

Service Information

Mazda Motor Corporation

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Category M	Repair Guidance	Ref. No. R044/14	Page 1 of 5
Coverage <input type="checkbox"/> Distributor only <input checked="" type="checkbox"/> Please inform your dealers		Date Issued May 28, 2014	
Please convey this information to your <input type="checkbox"/> Director <input checked="" type="checkbox"/> General Manager <input checked="" type="checkbox"/> Warranty Dept. <input checked="" type="checkbox"/> Parts Dept. <input checked="" type="checkbox"/> Training Dept. <input checked="" type="checkbox"/> Field Rep.		Date Revised	
Applicable Model CX-5 (KE) with 4WD		Applicable Countries or Specifications Europe spec	

Subject: Chattering / Rattling Noise from Rear of the Vehicle (Coupling Unit).

DESCRIPTION

While driving at low speeds, some vehicles may exhibit a chattering / rattling noise from rear of the vehicle (around the coupling unit).

CAUSE

During the assembly process at plant, the housing of the coupling unit may have been installed incorrectly (diagonally) to the housing of the rear differential. In this case, sliding resistance of the bearing in the coupling unit may increase causing the noise.

MASS PRODUCTION CHANGE

Assembly process has been changed.

BEGINNING VIN & DATE OF MODIFICATION

EU spec

JMZ KE **** ** 247844 September 16, 2013

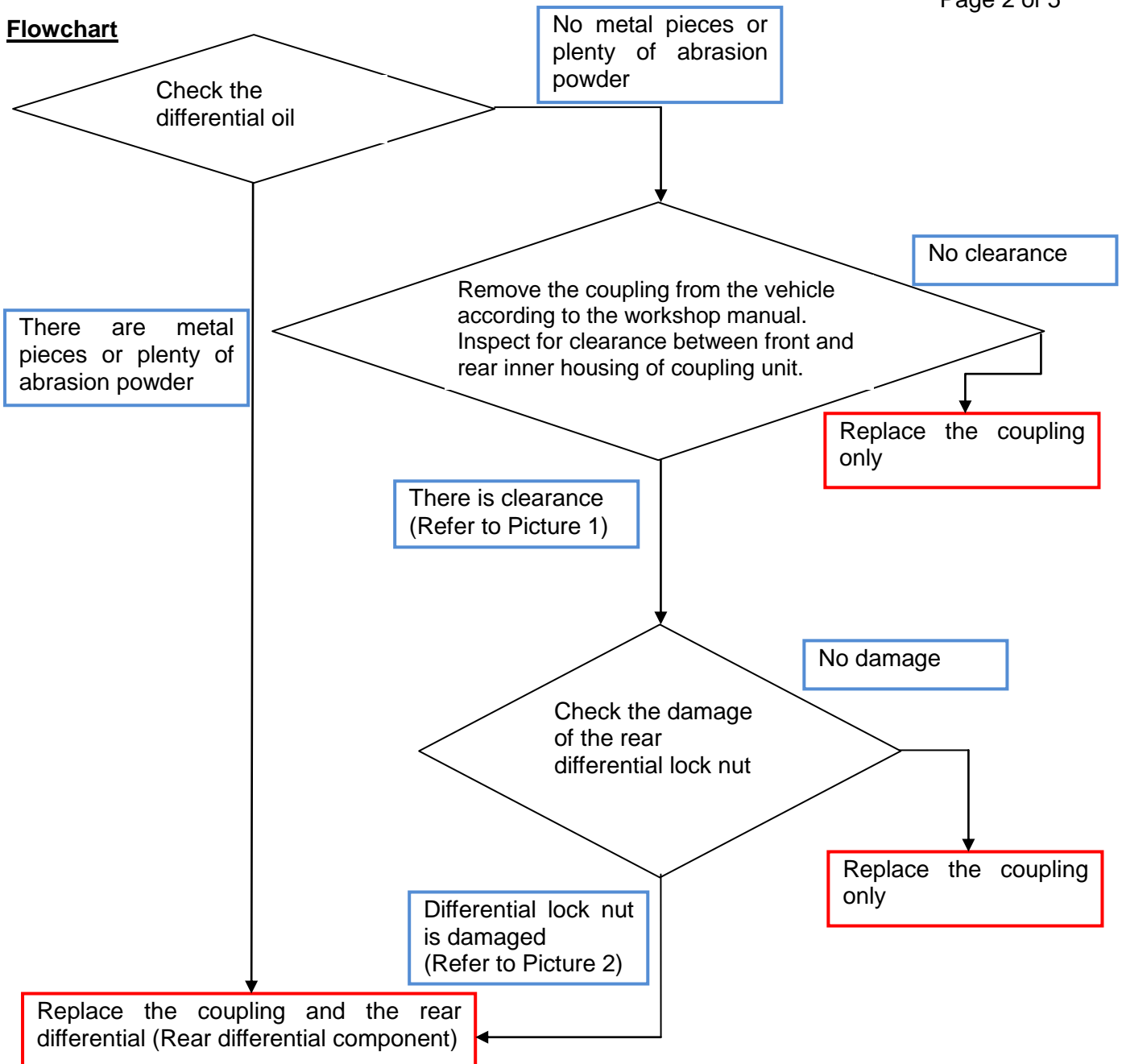
UK spec

JMZ KE **** ** 163180 September 16, 2013

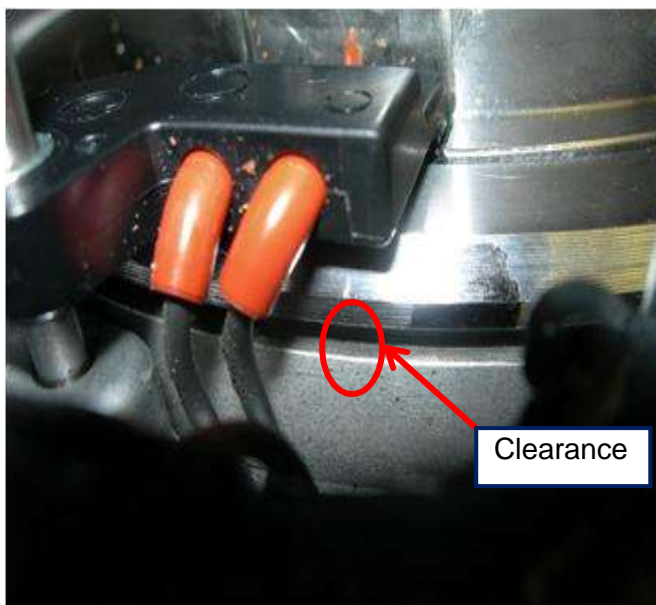
REPAIR PROCEDURE

1. Lift up the vehicle.
2. Verify if the noise is heard from the coupling unit when the vehicle speed is approximately 5 to 10 km/h by the speedometer reading.
Note: Refer to the attached video of noise sample.
3. If the noise is present, drain the differential oil then verify if metal pieces or a plenty of abrasion powder are present in the oil.
Refer to the flowchart on the next page for proper diagnosis.

