

RENAULT

Technical Note 3867A

XXXX

Subsection concerned: 09A

Shock absorber noise fault finding

Fault finding on gurgling, banging, knocking and grating of shock absorbers.

FOREWORD

- 1 - Replacing each shock absorber must be justified by the fault finding attached.
- 2 - Noises heard when descending a pavement ("Cannon shot") are linked to the shock absorber definition:
- The shock absorber is compliant: do not replace the shock absorbers.**
- 3 - Hissing noises (normal hydraulic noise of shock absorber) or cracking (micro-displacement of the tightened rear brake pads) caused when passengers get into or out of the vehicle are never linked to a shock absorber fault. Confirm the customer complaint in the same conditions **without tightening** the parking brake:
- If the noise has disappeared, the shock absorber is not to blame.**
- 4 - Noises heard during parking manoeuvres are never due to the shock absorber ->
- Do not replace the shock absorbers.**
- 5 - Before replacing any shock absorbers due to gurgling, make sure that the noise does not come from the end rubber pad, the stabiliser bar tie rods (and other ball joints) or shock absorber turret rubber mountings + check tightness of the turret and the shock absorber axle.

BEFORE WORK

- ➡ Ask the customer for information regarding the conditions in which the noise occurs as soon as the Repair Order is issued.

Description	Gurgling	Banging/Knocking	Grating
Noise similar to tapping on a small drum - beat caused by internal valves in the shock absorber	X		
Burst of small dry banging noises similar to metal impacts		X	
Noise caused by contact between a metal part and a rubber part			X
Noise appearing on a bad road or deformed road at low speed (6-19 mph (10-30 km/h)).	X	X	X

- ➡ Before any road tests, check the tightening and clearance of the shock absorber front and rear axle mountings, linkage, ball joints and bearing clearances.

NOISES AND VIBRATIONS

Fault finding

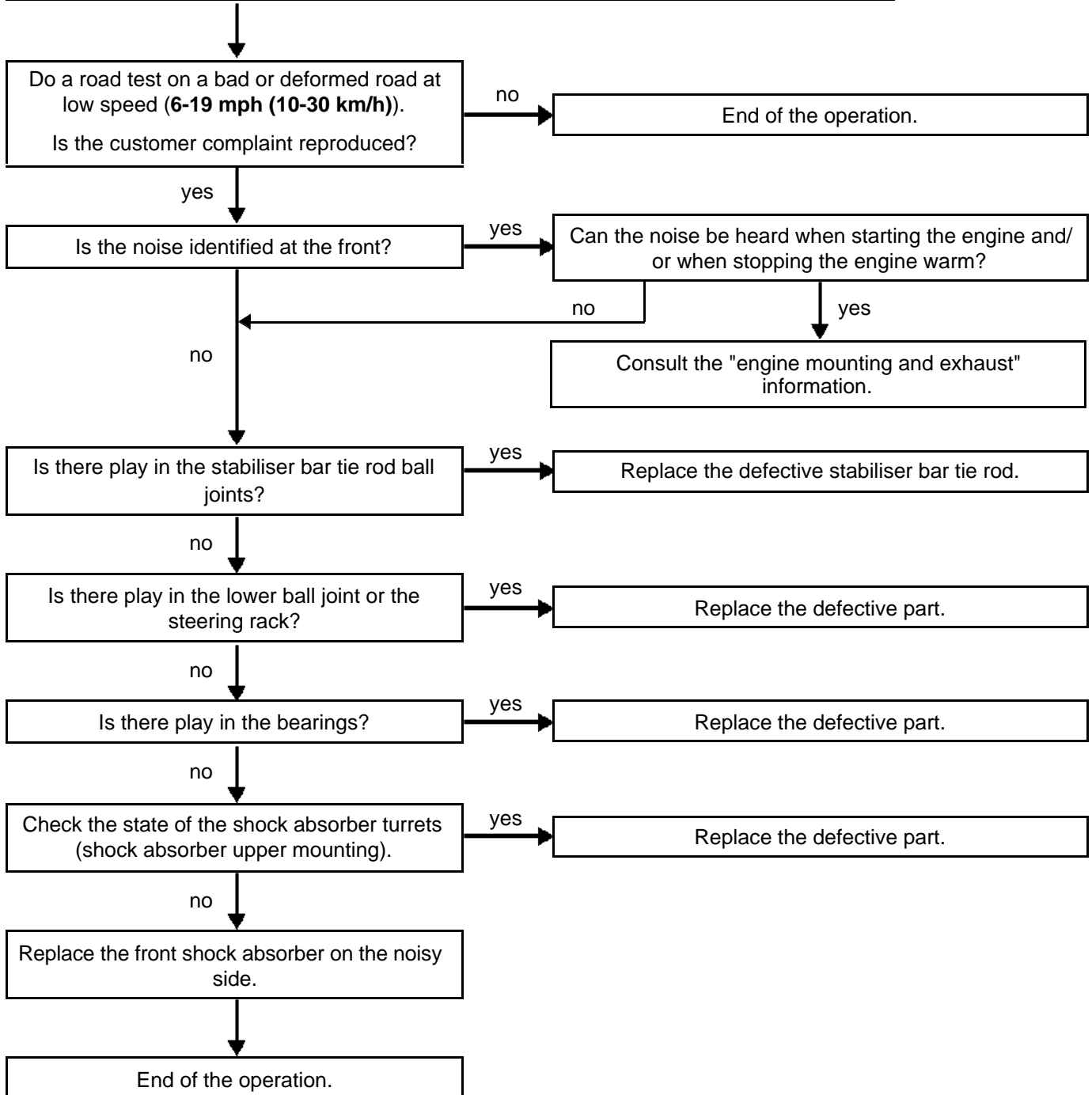
09A

Shock absorber noises

GURGLING from shock absorbers

Origin: Noise caused by shock absorber piston valves reversing their direction.

