

# RENAULT

## Technical Note 3451A

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**Affected vehicles: All types**

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**Basic manual: Technical Note 3439A and 3669A**

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**Sub-section concerned: 20A**

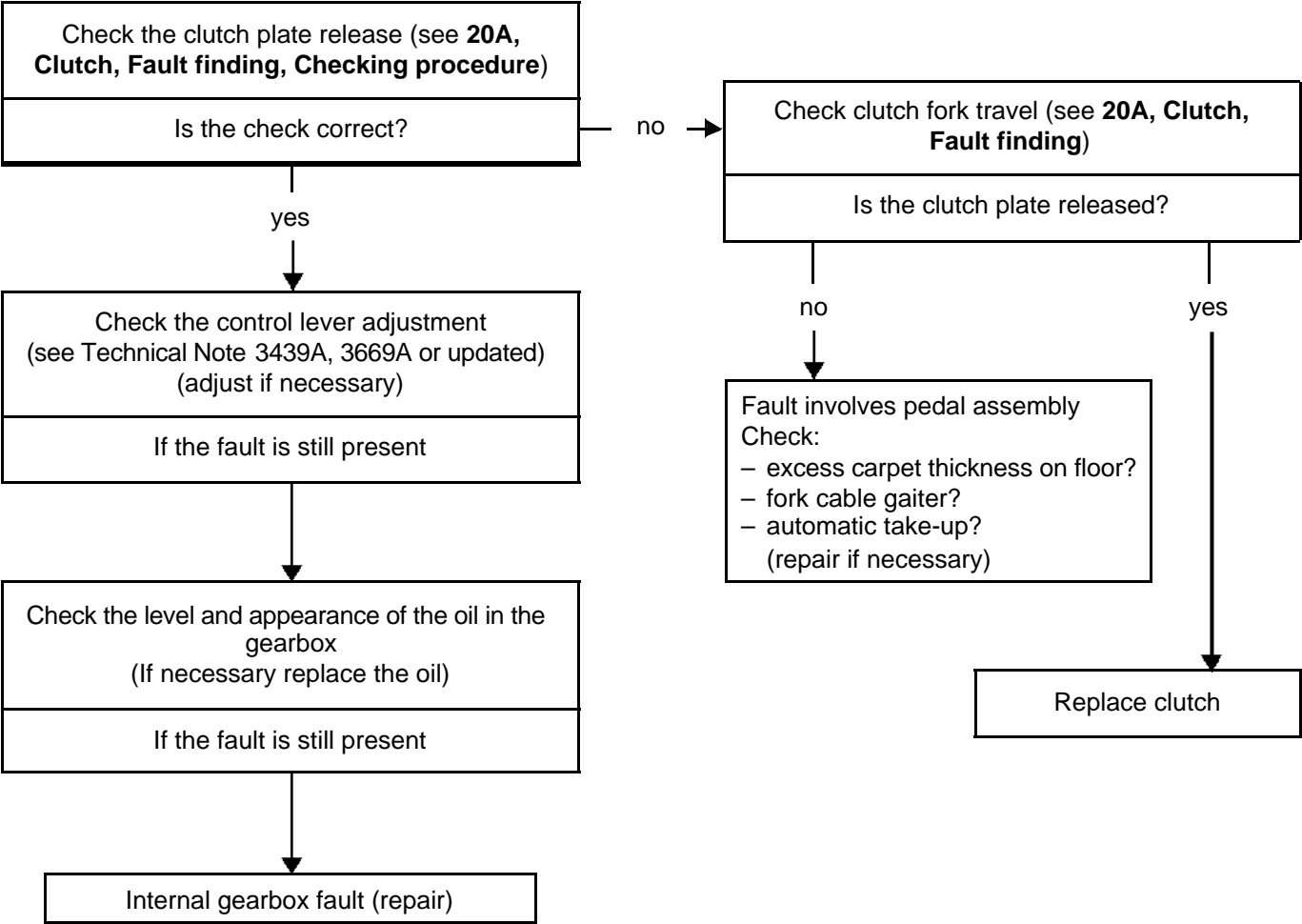
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## Clutch: Fault finding aid

