until the next day when the temperature warmed up again. When they went to bring our Jeep in to work on it, the sound was gone. On March 4, 2003, Yark then called Cottman and told them there was nothing wrong with the vehicle and to come get it. They refused to do any work on it and Cottman had to pay Yark just for the diagnostic tests they had done while having the vehicle.

Cottman also took our Jeep to Mytee Discount Muffler & Brake (1145 S. Reynolds Rd, Toledo) to have to exhaust system checked.

Thoroughly frustrated and now knowing what the problem was after Yark explained about the Exhaust Manifold gasket problem, Cottman contacted Vin Devers (5570 Monroe St., Toledo) and requested that they replace the part. Vin Devers stated that they would be unable to get the Jeep in for the repair immediately and it would not be until the following week. Cottman not wanting us to wait any longer to get our vehicle back repaired, then contacted Charlies Dodge (725 Illinois Ave, Maumee) again. Charlies Dodge also stated that they would be unable to get the vehicle in immediately. Upon speaking with Charlies Dodge, another repair technician, named Chris, mentioned that while he was employed previously at Bowling Green Jeep, the Exhaust manifold gasket was a common problem seen in Jeeps.

Finally, Cottman decided to allow one of their newly hired transmission technicians, who is A certified in engine & exhaust repairs, to work on the exhaust manifold gasket. He replaced the part and the sound was gone! He found that the exhaust manifold gasket had over heated and burnt up which in turned had caused over heating in our transmission's torque converter causing it to burn up, which lead to our transmission failure. Cottman took the exhaust manifold itself over to Ridge Engine & Machine (1236 Conant St, Maumee) to have diagnostic testing ran on it to make sure it was not damaged. Jim at Ridge Engine mentioned that he had read about the exhaust manifold gasket problem in an Engine Rebuilders Magazine article two years ago. Again someone else mentioning that this is a prevalent problem, should this be investigated as a possible recall part?

As earlier stated, Cottman at one time found that the whining sound would disappear when pressing down on the air filter bonnet, the exhaust manifold gasket was located directly under the air filter bonnet! On Thursday, March 6, 2003, we finally got our Jeep back and repaired after 7 weeks, almost 2 months later.

since the original invoice was paid. They paid the Dealers for any assistance or repairs/parts render within those 7 weeks, so no further expenses would be due from us the owners. We do not believe any of the dealers used would have done the same for us.

All this and we still have the power locks to fix... On a vehicle that is only 4 years old with only 55-56,000 miles on it.

During this whole ordeal I have done a lot of research on the internet and have found several items of interest including internet chat boards containing page after page of Chrysler/Jeep owners who have experienced similar problems but have gotten little if no help from the company recovering the loss or repairs made by obviously faulty parts and/ or vehicles. I have researched recalls, warranty issues, NHTSA & CAS complaints and bulletin's, TSB recalls and complaints as wells as filing my own complaints and sending copies of this letter to all of the above. I have researched the Lemon aid law/bill which makes me begin to believe that I possibly have a "lemon of a vehicle" on my hands especially after the vehicle is still defective after three tries at being fixed and has been out of service for 30 days or more, as stated in the Ohio Lemon-aid bill.

An item of information I found the most interesting is that Chrysler for years has had problems with peeling paint, transmission failure, ABS system and other maladies which Chrysler owners have had problems dealing with this automotive company about. Chrysler's repeated attempts to blame owners for their vehicles' ABS, automatic transmission and paint problems continues to arouse consumer anger. The Internet is overflowing with postings related to the failures all over the world and Chrysler is currently the defendant in half a dozen class actions in the United States. As a Jeep/Chrysler owner I find this alarming. As I continued to research I learned that there are Chrysler Lemon Owners Groups in Canada and possible some in the USA who submit members names to the automaker and have succeeded in getting sizeable refunds for the above-mentioned problems. Many of the requests for refunds fall under what I have learned Chrysler calls "Goodwill" repairs or refunds for repairs already carried out or have yet to be done. An Owner Satisfaction Notification or extension of the original warranty applied to vehicles that may have been bought new or used. "Secret warranties" as they are called. Few car owners know that that these secret car warranties exist. I did not, but I do now and I am aware that Chrysler offers them.

Please be advised that I am hereby claiming from Daimler Chrysler Motors Corporation expenses and collateral expenses incurred for the repair of the Transmission and the future repair of the lock system of my 1999 Jeep Grand Cherokee Laredo. VIN 1J4GW58SXXC721820.

I consider such defects to be abnormal as components such as a transmission, engine exhaust manifold gasket or electronic lock system should have a life expectancy of at least 80-100,000 miles or 7-10 years without major repair such as in our case of the transmission needing the torque converter & transfer case repaired or replaced and the exhaust manifold gasket. My research yielded that problems with defective transmissions in 1986-1997 Chrysler SUV's were offered full if not partial refunds up to 7 years/100,000 miles.

Daimler Chrysler announced as of 7/2002 that it will now provide an industry-leading 7 year/70,000 mile limited powertrain warranty on its Chrysler, Jeep and Dodge brand vehicles, seeking to boost its image and sales as it did in the late 1980's. Chrysler's sales have fallen 3.3 percent in 2002. Chrysler's chief Executive Dieter Zetsche admitted that Chrysler had a poor track record 10 years and more ago and Chryslers vehicles have suffered for decades from consumers' doubts about their durability and competition from growing numbers of high quality foreign models. According to J.D Power and Associates' research, about 20 percent of buyers reject Chrysler vehicles for reliability concerns, with 25 percent rejecting Dodge and Jeep vehicles. After years of continuing negligence, allowing a large number of transmission issues, failure and engine problems and failure to carry over and continue it really the least that Daimler Chrysler Corporation could do for the consumers it has let down and continues to let down such has myself. I believe the company is doing this because they know they will be running out of consumers and realize they have instilled diminished confidence in many consumers that were former Dodge, Jeep and Chrysler fans. Because of the years of many ongoing issues, design flaws and lack of overall quality, which Chrysler usually tries to deny, this has greatly damaged the company's reputation not to mention the many issues with their other vehicles, minivans and trucks and not to mention the poor customer treatment in response to these issues over the years that Chrysler initiated in the first place. Chrysler is loosing and falling behind to

actually last and hold up well (I should know, I once owned 2 Hondas with over 100,000 miles with absolutely no transmission, engine exhaust manifold or electrical problems). I find it very frustrating that this 7 year/70,000 mile warranty began originally in 1987 then was eliminated in 1994, but then began again in 2002. My vehicle built in 1999, falls between these years, why should I be penalized for choosing to purchase a vehicle during that year/during that time period. I should not be penalized for Chrysler's irregular warranty practices and for their need to pay for their "sins of the past". Therefore, I am requested an extension of the warranty on my vehicle to 7 years/70,000 miles through Chrysler's "goodwill" warranty program.

Despite what Automotive manufactures such as Chrysler argue, I discovered that repairs done by independent garages are included in these "goodwill" programs offered by Chrysler. Therefore we should not be penalized for going to an independent garage if the dealer did not disclose the "goodwill" warranty. The car was off warranty and we had no idea at the time that a warranty "goodwill" was available. And dealer repairs would have cost a great deal more. In addition the dealers had been uncooperative in the past and as explained above they were uncooperative in the present situation. Our Jeep was taken to over 5 different dealers who not only refused to do the repairs, but stated on several different occasions that they could not find anything wrong with our vehicle, which obviously there was. We can only conclude that we would have been faced with the same reaction from the dealers if we had taken our Jeep to them ourselves. Instead, Cottman went above the call of duty by taking the vehicle to these reputable dealers for assistance, which in the end resulted with them making the required repairs themselves at Cottman. We are dealing with well-known products\ defects, and the independent garage, Cottman Transmission, was available to show the repair was necessary to correct a factory related defect and attest that nothing was done by myself the owner to either create or exacerbate the problem.

