

Retail Operator General Manager	Sales New Motorcycles	Sales Pre-Owned Motorcycles	Business Manager (F&I)	Service	Parts & Accessories	Administration
Date: August 2012	Source: SI 08/2012					
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BMW Motorrad USA

Service Information Bulletin

Subject: Optimization of Engine Starting

Models: G 650 Xcountry (K15), G 650 GS (R13/31), G 650 GS (R13/40), G 650 GS Sertão (R13/40).

Details: BMW Motorrad has ascertained that, on the models listed above, there is a possibility of the engine refusing to start even though the starter motor turns.

Causes:

A) Shortened length of the decompression lever in the initial cool-down phase of the engine from operating temperature.

The effect of the decompression mechanism on the exhaust camshaft is influenced by differences in the cool-down rates and changes in length of various components. During the engine's cool-down phase the length of the decompression lever is shorter than usual. Consequently, compression pressure remains high and the starter motor cannot crank the engine fast enough to start.

This phenomenon can typically occur after a short stop, for example while refueling. Once the engine has had sufficient time to cool down (> 30 minutes) it can be restarted (if the battery has not been drained by repeated start attempts).

B) Excessive exhaust-valve clearance (engine cold)

Excessive exhaust-valve clearance reduces the amount the decompression lever opens the corresponding exhaust valve. Consequently, compression pressure remains high and the starter motor cannot crank the engine fast enough to start.

Motorcycles affected: All K15, R13/31, R13/40 models with BMW Loncin engine.

Production Solution: From engine number 61712400 and later (vehicle production from approx mid-June 2012 onward) an optimized decompression lever (new part number 11 31 8 540 965) has been integrated into series production.

This modified decompression lever reliably limits compression pressure for engine starting to the requisite 8-10 bar in all circumstances.

The differences between the old (p/n 11 31 7 700 209) and new (p/n 11 31 8 540 965) decompression levers cannot be distinguished visually. Therefore they must be appropriately labeled upon receipt to avoid confusion.

As an additional measure, valve clearance of the BMW Loncin engines has been optimized in the engine production process.

Aftersales solution: In the event of a customer complaint, check the clearance of all the valves and adjust if necessary, and replace the decompression lever.

See work items 11 34 001 Checking valve clearance and 11 31 509 Replacing decompression lever on exhaust camshaft (cylinderhead cover removed) in the latest RSD (Repair and Service Data BMW Motorrad) service data DVD for detailed description.

The closing date for this measure is December 31, 2013.

Note: It is not permissible to replace batteries drained by ineffectual start attempts.

Warranty: The repair described in this bulletin is covered by the normal terms of the BMW New Motorcycle Limited Warranty or until December 31, 2013, whichever comes first.

Warranty Information:	Defect code:	11 31 93 12 00	Optimization of engine starting
	FRU code:	11 12 256	Removing/installing and sealing or replacing cylinder-head cover, See RSD for FRU amount
		11 31 509	Replacing decompression lever on exhaust camshaft, including checking valve clearances (cylinder-head cover removed), See RSD for FRU amount
		46 52 511	Removing and installing the middle stand special tool (motorcycles without center stand), See RSD for FRU amount
	Part numbers:	11 31 8 540 965	Decompression lever
		11 31 7 700 129	Spring
		11 31 7 700 344	Roller
		11 31 7 700 128	Sealing ring (timing-chain tensioner)
		11 11 2 343 010	Sealing ring (TDC locating screw)

Depending valve clearances, replace adjusting shims as necessary. Refer to ETK/EPC for part numbers.

Contact: Service and Technical Manager