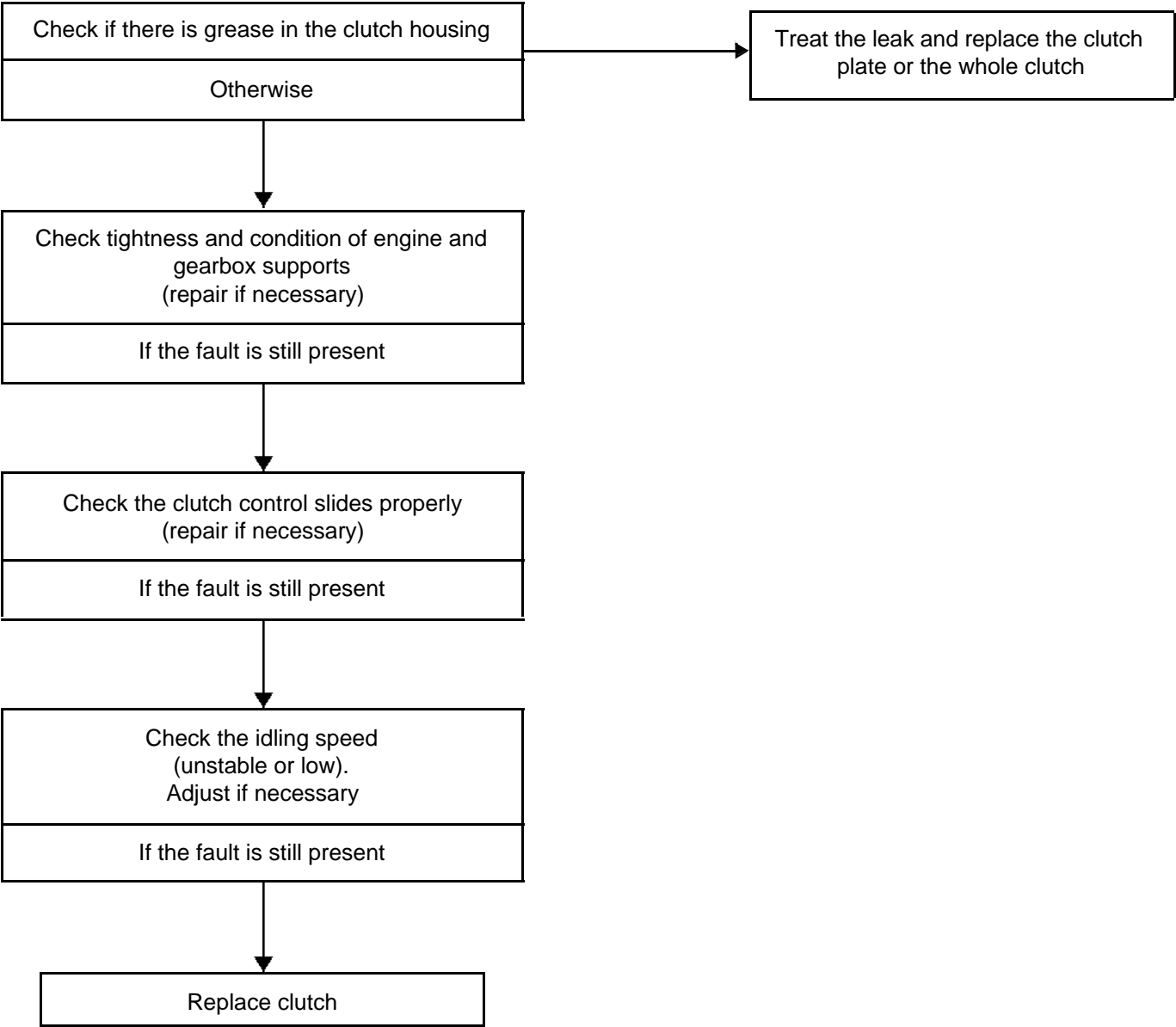
**The purpose of this Technical Note is to avoid parts being removed in after-sales without a priori technical justification.**