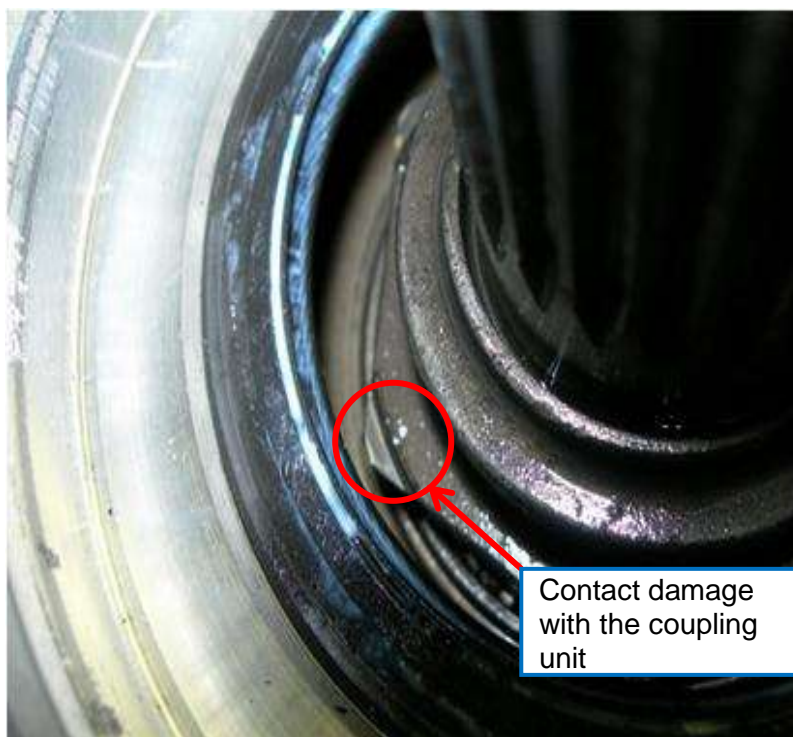
Flowchart



Picture 1:

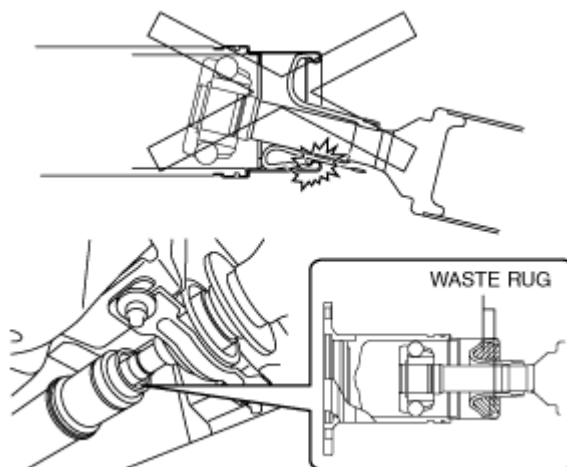


Picture 2:



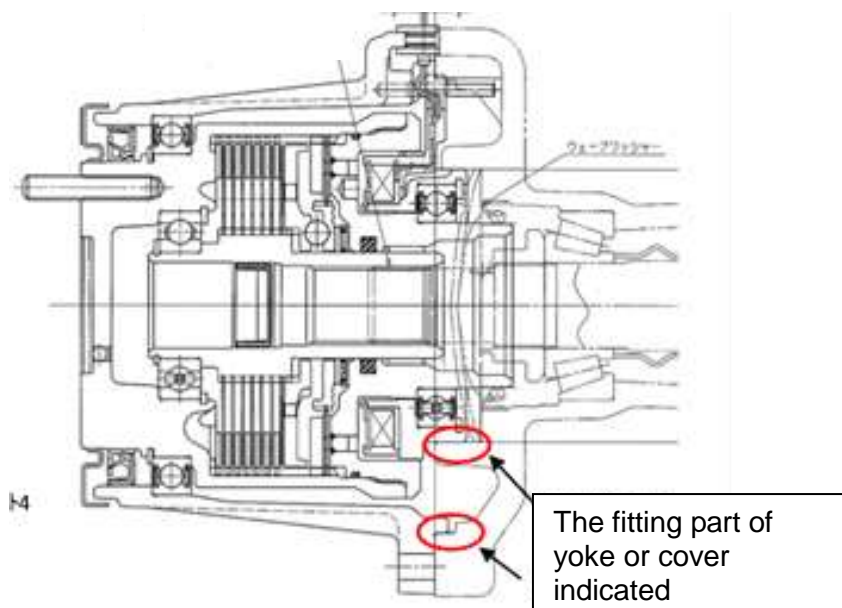
CAUTION 1:

If the constant velocity joint angle is excessive during propeller shaft removal/installation, the constant velocity joint boot may be damaged when contacting the metallic cover. Protect the constant velocity joint boot by inserting a shop rag between the boot and the metallic cover.