With all the competition among auto manufacturers, I expect more from the companies who receive my business. I am sure you can understand how frustrating and inconvenient this has been, and I hope you have been able to limit the number of consumers who have been forced to endure this sort of problem. It has taken 7 weeks to have my Jeep repaired. The lock system still needs to be repaired, which will take additional time and inconvenience.

You will find that my husband and myself are loyal, dealership-oriented maintenance-conscience customers who have ensured that our Jeep was maintained properly. We have several family members as well as friends who are employed by Daimler Chrysler, who we feel we support through owning a Chrysler vehicle. Upon offering the assistance we seek through the Chrysler "Goodwill" warranty program we would definitely continue to be a loyal customer and remember the assistance the next time we purchase a new vehicle. We are a young married couple in our late twenties/early thirties with plans of having children with whom we will be making future vehicle purchases for them as well as for ourselves. If no assistance were sought through this experience, we definitely would refrain from buying from your company again. Since word of mouth is the most effective form of advertising, we will definitely tell others about our experience. We are hoping we are able to pass along a positive experience with Daimler Chrysler.

Because your company is committed to customer service, I am confident you will want to resolve this issue quickly and thoroughly. I hereby formally put you on notice under federal and provincial consumer protection statutes that your refusal to honor my claim by extending the warranty of my 1999 Jeep Grand Cherokee Laredo to 7 years/70,000 miles and offering me a "goodwill" program reimbursement for repairs done to the transmission and manifold exhaust gasket as well as future repairs needed for the electronic door lock system would be unfair warranty practice. Therefore, I am asking that you honor my request and reimburse us for the repair work on the transmission for the total of \$1934.86 and pay for future repairs to the electronic door lock system at a cost up to \$500-600.

Please note that, if this matter is not settled in a timely, satisfactory manner, I intend to file my case in small Claims court.

We also intend on contacting and discussing this matter with the following:  
Ed Schmidt Dealer in Perrysburg-where the vehicle was purchased  
Daimler Chrysler Dealer Representative or Service Manager in our area  
Daimler Chrysler General Manager  
Jeep/Eagle Division of Chrysler Corporation

Center of Automotive Safety  
Consumer Reports  
Phil Edmonston's Lemon Aid Car Guides  
Automotive Dispute Resolution Programs & AUTOCAP  
Better Business Bureau

Should you need to contact me, my work number is [REDACTED] and my home number is [REDACTED]  
Email address: [REDACTED]. I look forward to receiving a response within 10 business days.

Thank you.

Respectfully,

[REDACTED]  
Toledo, Ohio [REDACTED]



**COTTMAN Transmission**

5250 Airport Highway  
 Toledo, OH 43615  
 Phone: 419-389-9992  
 Fax : 419-389-9995

Simmons Dori

432 Southdale  
 TOLEDO, OH 43612  
 (h) 419-476-6602  
 (b) 419-861-5261/  
 (c)  
 (f)

01/22/2003  
 12:48 PM JR

Vehicle: 99 Jeep Grand Cherok  
 Color: blue  
 License Plate: CR1 7VY  
 Vin Number: 1J4GW58SXXC721820  
 Engine Size: 4.0  
 Production Date: 4/99  
 Transmission: A500  
 Mileage: 55323

Customer Remarks:  
 WHINNING NOISE ON HWY

Center Remarks:

Original Invoice:  
 Type of Service:  
 Technicians:

**CUSTOMER'S RIGHTS:**

You are entitled to:

- a) A written Estimate of repairs and b) The return of any replaced parts unless they must be returned to the manufacturer for warranty or rebuilding purposes, if requested in writing.

**ESTIMATE**

**YOU MAY NOT BE CHARGED THE FOLLOWING WITHOUT YOUR CONSENT:**

- a) Repair costs more than the estimated price. b) Repairs not originally authorized by you.

I authorize the work stated herein along with the necessary materials. I agree that you are not responsible for any loss or damage to the above described vehicle or any articles left therein in case of fire, theft or any other cause beyond your control or for any delays caused by unavailability of parts or in parts shipment by the supplier or transporter. You and/or your employees or agents may operate the said vehicle on streets, highways and elsewhere for the purpose of testing, inspection and delivery at my risk. An express mechanic's lien is acknowledged on said vehicle to secure the payment for your work thereon.

Signature: \_\_\_\_\_

TORQUE CONVERTER	287.50
MASTER OVERHAUL KIT	389.75
FLUID, FILTER & EPA	55.00
BAND	48.00
LUOD SWITCH	86.00
GOV PRESS SOL	127.00
GOVERNOR SWITCH	108.00
OD BEARING KIT	78.00
OD SPRAG	56.00
RDI	285.00
LABOR BUILD	400.00
COUPON SPECIAL	-100.00
INSPECT T-CASE	
RESEAL KIT	
FLUID	

Written estimate :  
 Received \_\_\_ Waived \_\_\_  
 Initials: \_\_\_\_\_

11.7

Parts	1235.26
Labor	585.00
Net	1820.26
Tax	113.76
Total	1934.02

We gladly accept Visa/Master Card, Discover, ATM Cards, Bank & Certified Checks.

## Technical Service Bulletins

### II Technical Service Bulletins:

<u>Number</u>	<u>Date</u>	<u>Name</u>	
1-003-02A	Oct 02	Drivetrain - Rear Axle High Pitched Whining Sound	Checked & Corrected in Rebuild
1-009-02	Oct 02	A/C - System Leak Detection	
1-027-02	Sep 02	Fuel System - Rough Idle After Hot Soak	
1-002-02	Jul 02	A/T - Diagnostics/Labor Time Revisions	
1-003-02A	Jun 02	Brakes - Pulsation on Light to Moderate Application	
1-005-02	May 02	Power Steering - Honking Noise	
1-020-02	May 02	Liftgate - Will Not Open Correctly	
HTSA02V104000	Apr 02	Recall 02V104000: Manifold Shield Installation	
1-015-02	Apr 02	Outside Rearview Mirror - Glass Replacement	
1-007-02	Mar 02	Keyless Entry - Programming Procedure	
1-004-01B	Dec 01	Seat Heater - Inoperative	
1-025-01	Nov 01	Air Bag - On/Off Switches	
1-008-01	Nov 01	Steering Wheel - Popping/Ticking Sound	
1-011-01	Nov 01	Transfer Case - Fluid Seepage	
1-009-01	Oct 01	Driver Airbag - Trim Cover Service	
1-001-01A	✓ Sep 01	Front Drive Axle - Whining Sound	Checked Out - No Problem Present
1-005-01A	Sep 01	Brakes - Roughness Or Pedal Pulsation	
1-006-01	Jun 01	A/T - Fluid Usage	
1-012-01	May 01	Generic Scan Tool - Reference Information	
1-010-01	May 01	Airbag/Clock Spring - Service	
1-007-01	May 01	A/C - Automatic Temperature Control Setting Changes	
1-004-01	May 01	Evaporative System - Leak & DTC Diagnostics	
HTSA01V119000	Apr 01	Recall 01V119000: Seat Belt Retractor	
1-002-01	Mar 01	Fuel Pump - Long Cranking Time to Start Engine	
1-001-01	Jan 01	Engine Performance - Enhancements	
1-006-00A	Dec 00	Wiring - Revised Splicing Procedure	
1-008-00B	Nov 00	Child Seat - Tether Anchor Part Numbers & Labor Time	
1-041-00	Nov 00	Roof Rack - Optimum Positioning Instructions	
1-038-00	Oct 00	Seat Belt - Turning Loop Cover Replacement	
1-08-00	Sep 00	Differential Cover - Updated Sealer & Fluid	
1-30-00	Aug 00	Seatbelts - Slow To Retract	
1-04-00	Jun 00	Rear Propeller Shaft - Intermittent Stop-Bump	
174	Jun 00	Recall - Incorrect Instrument Printed Circuit Installed	
1-06-00	Jun 00	Engine/Fuel Pump - Abnormally long Crank Time	
1-17-00	May 00	Cargo Cover - Inoperative	
NHTSA00V105000	Apr 00	Recall 00V105000: Air Bag Light On/Accidental Deployment	
1-11-00	Mar 00	CD Player - CD Compatibility	
1-08-00	Mar 00	Keyless Entry Transmitter - Intermittently Inoperative	
1-03-00	Mar 00	Transfer Case - Sector Shaft Leakage	
1-10-00	Mar 00	Window Regulator - Sticks at Top Of Travel	
1-03-00	Feb 00	Power Door Locks/Windows/Mirrors/RKE - Erratic Operation	SEE ATTACHED
1-01-00	Feb 00	EVAP System - Leak Detection Pump Misdiagnosis	
1-01-00	Feb 00	A/T - Harsh Reverse Gear Engagement	
1-01-00	Feb 00	Driver Side Floor Duct - Inadequate Air Flow	
NHTSA00V034000	Feb 00	Recall 00V034000: Seat Belt Defect	
866	Feb 00	Recall - Shoulder Belt Height Adjuster Bolt	
1-11-99A	Dec 99	Front Driveline - Vibration/Noise/Harshness	
1-06-99A	Dec 99	Heater-A/C Housing - Condensation Formation	
1-06-99A	Dec 99	Front Hub Seals - Grease Purge Explanation	
1-08-99	Nov 99	Differential - Pinion Nut/Spacer Update	
1-25-99	Nov 99	PCM - Erroneous Engine Misfire	
1-25-99	Nov 99	Plenum Seal - Cold Air Leaks To Footwell	
1-24-99	Nov 99	Heater A/C System - Defaults To Defrost Mode	
1-02-99A	Oct 99	Front Brakes - Roughness/Pedal Pulsation	- Cleared Corroded ABS Sensor
1-05-99	Oct 99	Fuel System Pressure Loss - Diagnostic Procedures	