**It consists of a clutch fault finding aid for:  
difficulties in changing gear,  
vibrations,  
noise.**

**GEAR CHANGE PROBLEMS (grinding - stiff point)**

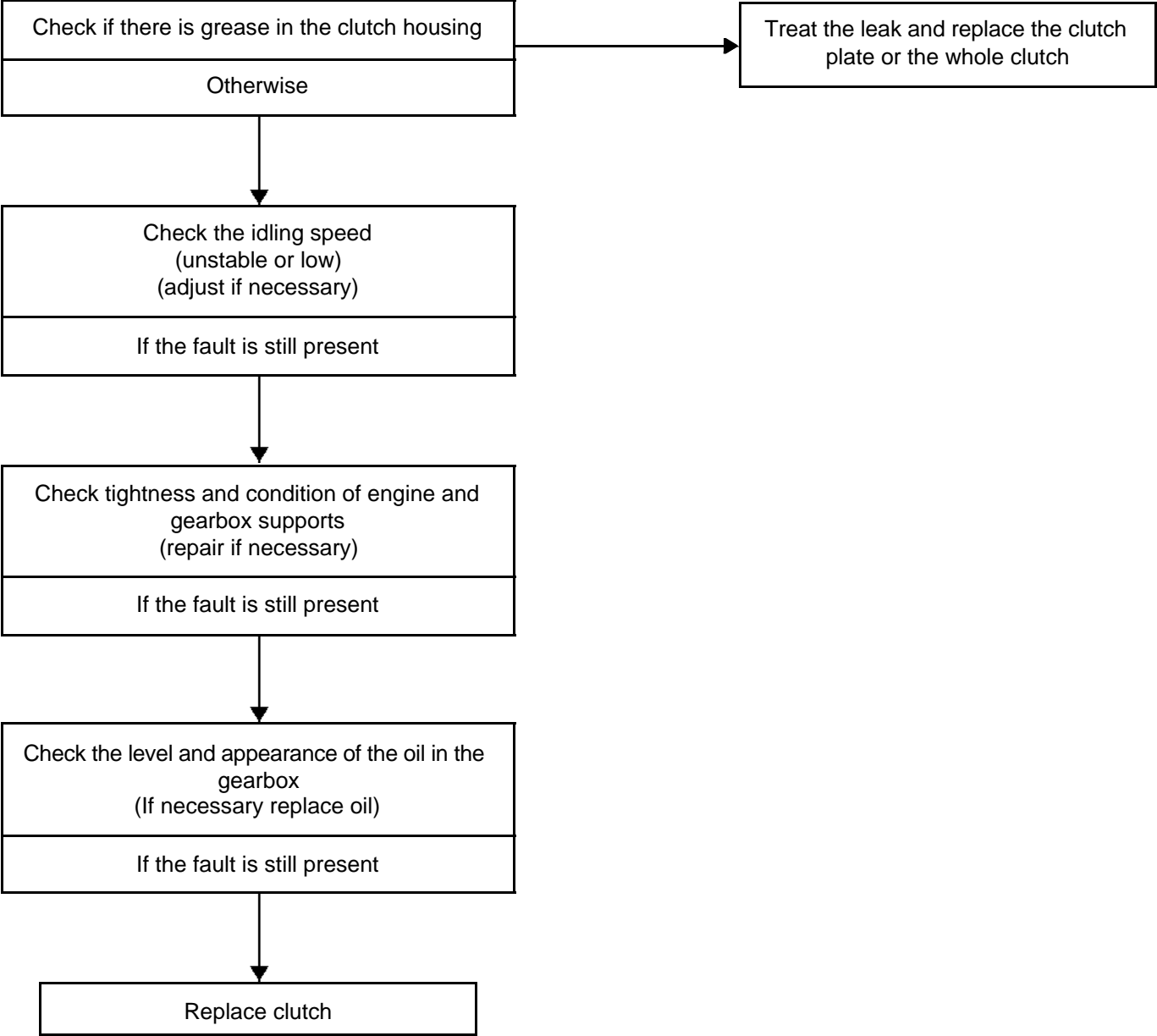


VIBRATION



**NOISE IN NEUTRAL**

**(dull, regular sound modulated by engine speed, coming from grinding of gear wheels in gearbox)**



### CHECKING PROCEDURE

#### CLUTCH PLATE RELEASE (engine warm at idle speed)

##### **Gearbox without reverse gear brake:**

- declutch,
- wait for **3 seconds**,
- select reverse gear (there should be no grinding).

##### **Gearbox with reverse gear brake or synchronisation:**

- declutch,
- partly engage 3<sup>rd</sup> gear (the objective is to position the sliding gear wheel teeth close to the dog clutches without engaging gear),
- declutch,
- wait for **3 seconds**,
- engage 3<sup>rd</sup> gear (there should be no grinding).

#### FORK TRAVEL

Using a tape measure:

- measure the distance between the top of the fork and the sleeve stop mounting in engaged position,
- repeat the same operation in declutched position,
- note the difference and compare with the correspondence table.

FORK TRAVEL CORRESPONDENCE TABLE (CONTINUED)

VEHICLES	ENGINE (dimensions in mm)					
	C1C	C1E	C1G	C1J	C2J	C3J
R19			17 MIN 20 MAX	17 MIN 20 MAX	17 MIN 20 MAX	17 MIN 20 MAX
R21					17 MIN 20 MAX	