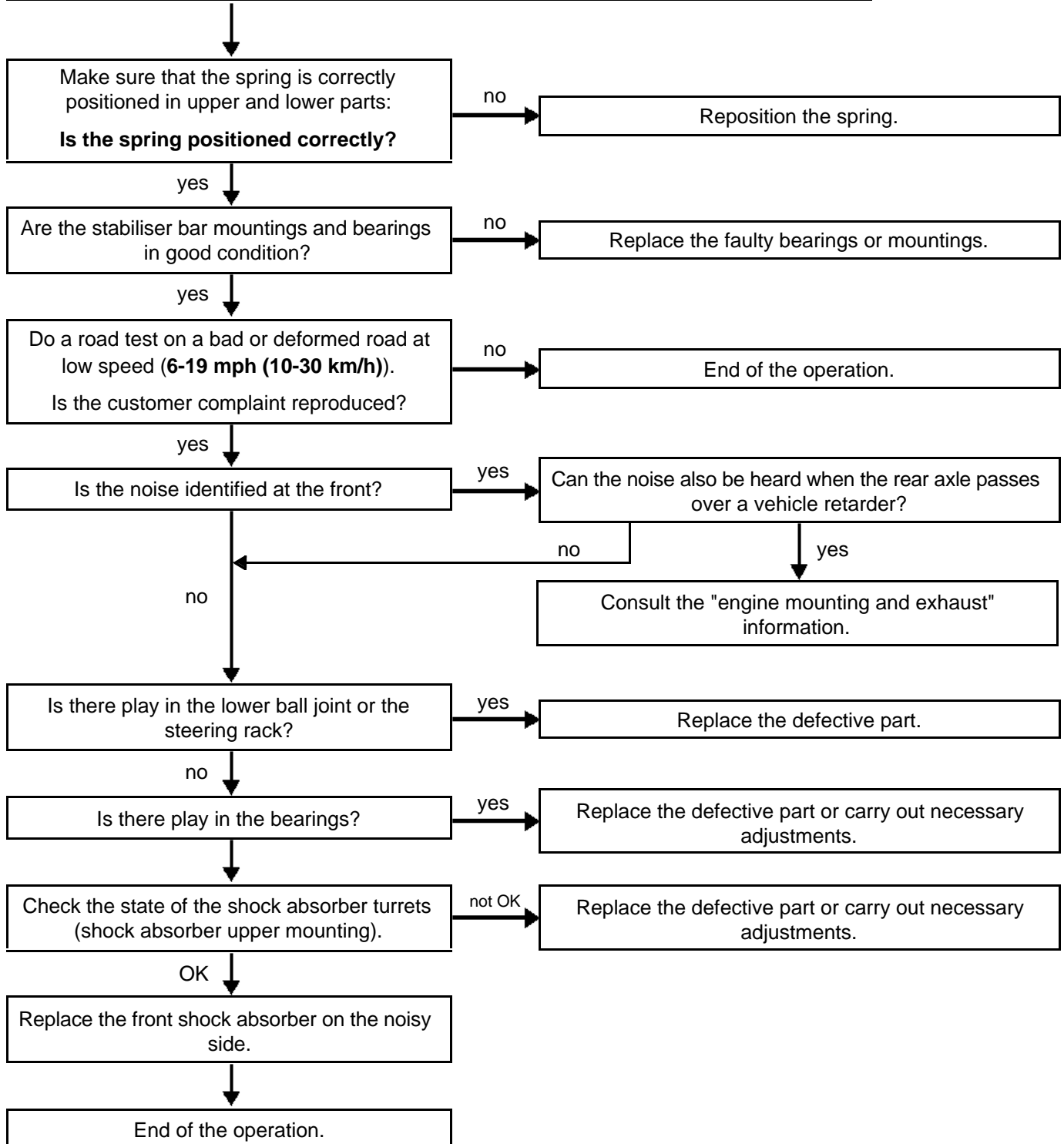
Check tightness and clearance for all the mountings, linkage and ball joints of the front and rear axles and the shock absorbers as well as the state of the sub-frame rubber mountings.



BANGING/KNOCKING from shock absorbers

Origin: Noise caused by a faulty component or incorrect assembly of the suspension.

Check tightness and clearance for all the mountings, linkage and ball joints from the front and rear axles and the shock absorbers as well as the state of the sub-frame rubber mountings.



NOISES AND VIBRATIONS

Fault finding

09A

Shock absorber noises

GRATING of shock absorbers

Origin: Noise caused by contact between a metallic part and a rubber part.