## Technical Service Bulletins

### II Technical Service Bulletins:

<u>Number</u>	<u>Date</u>	<u>Name</u>
98-38-99	Oct 99	Roof Joint Molding - Distorted/Protruding
98-35-99A	Oct 99	Child Seat Tether Anchor - Labor/Parts Identification
98-05-99	Sep 99	Differential/Drive Axle - Diagnosis
98-12-99A	Sep 99	Electronic Vehicle Information Center - Wrong Value
98-00-00	Sep 99	Recall - Sensor Wiring Heat Shield
98-09-00	Sep 99	Recall - Reprogram PCM
98-12-99	Aug 99	Front End Alignment - Adjustable/Offset Ball Joints
98-16-99	Aug 99	A/C - AZC Module, Inaccurate Temperature Settings
98-01-99A	Aug 99	NV 247 Transfer Case - Low Speed Grinding
98-01-99	Aug 99	Transfer Case - NV 247 Low Speed Grinding Noise
98-10-99	Jul 99	Tie Rod And Drag Link Sleeve - Bolt Torque Revision
98-23-99	Jul 99	Radio Communication Equipment - Recommendations
98-13-99	Jun 99	PCM - Engine No Start Condition
98-12-99	Jun 99	Leak Detection Pump - Monitor Test
98-05-99	Jun 99	Brake Rotors - Match Mounting
98-20-99	Jun 99	Sunroof - Revised 'Express Open' Position
98-16-99A	Jun 99	RKE Transmitter - Is Intermittently Inoperative
98-18-99	Jun 99	Radio - Clock Defeat
98-09-99	Jun 99	Transfer Case - NV 247 Shudder at Slow Speeds
98-03-99	May 99	Front Propeller Shaft - Popping/Snapping/Grinding
98-14-99	May 99	Antitheft System - Vehicle Stall/No Start
98-09-99	May 99	DTC's - Caused By Open Fuses
98-14-99	May 99	Door Weather Seal - Does Not Fit Properly
98-15-99	May 99	Front Power Window - Tips Forward When Raised
98-08-99	May 99	Heater Blower - Whistle Noise
98-17-99	May 99	Roof Rack Cross Bar - Shipping Location
98-07-99	May 99	Power Distribution Center - Service
98-08-99	Apr 99	A/T - Buzz/Whining in Reverse When Cold - <i>Correction Made During Rebuild</i>
98-07-99	Apr 99	Heater, A/C - Reduced Airflow From Center Outlets
98-07-00	Apr 99	Recall - VECI Replacement
98-04-99	Feb 99	Universal Garage Door Opener - Reduced Range
98-01-99	Feb 99	Suspension - Squeak/Squawk Noises
98-01-99	Feb 99	Rear Brakes - Squeal on Light Application - <i>Ruled Out - Prob occurs after 20-30 MPH</i>
98-01-99	Feb 99	Fuel Filler Tube - Slow Fuel Fill
98-02-99	Feb 99	A/T - Slow Neutral To Drive Engagement
98-02-99	Jan 99	A/C Compressor - Service Precautions
98-01-99	Jan 99	A/C - Refrigerant Charge Specification Change
98-17-98C	Dec 98	Air Bag System - ON-OFF Switch Availability
98-61-98	Dec 98	Liftgate Flipper Glass - Water Leak
98-46-98	Dec 98	Engine Idle Undershoot/Driveway Die Out
98-45-98	Dec 98	PCM - Engine Vibration At Idle/Drone Noise <i>N/A Prior To 1/99</i>
98-44-98	Dec 98	PCM - Cold Engine Start/Partial Cool Down Sag
98-43-98	Dec 98	PCM - Engine Sag When A/C Compressor Cycles
98-41-98	Dec 98	PCM - Idle RPM Undershoot/Overshoot
98-40-98	Dec 98	PCM - High Idle RPM On Deceleration
98-37-98	Dec 98	PCM - Addition of A Clear Flood Feature
98-35-98	Dec 98	PCM - False Mil ON, DTC P0443 Set
98-36-98	Dec 98	PCM - Start and Stall, Idle Undershoot/Lost IAC Steps
98-60-98	Dec 98	Sunroof Sunshade - Fabric Delamination
98-07-98	Dec 98	Fuel Filler Cap - Difficult To Remove
98-11-98	Dec 98	Diagnostic Tool - Transmission Simulator
98-44-98	Dec 98	Memory Power Seat - Travel Range
98-16-98	Dec 98	42RE A/T - Revised Front Band Adjustment
98-14-98	Dec 98	45RFE A/T - Quick Learn Clutch Volume Procedures

**Technical Service Bulletins****All Technical Service Bulletins:**

<u>Number</u>	<u>Date</u>	<u>Name</u>
09	Dec 98	Recall - Rear Outboard Seat Belts
HTSA98V276000	Nov 98	Recall 98V276000: Seat Belt Retractor Malfunction
3-47-98	Oct 98	RKE/PDL or Power Windows - Erratic Operation
5-02-98	Oct 98	I/M Testing - OBDII CARB Readiness Monitor Information
3-45-98	Oct 98	Paint - Transit Film Protection
3-32-98	Sep 98	PCM - Flash Programming Failure Recovery
3-36-98	Jul 98	Auto Computers - Y2K Effects

**Technical Service Bulletins****Recalls:**

<u>Number</u>	<u>Date</u>	<u>Name</u>
HTSA02V104000	Apr 02	Recall 02V104000: Manifold Shield Installation
HTSA01V119000	Apr 01	Recall 01V119000: Seat Belt Retractor
4	Jun 00	Recall - Incorrect Instrument Printed Circuit Installed
HTSA00V105000	Apr 00	Recall 00V105000: Air Bag Light On/Accidental Deployment
HTSA00V034000	Feb 00	Recall 00V034000: Seat Belt Defect
6	Feb 00	Recall - Shoulder Belt Height Adjuster Bolt
0	Sep 99	Recall - Sensor Wiring Heat Shield
9	Sep 99	Recall - Reprogram PCM
7	Apr 99	Recall - VECI Replacement
9	Dec 98	Recall - Rear Outboard Seat Belts
HTSA98V276000	Nov 98	Recall 98V276000: Seat Belt Retractor Malfunction

# Automatic Transmission/Transaxle: All Technical Service Bulletins /T - Buzz/Whining in Reverse When Cold

NUMBER: 21-08-99

GROUP: Transmission

DATE: April 30, 1999

*Corrected  
In Rebuild*

SUBJECT: "Buzz", Whining, Or "Moaning" Like Noise From A Cold Transmission When Reverse Is Selected.