EXPRESS	17 MIN 20 MAX	17 MIN 20 MAX		17 MIN 20 MAX	17 MIN 20 MAX	17 MIN 20 MAX
SUPER 5	17 MIN 20 MAX	17 MIN 20 MAX		17 MIN 20 MAX	17 MIN 20 MAX	17 MIN 20 MAX
TWINGO						
CLIO		17 MIN 20 MAX				
CLIO II						
KANGOO						
LAGUNA						
MEGANE						
SAFRANE						
ESPACE						
MASTER						

FORK TRAVEL CORRESPONDENCE TABLE (CONTINUED)

VEHICLES	ENGINE (dimensions in mm)					
	C3G	D7F* Controlled clutch	D7F	E5F	E6J	E7F
R19					17 MIN 20 MAX	
R21						
EXTRA						
SUPER 5						
TWINGO	17 MIN 20 MAX	17 MIN 20 MAX	17 MIN 20 MAX			
CLIO	17 MIN 20 MAX		17 MIN 20 MAX	17 MIN 20 MAX	17 MIN 20 MAX	17 MIN 20 MAX
CLIO II			27 MIN 30 MAX	17MINI 20 MAXI		
KANGOO			27 MIN 30 MAX			
LAGUNA						
MEGANE			27 MIN 30 MAX			
SAFRANE						
ESPACE						
MASTER						

FORK TRAVEL CORRESPONDENCE TABLE (CONTINUED)

VEHICLES	ENGINE (dimensions in mm)					
	E7J Ø 180	E7J Ø200	F2N	F3N	F3P	F3R
R19	17 MIN 20 MAX	17 MIN 20 MAX	17 MIN 20 MAX	17 MIN 20 MAX	17 MIN 20 MAX	
R21			17 MIN 20 MAX	17 MIN 20 MAX		
EXTRA			17 MIN 20 MAX			
SUPER 5			17 MIN 20 MAX			
TWINGO						
CLIO	25 MIN 30 MAX	17 MIN 20 MAX			17 MIN 20 MAX	
CLIO II		27 MIN 30 MAX	17 MIN 20 MAX	17 MIN 20 MAX		
KANGOO	27 MIN 30 MAX	27 MIN 30 MAX				
LAGUNA	27 MIN 30 MAX	27 MIN 30 MAX			27 MIN 30 MAX	27 MIN 30 MAX
MEGANE		17 MIN 20 MAX	17 MIN 20 MAX			27 MIN 30 MAX
SAFRANE						
ESPACE						27 MIN 30 MAX
MASTER						



