

Measure no.

US 64520462-03

Subject

Telescopic Fork Noise

Status date (mm/dd/yy)

10/23/18

Status

Accepted

Organization

US, MOT

Date created (mm/dd/yy)

10/23/18

Created by

Robert Karl

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

Allow automatic release

Vehicles affected**E series**

K23 K33

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

(mm/dd/yy)

Comment on production period**Feedback (all cases relating to**

measure up to) (mm/dd/yy)

/

Complaint

A "Clacking" noise can be heard while driving over rough uneven surfaces with fast compression and a louder "clacking" noise can be heard when strongly actuating the front forks at a standstill.

A video demonstrating this noise is attached to the PuMA Measure in PuMA.

Cause

Hydrostops (hydraulic spring travel limiters) are installed in these telescopic forks to prevent the forks from breaching when fully compressed to prevent damage to the mechanical components.

In the final tenth of the compression stroke of the spring travel, the piston of the hydrostop moves into the auxiliary damper unit and closes it. The oil can then only flow from the hydrostop damper unit through a small gap which cushions the compression movement.

On the return stroke of the forks, a "clack" noise is produced. The explanation for this noise is a "cavitation" of the oil in the hydrostop. This means that on the return stroke there is a pressure drop, which then abruptly collapses again, producing this noise.

Measure

This noise is the result of the design and is not a technical fault.

Complaint

	Fault location	Fault type	Fault place
†	31/42 Tele-fork, ball joint fork, trailing arm	Rattling noise / tapping noise / knocking noise (disturbing noise).	

Cause

#	Fault location	Fault type	Fault place
† 1	31/42 Telescopic forks		
	Repair Task	Special Clearance	Area
	No action	No	Chassis and Suspension

Fault code**Progman / DIS / ISTA / ISTA/P**

System	State	Version
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