OVERVIEW:  
This bulletin involves replacing the transmission regulator valve.

MODELS:

1996 - 1999	(AB)	Ram Van
1996 - 1999	(AN)	Dakota
1996 - 1999	(BR/BE)	Ram Truck
1998 - 1999	(DN)	Durango
1996 - 1999	(TJ)	Wrangler
1996 - 1999	(XJ)	Cherokee
1996 - 1998	(ZJ)	Grand Cherokee
1999	(WJ)	Grand Cherokee

NOTE:  
THIS INFORMATION APPLIES TO VEHICLES EQUIPPED WITH A RE OR RH AUTOMATIC TRANSMISSION.

**SYMPTOM/CONDITION:**  
Some vehicles may exhibit an intermittent noise from the transmission when reverse gear is selected. This noise has been described as a "buzz", "whining", or "moaning" like noise. The noise is most noticeable when transmission fluid temperature is below 38 C. (100 F.). The condition is caused by a resonance of the transmission regulator valve system.

Other items may cause regulator valve resonance, including air ingestion into the valve body or out of specification parts. These two items may be the result of a possible cracked pump housing, a torn pump gasket, an under filled transmission, a restricted fluid filter or cooler flow, or an out of specification valve and/or valve body. You should remember these additional items / components when you perform your diagnosis.

Vehicles built prior to August 1, 1995 may experience this condition if either a transmission valve body or an entire automatic transmission was replaced with components manufactured after August 1, 1995.

**DIAGNOSIS:**  
Using the Diagnostic Scan Tool (DRB III(R)) with the appropriate Diagnostics Procedure Manual, verify all engine and transmission systems are functioning as designed. If Diagnostic Trouble Codes (DTC's) are present, record them on the repair order and repair as necessary before proceeding further with this bulletin.

For 1996 and 1997 model year product, review Technical Service Bulletin 21-11-97 Rev A to determine if it applies to this vehicle before attempting to complete the analysis or repairs described in this bulletin.

In most instances, the sump temperature of vehicles exhibiting transmission regulator valve resonance in reverse has been less than 38 C. (100 F). If possible, allow the suspect vehicle to remain parked in a cool place overnight. Then perform the following steps:

1. Set the vehicle parking brake.
2. Start the engine (make certain windows are closed, to eliminate outside noise).
3. With brakes applied, place the transmission selector lever in reverse.
4. Listen for any buzz/moaning/whining like noises as the transmission sump temperature rises to normal operating temperature (180 - 210 degrees F).

If a buzz/roaring/whirring like noise is present, perform the Repair Procedure.

**PARTS REQUIRED:**

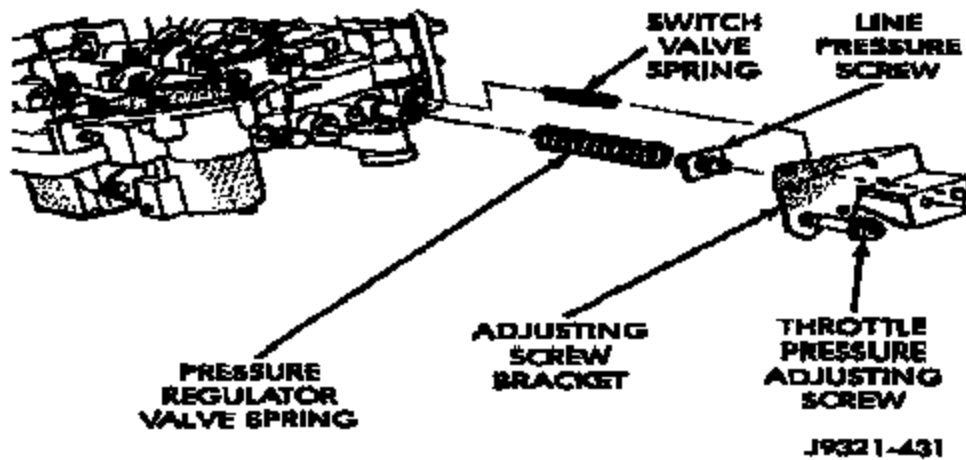
04130169	Valve, Steel Transmission Regulator
02464324	Gasket, Transmission Pan
05010124AA	Fluid, ATF Plus 3, Type 7176E

**EQUIPMENT REQUIRED:**

C-3763	Gauge Tool, Throttle Pressure Adjustment
--------	--

**REPAIR PROCEDURE:**

Following the procedures in the applicable service manual, remove the valve body from the transmission (Refer to Group 21 of the appropriate Service Manual - TRANSMISSION AND TRANSFER CASE - AUTOMATIC TRANSMISSION section - REMOVAL AND INSTALLATION).



**FIGURE 1**

1. Remove the screws holding the adjusting screw bracket and replace the regulator valve with p/n 04130169 (Figure 1). Install the adjusting screw bracket.
2. Verify and adjust, if necessary, both the line pressure and the throttle pressure settings by following the procedures in the service manual (Refer to Group 21 of the appropriate Service Manual - TRANSMISSION AND TRANSFER CASE - AUTOMATIC TRANSMISSION section - ADJUSTMENTS - VALVE BODY).
3. Following the procedures in the appropriate Service Manual, re-install the valve body with the new regulator valve into the transmission.
4. After filling the transmission with the proper automatic transmission fluid, and verifying correct fill level, check the throttle valve cable adjustment. Make appropriate adjustments, if necessary, following the applicable service manual procedure (Refer to Group 21 of the appropriate Service Manual - TRANSMISSION AND TRANSFER CASE - AUTOMATIC TRANSMISSION section - ADJUSTMENTS - TRANSMISSION THROTTLE VALVE CABLE ADJUSTMENT).

**POLICY:** Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

Labor Operation No: 21-95-01-90 1.2 Hrs.

FAILURE CODE: P8 - New Part

**Vehicle: All Technical Service Bulletins**  
**Drivetrain - Rear Axle High Pitched Whining Sound**

NUMBER: 03-003-02 REV. A

*Corrected  
In Rebuild*

GROUP: Rear Axle

DATE: October 28, 2002

THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 03-003-02 DATED AUGUST 12, 2002, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\* AND INCLUDES A REVISED PART NUMBER.

SUBJECT:  
Rear Axle Whine Sound

OVERVIEW:  
This bulletin involves installation of a new rear propeller shaft with a damper on the front yoke.

MODELS:  
999-2001 (WG/WJ) Jeep Grand Cherokee

NOTE:  
THIS BULLETIN APPLIES TO 1999-2001 4WD (WG/WJ) JEEP GRAND CHEROKEES EQUIPPED WITH THE 4.0L ENGINE AND EITHER THE NV242 OR NV247 TRANSFER CASE.