FORK TRAVEL CORRESPONDENCE TABLE (CONTINUED)

VEHICLES	ENGINE (dimensions in mm)					
	F4P	F4R	F5R	F7P	F7R	F8Q
R19				17 MIN 20 MAX		17 MIN 20 MAX
R21						17 MIN 20 MAX
EXTRA						17 MIN 20 MAX
SUPER 5						17 MIN 20 MAX
TWINGO						
CLIO						17 MIN 20 MAX
CLIO II						27 MIN 30 MAX
KANGOO						27 MIN 30 MAX
LAGUNA		27 MIN 30 MAX				17 MIN 20 MAX
MEGANE	27 MIN 30 MAX	27 MIN 30 MAX	27 MIN 30 MAX		27 MIN 30 MAX	27 MIN 30 MAX
SAFRANE						
ESPACE		27 MIN 30 MAX				
MASTER						

FORK TRAVEL CORRESPONDENCE TABLE (CONTINUED)

VEHICLES	ENGINE (dimensions in mm)					
	F8QT	F9Q	G8T	G8Tt	K4J	K4M
R19						
R21						
EXTRA						
SUPER 5						
TWINGO						
CLIO					28 MIN 32 MAX	17 MIN 20 MAX
CLIO II		27 MIN 30 MAX				27 MIN 30 MAX
KANGOO		27 MIN 30 MAX				
LAGUNA		27 MIN 30 MAX	27 MIN 30 MAX	27 MIN 30 MAX		27 MIN 30 MAX
MEGANE	27 MIN 30 MAX	27 MIN 30 MAX			27 MIN 30 MAX	27 MIN 30 MAX
SAFRANE				12 MIN 13 MAX		
ESPACE		27 MIN 30 MAX	12 MIN 13 MAX			
MASTER						

FORK TRAVEL CORRESPONDENCE TABLE (CONTINUED)

VEHICLES	ENGINE (dimensions in mm)					
	K7M	L7X	N7Q	N7U	S8U	S9W
R19						
R21						
EXTRA						
SUPER 5						
TWINGO						
CLIO						
CLIO II	27 MIN 30 MAX					
KANGOO	27 MIN 30 MAX					
LAGUNA		12 MIN 13 MAX	27 MIN 30 MAX			
MEGANE	27 MIN 30 MAX					
SAFRANE			17 MIN 19 MAX	17 MIN 19 MAX		
ESPACE						
MASTER					12 MIN 13 MAX	12 MIN 13 MAX

FORK TRAVEL CORRESPONDENCE TABLE (CONTINUED)

VEHICLES	ENGINE (dimensions in mm)
	Z7X
R19	
R21	
EXTRA	
SUPER 5	
TWINGO	
CLIO	
CLIO II	
KANGOO	
LAGUNA	27 MIN 30 MAX
MEGANE	
SAFRANE	10 MIN 11 MAX
ESPACE	
MASTER	

### IMPORTANT POINTS TO REMEMBER DURING CLUTCH REPLACEMENT

#### Before refitting, check:

- the friction track (scratches - bluing),
- the pilot ring or crankshaft bearing if fitted (seizing),
- tightness of engine/gearbox seals (leaks possible),
- the thrust bearing guide and the fork (scratching and wear),
- the input shaft grooves (no trace of rust),
- the proper sliding of the clutch plate on the input shaft (without grease),
- the correct sliding of the stop on its guide (lightly lubricated),
- the fork supports and seals (lightly lubricated).

#### During reassembly, check:

- the friction plate is fitted in the correct direction,
- the centring of the friction plate,
- the progressive tightening and torque of the assembly bolts,
- the position of the fork hook,
- the mating of the engine crankcase (must be carried out without any obstructions).

#### After refitting, check:

- the adjustment of the clearance (if there is one),
- the bleeding for the hydraulic circuit.

Carry out a road test.