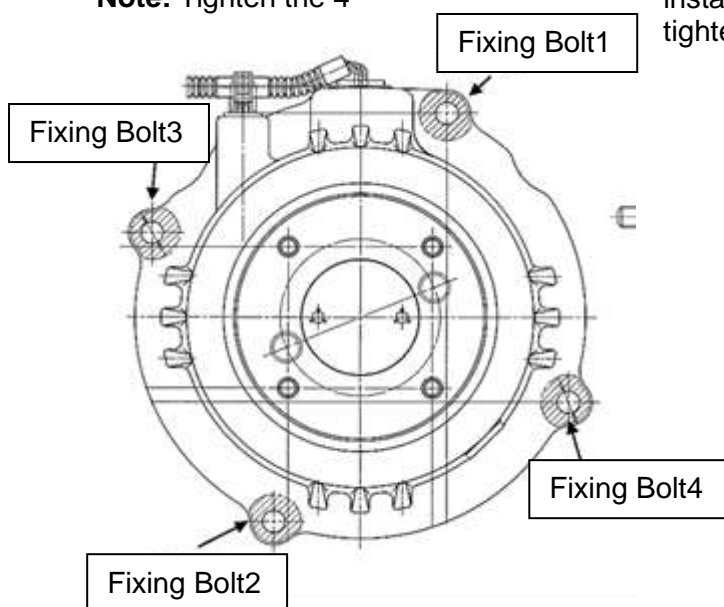


CAUTION 2: Coupling Unit Installation Note

1. Install the coupling unit straight to the rear differential in order to prevent any damage by jamming (inclined installation) to the fitting part of yoke or cover indicated in red circle.



2. Temporarily tighten 4 installation bolts so they will equally seat.
3. Then equally tighten the 4 installation bolts little by little so that the coupling unit would not incline.
Note: Tighten the 4 installation bolts little by little by repeating the tightening order crosswise as shown in the figure.



4. Verify that there is no clearance between the aligned surfaces of the coupling unit and the rear differential. Tighten the 4 installation bolts with torque 22.6 Nm~26.4 Nm.

PART INFORMATION

Part Number	Part Name	Q'ty	Remark
KAT1 27 020A	Rear differential component	1	-
KE01 27 97X	Coupling unit	1	-
PE23 40 305	Gasket	2	Not reusable part
9994 61 000	Nut	4	
D651 33 042A	Lock Nut	2	
RTA1 25 421	C-Clip	2	

WARRANTY INFORMATION

Replacing the rear differential component (including the coupling unit)

Assembly group	M - Front and rear axle	
Subassembly group	04 - DIFFERENTIAL (EXCEPT FRONT WHEEL DRIVE)	
Symptom Code	82	
Damage Code	9G	
Causal Part No.	KAT1 27 020A	
Q'ty	1	
Operation No.& Labor Hours	XXK66CRX, 3.0Hrs. Rear differential component R&R	SKYACTIV-G 2.0 and 2.5
	XXK66DRX, 2.7Hrs. Rear differential component R&R	SKYACTIV-D 2.2
Period Covered	Normal Warranty Period	
Prior Approval necessary	YES	

Replace the coupling unit

Assembly group	M - Front and rear axle	
Subassembly group	04 - DIFFERENTIAL (EXCEPT FRONT WHEEL DRIVE)	
Symptom Code	82	
Damage Code	9G	
Causal Part No.	KE01 27 97X	
Q'ty	1	
Operation No.& Labor Hours	XXK66ERX, 1.8Hrs Coupling Unit, R&R	SKYACTIV-G 2.0, 2.5 and SKYACTIV-D 2.2
Period Covered	Normal Warranty Period	

Ryu Shimizugawa
Manager, Technical Information Gr.
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1D40361219 (MC Internal Use)