SYMPTOM/CONDITION:  
Customer may complain of a high-pitched sound coming from the rear of the vehicle between 55 and 70 MPH (88 - 112 KPH)

DIAGNOSIS:  
If the customer complains of the condition, and the damper is not present, perform the repair.

NOTE:  
IT IS POSSIBLE THAT SOME VERY LATE 2001 VEHICLES WILL HAVE THE DAMPER IN PLACE.

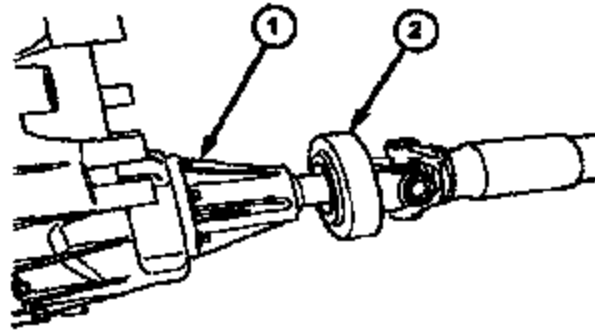
Qty.	Part No.	Description
AR	**52099485AF**	Propeller shaft (NV247 w/M35 Rear Axle)
AR	52111483AC	Propeller shaft (NV247 w/M44 Rear Axle)
AR	52105530AD	Propeller shaft (NV242 w/M35 Rear Axle)
AR	62105901AB	Propeller shaft (NV242 w/M44 Rear Axle)

**NOTE: 52099485AF IS TO BE USED EXCLUSIVELY FOR THIS SERVICE BULLETIN (WITH NV247 w/M35 REAR AXLE). USE 52099485AE FOR ALL OTHER PROPELLER SHAFT REPAIRS NOT RELATED TO THIS BULLETIN (WITH NV247 w/M35 REAR AXLE).**

**PARTS REQUIRED**

**NOTE:**  
THIS REPAIR DOES NOT REQUIRE DRAINING OR REMOVAL OF THE TRANSFER CASE OR DIFFERENTIAL.

**REPAIR PROCEDURE:**



8904130

**Fig. 1 DAMPER LOCATION**

- 1 - REAR OF TRANSFER CASE
- 2 - DAMPER

Follow the removal and installation procedures in Section 3 of the appropriate service manual for the model year under "Propeller Shaft - Rear". Refer to (Fig. 1) shown for the location of the damper.

**POLICY:**  
 Reimbursable within the provisions of the warranty.

Labor Operation No:	Description	Amount
16-30-01-99	Propeller Shaft, Replace	0.3 Hrs.

**TIME ALLOWANCE**

P8	New Part
----	----------

**FAILURE CODE**

**Vehicle: All Technical Service Bulletins  
Front Drive Axle - Whining Sound**

NUMBER: 03-001-01 REV. A

*We checked out  
it found No Problem*

GROUP: Axle & Propeller Shaft

DATE: Sep. 14, 2001

THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN 03-001-01, DATED FEB. 02, 2001, WHICH SHOULD BE REMOVED FROM YOUR FILES. ALL REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\*. THIS REVISION INVOLVES A CHANGE TO LABOR OPERATION NUMBER.

SUBJECT:  
Front Axle Whine-Like Sound On 4.0L Equipped Grand Cherokee Vehicles

OVERVIEW:

This bulletin involves the replacement of the front propeller shaft and front axle yoke.

MODELS:

99 - 2001 (WJ) Grand Cherokee (Domestic & International Markets)

01 (WG) Grand Cherokee (International Markets)

NOTE:

THIS BULLETIN APPLIES TO VEHICLES EQUIPPED WITH A 4.0L ENGINE, A FOUR WHEEL DRIVE SYSTEM (4WD), AND BUILT PRIOR TO DECEMBER 15, 2000 (MDH 1215XX).

SYMPTOM/CONDITION:

The customer may experience a powertrain related sound which may be described as front axle whine. The axle whine-like sound may occur during any vehicle speed and during any of the following driving modes: acceleration, coast, or float.

DIAGNOSIS

If the above condition has been experienced on the vehicle in question, perform the Repair Procedure.

NOTE:

REFER TO TECHNICAL SERVICE BULLETIN 03-05-99 IF ADDITIONAL AXLE DIAGNOSIS IS REQUIRED.

Qty.	Part No.	Description
1	52105884AA	Propshaft, Front
1	05019824AA	Yoke, Front axle pinion
1	05017755AA	Nut, Front axle pinion

2	J3240553	Strap, Front axle yoke
4	J4008928	Bolt, Front axle yoke strap

PARTS REQUIRED:

8958	Yoke Holder
NPN	Dial Torque Wrench (inch pounds)
NPN	Dial Torque Wrench (foot pounds)

EQUIPMENT REQUIRED:

POLICY:

Not reimbursable within the provisions of the warranty.

Labor Operation No:		
**16-30-03-91**	Replace front propeller shaft	1.1 Hrs.

TIME ALLOWANCE:

Pa	New Part
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FAILURE CODE:

**Vehicle: All Technical Service Bulletins**

**Heater Blower - Whistle Noise**

NUMBER: 24-08-99

Group: Heating & A/C

DATE: May 14, 1999

**SUBJECT:**

Heater Blower Whistle

**DESCRIPTION:**

This bulletin involves installing a baffle in the blower housing and revised blower wheel.

**MODELS:**

1999 (WJ) Grand Cherokee

**SYMPTOM/CONDITION:**

A whistling sound may be present with the fan on high speed in temperatures below freezing.

**DIAGNOSIS:**

If a vehicle exhibits this condition, perform the Repair Procedure.

**PARTS REQUIRED:**

05016172AA

Baffle

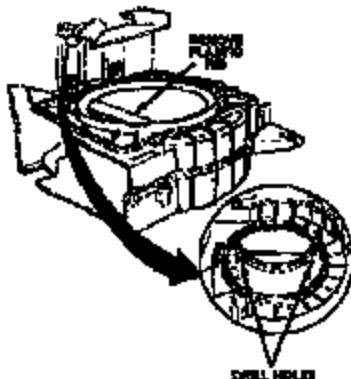
05012701AB

Blower Wheel

**REPAIR PROCEDURE:**

**THIS REPAIR IS COMPATIBLE WITH DAIMLERCHRYSLER'S MOBILE SERVICE PROGRAM AND DOES NOT REQUIRE HOISTS OR OTHER FULL SERVICE FACILITY SPECIAL EQUIPMENT.**

1. Disconnect and isolate the negative battery cable.
2. Remove the blower fan from the heater A/C housing in the passenger compartment foot well.
3. Remove the blower wheel from the fan motor.
4. Install the new blower wheel, p/n 05012701AB, onto the fan.



**FIGURE 1**

5. Inspect the blower housing. Remove the plastic rib running across the opening (Figure 1). Cut the divider with hacksaw or suitable tool.
6. Position the baffle, p/n 05016172AA, on the blower housing as shown in Figure 1. The baffle is installed at the forward end of the blower housing closest to the engine compartment. Mark the housing for a reference on where to drill the holes for the attaching screws.

*Myjee Checked & Ruled Out*

Drill two 1/8 in. (3 mm) holes through the housing and baffle as shown in Figure 1. Apply a thin coating of RTV to the baffle to act as an adhesive and prevent the baffle from rattling, then position the baffle on the housing.

Install the two sheet metal screws.

Clean any remaining plastic shavings from the housing.

Install the blower fan.

Connect the negative battery cable.

POLICY: Reimbursable within the provisions of the warranty.

