

7G-DCT: Scratching noise when changing gear from D to R with transmission cold

Topic number	LI27.50-P-064440
Version	1
Design group	27.50 Gear assembly
Date	07-07-2016
Validity	All vehicles of BR 176, BR 117, BR 156, BR 242, BR 245, BR 246 with transmission 724.0
Reason for change	
Reason for block	

Complaint:

A scratching noise when changing gear from D to R with the transmission cold.

Cause:

Reverse gear synchronizer ring may be outside of tolerance.

Check whether the vehicle is affected by the scratching noise:

Accelerate the cold vehicle to 30 km/h (19mph) (2nd gear must be engaged). Slow the vehicle with the brakes and at 7 km/h (4 mph) select reverse gear.

Remedy:

Please replace the complete sub transmission output shaft 2 (3rd, 6th, 7th and reverse gear). Make sure that the oil restrictor (A 246 372 18 50) is installed in the replacement output shaft; if not, order one at the same time.

Symptoms
Power transmission / Automatic transmission / Function / Engaging process
Power transmission / Automatic transmission / Noises / General
Power transmission / Automatic transmission / Automatic transmission operation / Drive position selection / Noises / Scratching

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 246 260 27 01			Output shaft	1	724.016	X
A 246 260 95 00			Output shaft	1	724.015	X
A 246 260 69 20			Output shaft	1	724.021,724.011, 724.004	X
A 246 260 42 20			Output shaft	1	724.003	X
A 246 260 43 20			Output shaft	1	724.002	X
A 246 260 70 20			Output shaft	1	724.001	X
A 246 260 68 20			Output shaft	1	724.002 with code A69 (Carbon synchronizer)	X

XENTRY TIPS

A 246 260 67 20			Output shaft	1	724.003 with code A69 (Carbon synchronizer)	X
A 246 260 67 20			Output shaft	1	724.020	X
A 246 260 85 00			Output shaft	1	724.003 with code 28A (Uprated synchronizer body) +A69 (Carbon synchronizer)	X
A 246 260 36 00			Output shaft	1	724.003 with code 28A (Uprated synchronizer body)	X
A 246 260 84 00			Output shaft	1	724.004, 724.011 with code 28A (Uprated synchronizer body)	X

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			27389 46	In the dealer text note please state "Reverse gear scratching"
54-0650	GROUND LINE			
54-1011	SHORT TEST			
83-1762	A/C DRAIN FILL			
01-2800	ENGINE/TRANS R&R			
27-4353	OUTPUT SHAFT R&R			
27-4354	DISASSEMBLE/ ASSEMBLE OUTPUT SHAFT			includes bearings and oil seals

WIS-References			
Document number	Title	Note	Allocation
AR27.50-P-0560NKB	Disassemble/assemble output shaft		Remedy