

**Measure no.**

US 63308496-01

**Subject**

Gear indicator failure after changing the final drive ratio.

**Status date (mm/dd/yy)**

4/10/17

**Status**

Accepted

**Organization**

US, MOT

**Date created (mm/dd/yy)**

4/10/17

**Created by**

Carsten Gruetzmacher

**PQM Problem reference****Release date (mm/dd/yy)****Approved by****Dealer release**

Allow automatic release

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**Vehicles affected****E series**

K70/12 K72/12 K73/12 K75/12

**Engine****Body****Production period (from/to)**

(mm/dd/yy)

**Comment on production period****Feedback (all cases relating to****measure up to) (mm/dd/yy)**

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**Complaint**

Frequent failure of gear indicator and engine running issues after changing the final drive ratio (drive chain and sprockets) on K7X bikes with electronic throttle control.

The guided diagnosis shows no fault in the Gear position sensor (potentiometer), cables or connectors, resulting in a recommendation of the replacement of the engine control unit (DME).

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**Cause**

Changing the final drive gear ratio leads to gear indicator and engine running issues.

The DME checks the signal of the gear position sensor (potentiometer) against the gear speed (calculated from the road speed and engine speed).

Therefore this plausibility check inevitably detects a fault, when the final drive gear ratio is changed.

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**Measure**

Remove the fitted drive chain and sprockets and install the original gear ratio.

Do not exchange the;

- 1) DME
- 2) Gear Position sensor (potentiometer)
- 3) Wiring harness parts
- 4) Instrument cluster

Due to a software update after mid-2017, it should be possible to change the final drive gear ratio without causing gear indicator/engine running issues.

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**Complaint**

<b>Fault location</b>	<b>Fault type</b>	<b>Fault place</b>
† Gear indicator	Display: incorrect / implausible	

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**Cause**

<b>#</b>	<b>Fault location</b>	<b>Fault type</b>	<b>Fault place</b>
† 1	33/82 Traction mechanism, chain, belt pinion		
	<b>Repair Task</b>	<b>Special Clearance</b>	<b>Area</b>
		No	Powertrain

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**Fault code**

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**Progman / DIS / ISTA / ISTA/P**

<b>System</b>	<b>State</b>	<b>Version</b>
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