ME ALLOWANCE:

Labor Operation No: 24-65-34-94

0.3 Hrs.

FAILURE CODE: P8 - New Part

**Vehicle: All Technical Service Bulletins  
Rear Brakes - Squeal on Light Application**

NUMBER: 05-01-99

*Master Checked & Ruled Out*

GROUP: Brakes

DATE: Feb. 26, 1999

SUBJECT:  
Rear Brake Squeal

OVERVIEW:

This bulletin involves installing revised rear brake pads.

MODELS:

1999 (WJ) Grand Cherokee

SYMPTOM/CONDITION:

Rear brake squeal may be present at speeds over 35 mph with light brake pedal pressure.

This condition will often be present for the first few miles when the brake pads are cold and will diminish as the pads warm up.

DIAGNOSIS:

When a customer complains of this condition, perform the Repair Procedure.

PARTS REQUIRED:

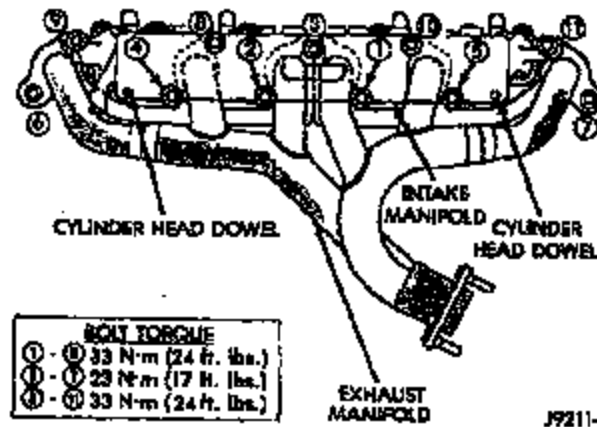
05011970AB

Brake Pad Set - Rear

REPAIR PROCEDURE:

1. Raise the hood and remove some of the brake fluid from the master cylinder. This will prevent fluid from overflowing when the caliper pistons are positioned.
2. Raise the vehicle on a hoist.
3. Remove the rear wheel and tire assemblies.
4. Bottom the caliper piston in the bore by prying the caliper over.
5. Remove the rear brake calipers. Support the calipers by tying them up to a suspension component. Do not allow the calipers to hang from a flex hose or damage to the hoses may result.
6. Remove the brake pads and support springs from the caliper assemblies.
7. Install the new brake pads, p/n 05011970AB, onto the calipers.
8. Lubricate the slide pins and bushings with brake grease, Dow Corning part number G807 or equivalent.
9. Install the caliper to the anchor.
10. Install the slide pins and tighten them to 40 Nm (30 ft. lbs.).
11. Install the support spring.
12. Operate the brakes to seat the pistons.
13. Check and adjust the fluid level.
14. Install the wheel and tire assemblies.

## Exhaust Manifold: Specifications



This is what WE  
Did to eliminate  
The Squeal.

NOTE: If the manifold is being replaced, ensure all the fitting, etc. are transferred to the replacement manifold.

1. Install a new engine exhaust/intake manifold gasket over the alignment dowels on the cylinder head.
2. Position the engine exhaust manifold to the cylinder head. Install fastener Number 3 and finger tighten at this time.
3. Install intake manifold on the cylinder head dowels.
4. Install washer and fastener Numbers 1, 2, 4, 5, 8, 9, 10 and 11.
5. Install washer and fastener Numbers 6 and 7.
6. Tighten the fasteners in sequence and to the specified torque.
  - ^ Fastener Numbers 1 through 5, Tighten to 33 Nm (24 ft. lbs.) torque.
  - ^ Fastener Numbers 6 and 7, Tighten to 31 Nm (23 ft. lbs.) torque.
  - ^ Fastener Numbers 8 through 11, Tighten to 33 Nm (24 ft. lbs.) torque.

Per Jim at Ridge Engine  
He read about this problem in an Engine Rebuilders Mag  
(As a side note to the article) two years ago.

Chris at Charlie's Dodge (Parts) worked for B.G. Jeep  
and saw this problem many times

Yark's service mgr. Dave Emerine also indicated they  
had seen this problem many times.

CONDITION	POSSIBLE CAUSE	CORRECTION
<b>EXCESSIVE EXHAUST NOISE</b>	<ol style="list-style-type: none"> <li>1. Leaks at pipe joints.</li> <li>2. Burned or blown out muffler.</li> <li>3. Burned or rusted-out exhaust pipe.</li> <li>4. Exhaust pipe leaking at manifold flange.</li> <li>5. Exhaust manifold cracked or broken.</li> <li>6. Leak between exhaust manifold and cylinder head.</li> <li>7. Restriction in muffler or tailpipe.</li> <li>8. Exhaust system contacting body or chassis.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten clamps at leaking joints.</li> <li>2. Replace muffler assembly. Check exhaust system.</li> <li>3. Replace exhaust pipe.</li> <li>4. Tighten connection attaching nuts.</li> <li>5. Replace exhaust manifold.</li> <li>6. Tighten exhaust manifold to cylinder head stud nuts or bolts.</li> <li>7. Remove restriction, if possible. Replace muffler or tailpipe, as necessary.</li> <li>8. Re-align exhaust system to clear surrounding components.</li> </ol>
<b>LEAKING EXHAUST GASES</b>	<ol style="list-style-type: none"> <li>1. Leaks at pipe joints.</li> <li>2. Damaged or improperly installed gaskets.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten/replace clamps at leaking joints.</li> <li>2. Replace gaskets as necessary.</li> </ol>

## Exhaust System: Description and Operation

### Exhaust System

**WARNING:** THE NORMAL OPERATING TEMPERATURE OF THE EXHAUST SYSTEM IS VERY HIGH. THEREFORE, NEVER WORK AROUND OR ATTEMPT TO SERVICE ANY PART OF THE EXHAUST SYSTEM UNTIL IT IS COOLED. SPECIAL CARE SHOULD BE TAKEN WHEN WORKING NEAR THE CATALYTIC CONVERTER. THE TEMPERATURE OF THE CONVERTER RISES TO A HIGH LEVEL AFTER A SHORT PERIOD OF ENGINE OPERATION TIME.

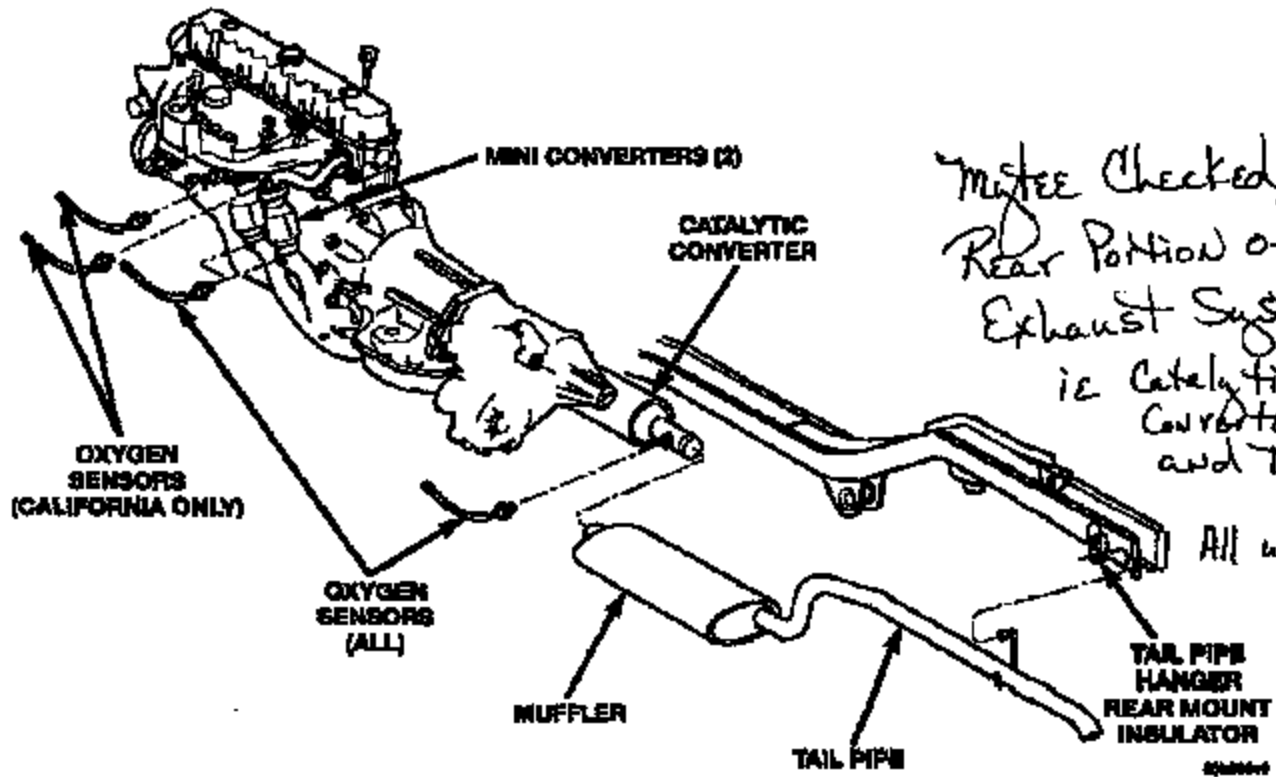


Fig. 1 Exhaust System—4.0L

Fig. 1

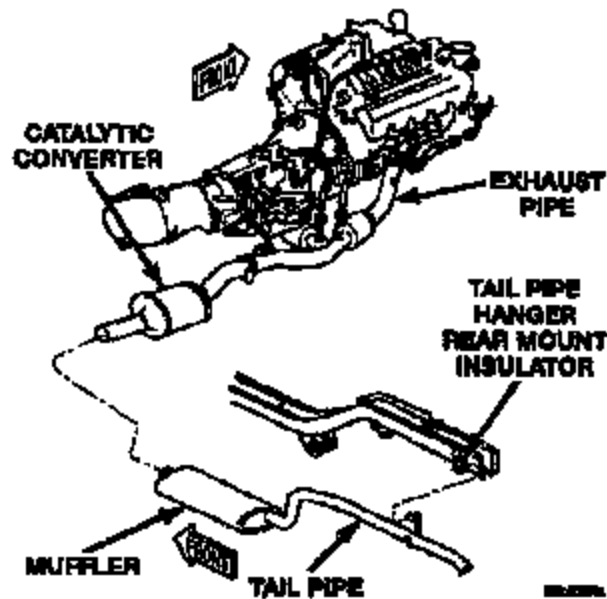


Fig. 2 Exhaust System—4.7L

Fig. 2

The basic exhaust system consists of exhaust manifold(s), exhaust pipe with oxygen sensors, catalytic converter(s), heat shield(s), muffler and tailpipe.

The exhaust system uses a single muffler with a welded tail pipe (Figs. 1 and 2).

The 4.0L and 4.7L Federal Emissions vehicles use a single catalytic converter, while the California models use two additional mini catalytic converters in line with the exhaust pipe below the exhaust manifolds.

The 4.0L and 4.7L exhaust manifolds are equipped with ball flange outlets to assure a tight seal and strain free connections.

The exhaust system must be properly aligned to prevent stress, leakage and body contact. If the system contacts any body panel, it may amplify objectionable noises originating from the engine or body.

When inspecting an exhaust system, critically inspect for cracked or loose joints, stripped screw or bolt threads, corrosion damage and worn, cracked or broken hangers. Replace all components that are badly corroded or damaged. DO NOT attempt to repair.

When replacement is required, use original equipment parts (or their equivalent). This will assure proper alignment and provide acceptable exhaust noise levels.

**CAUTION:** Avoid application of rust prevention compounds or undercoating materials to exhaust system floor pan heat shields. Light overspray near the edges is permitted. Application of coating will result in excessive floor pan temperatures and objectionable fumes.

## Automatic Transmission/Transaxle: Description and Operation

### General Information

42RE TRANSMISSION - *YOUR TRANSMISSION*

The 42RE is a four speed fully automatic transmission (Fig. 1) with an electronic governor. First through third gear ranges are provided by the clutches, bands, overrunning clutch, and planetary gear sets in the transmission. Fourth gear range is provided by the overdrive unit that contains an overdrive clutch, direct clutch, planetary gear set, and overrunning clutch. The overdrive clutch is applied in fourth gear only. The direct clutch is applied in all ranges except fourth gear. The 42RE is equipped with a lock-up clutch in the torque converter. The torque converter clutch is controlled by the Powertrain Control Module (PCM). The torque converter clutch is hydraulically applied and is released when fluid is vented from the hydraulic circuit by the Torque Converter Control (TCC) solenoid on the valve body. The torque converter clutch engages in fourth gear, and in third gear when the O/D switch is OFF. Engagement occurs when the vehicle is cruising on a level plane after the vehicle has warmed up. The torque converter clutch disengages when the accelerator is applied. The torque converter clutch feature increases fuel economy and reduces the transmission fluid temperature. The 42RE transmission is cooled by an integral fluid cooler inside the radiator.

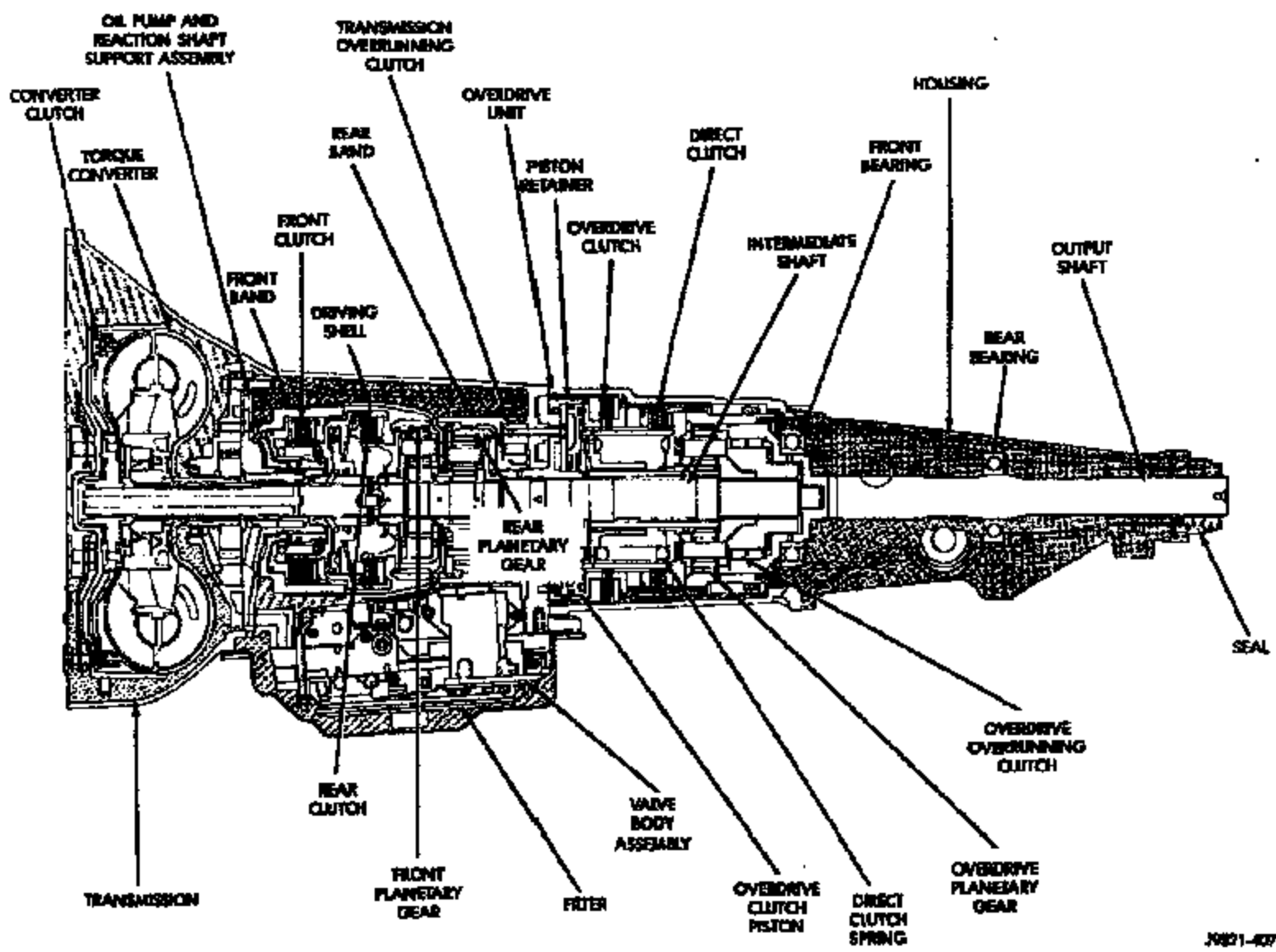
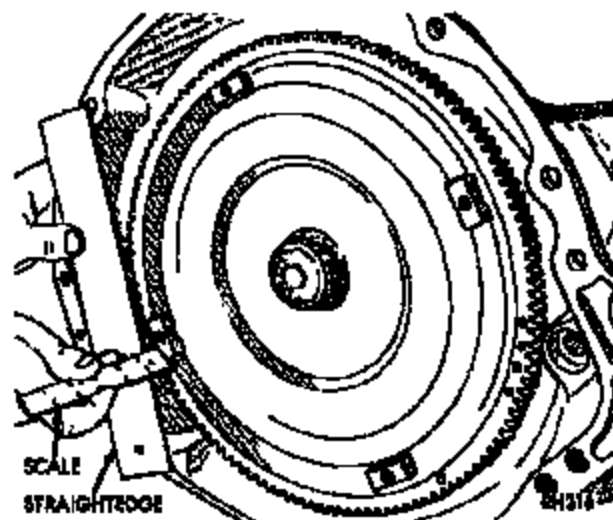


Fig. 1

Fig. 1 42RE Transmission

J821-407



**Fig. 23 Checking Torque Converter Seating—Typical**

Fig. 23

## **Automatic Transmission/Transaxle: Description and Operation**

### **Causes of Burnt Fluid**

Burnt, discolored fluid is a result of overheating which has two primary causes.

1. A result of restricted fluid flow through the main and/or auxiliary cooler. This condition is usually the result of a faulty or improperly installed drainback valve, a damaged main cooler, or severe restrictions in the coolers and lines caused by debris or kinked lines.
2. Heavy duty operation with a vehicle not properly equipped for this type of operation. Trailer towing or similar high load operation will overheat the transmission fluid if the vehicle is improperly equipped. Such vehicles should have an auxiliary transmission fluid cooler, a heavy duty cooling system, and the engine/axle ratio combination needed to handle heavy loads.

**Vehicle: All Technical Service Bulletins**  
**Power Door Locks/Windows/Mirrors/RKE - Erratic Operation**

NUMBER: 08-03-00

GROUP: Electrical

DATE: Feb.11,2000

**THIS BULLETIN SUPERSEDES TECHNICAL SERVICE BULLETIN NUMBER 08-47-98, DATED JUNE 26, 1998, WHICH SHOULD BE REMOVED FROM YOUR FILES AND NOTED IN THE TECHNICAL SERVICE BULLETIN BOUND MANUAL, PUBLICATION NUMBER 81-699-99003. THE REVISIONS ARE HIGHLIGHTED WITH \*\*ASTERISKS\*\*.**  
**THE REVISION INVOLVES THE ADDITION OF ERRATIC OPERATION OF THE POWER MIRRORS TO THE SYMPTOMS**

**SUBJECT:**

**\*Erratic operation of the power door locks, remote keyless entry system, power windows or power mirrors\*\*.**

**OVERVIEW:**

**This bulletin involves Flash Re-programming the Body Control Module and resetting the Remote Keyless Entry Module.**

**MODELS:**

**999 (WJ) Grand Cherokee**

**SYMPTOM/CONDITION:**

**\*Intermittent and erratic operation of the power door locks, remote keyless entry (RKE), power mirrors and power windows. This can be the result of a communication error in the Door Switch Module located in the passengers' door. Revised programming in the Body Control Module has been developed to address this issue\*\*.**

**DIAGNOSIS:**

**Due to the intermittent nature of this condition, diagnosis may be difficult. If customers complain of intermittent or erratic operation of any of the systems listed above, perform the**

**EQUIPMENT REQUIRED:**

CH6000	Scan Tool (DRB III®)
CH7035	General Purpose Interface Bus Cable (GPIB)
CH700017001	J1962 Cable

**REPAIR PROCEDURE:**

**THIS REPAIR IS COMPATIBLE WITH DAIMLERCHRYSLER'S MOBILE SERVICE PROGRAM AND DOES NOT REQUIRE HOIST OR OTHER FULL SERVICE FACILITY SPECIAL EQUIPMENT.**

1. Connect the DRB III to the MDS II using cables CH 7023 and 7038.
2. From the DRB III main menu select "2" Connect the MDS II.
3. From the DRB III select "1 ", MDS Diagnostics or DRB update.
4. From the diagnostic menu, select "Vehicle Controller Program".
5. From the Controller Programming options select "DRB III Stand Alone Programming By Vehicle Description".
6. From the Stand Alone Vehicle Description Menu input the vehicle information.
7. Select Body Control Module Flash.
8. Select "F4" and the DRB III will display" 3 of 3 Updates Loaded, 1 New Part Number Loaded Display Part Numbers (Y/N).

Select "No".

- 1. Disconnect DRB III from MDS I.
- 2. Connect the DRB III to the vehicle diagnostic connector, using cable CH 7001.
- 3. Turn the ignition key ON (engine OFF).
- 4. From the Main Menu, select - "2"- "Connect MDS I or MDS II".
- 5. Select - "1" - " MDS Diagnostics or DRB Update".
- 6. Select "Yes" to "Reprogram Vehicle".
- 7. Select "Page Fwd" to begin programming.
- 8. Select "Enter" on the DRB III.
- 9. The DRB III will display the bar graph indicating percentage complete. Turn the Ignition key off and then on when instructed.
- 10. The DRB III will display "BCM Reprogramming Was Successful".
- 11. When the DRB III asks, " Do You Want To Reprogram another Vehicle", select "No".

**NOTE:**

LABELS INDICATING THE NEW PART NUMBER ARE NOT REQUIRED FOR BODY CONTROLLER REPROGRAMMING.

- 1. If any error codes are present, the Door Switch Module will require resetting to complete the repair. Remove fuse 12 from the Power Distribution Center for 10 seconds and install it in the same location. This will remove power from the module and reset it when power is applied.

**POLICY:** Reimbursable within the provisions of the warranty.

**TIME ALLOWANCE:**

Labor Operation No: 08-19-60-90 ..... 0.2 H

**FAILURE CODE:** FM - Flash Module

**THE ATTACHMENTS TO THIS  
DOCUMENT HAVE BEEN REMOVED  
TO PROTECT UNWARRANTED  
INVASION OF PERSONAL PRIVACY  
PURSUANT TO EXEMPTION 6 OF  
THE FREEDOM OF INFORMATION  
ACT (FOIA), 5 U.S.C. 552(b)(6).**