

**Classification:**

EM09-014

**Reference:**

ITB10-005

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**Date:**

January 12, 2010

## DRIVE BELT SYSTEM NOISE DIAGNOSIS

**APPLIED VEHICLES:** All Infiniti

### IF YOU CONFIRM

There is noise coming from the drive belt(s), or drive belt pulley(s),

### ACTION

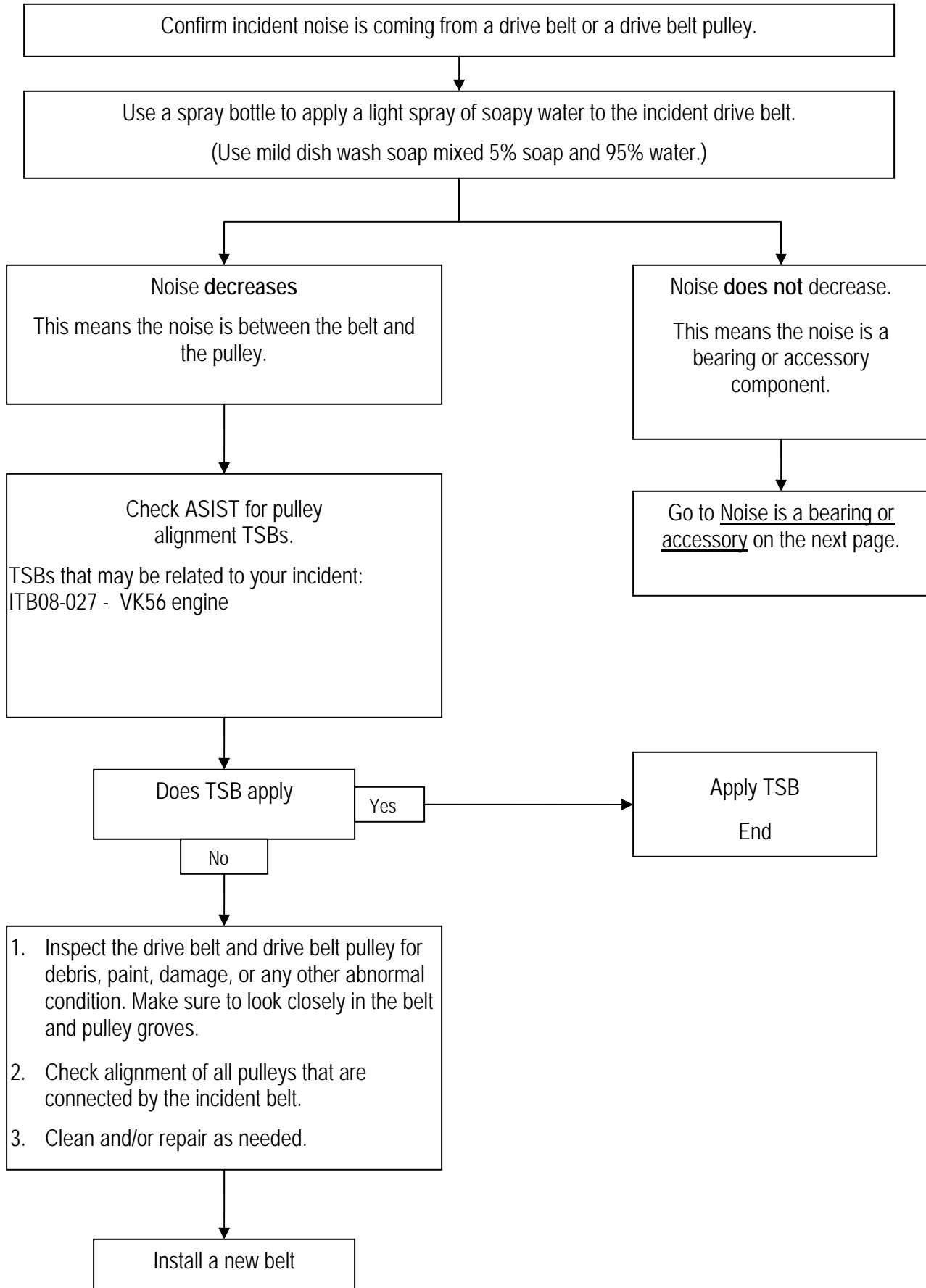
Use the flow chart in this bulletin to help diagnose and identify the source / cause of the noise.

### CLAIMS INFORMATION

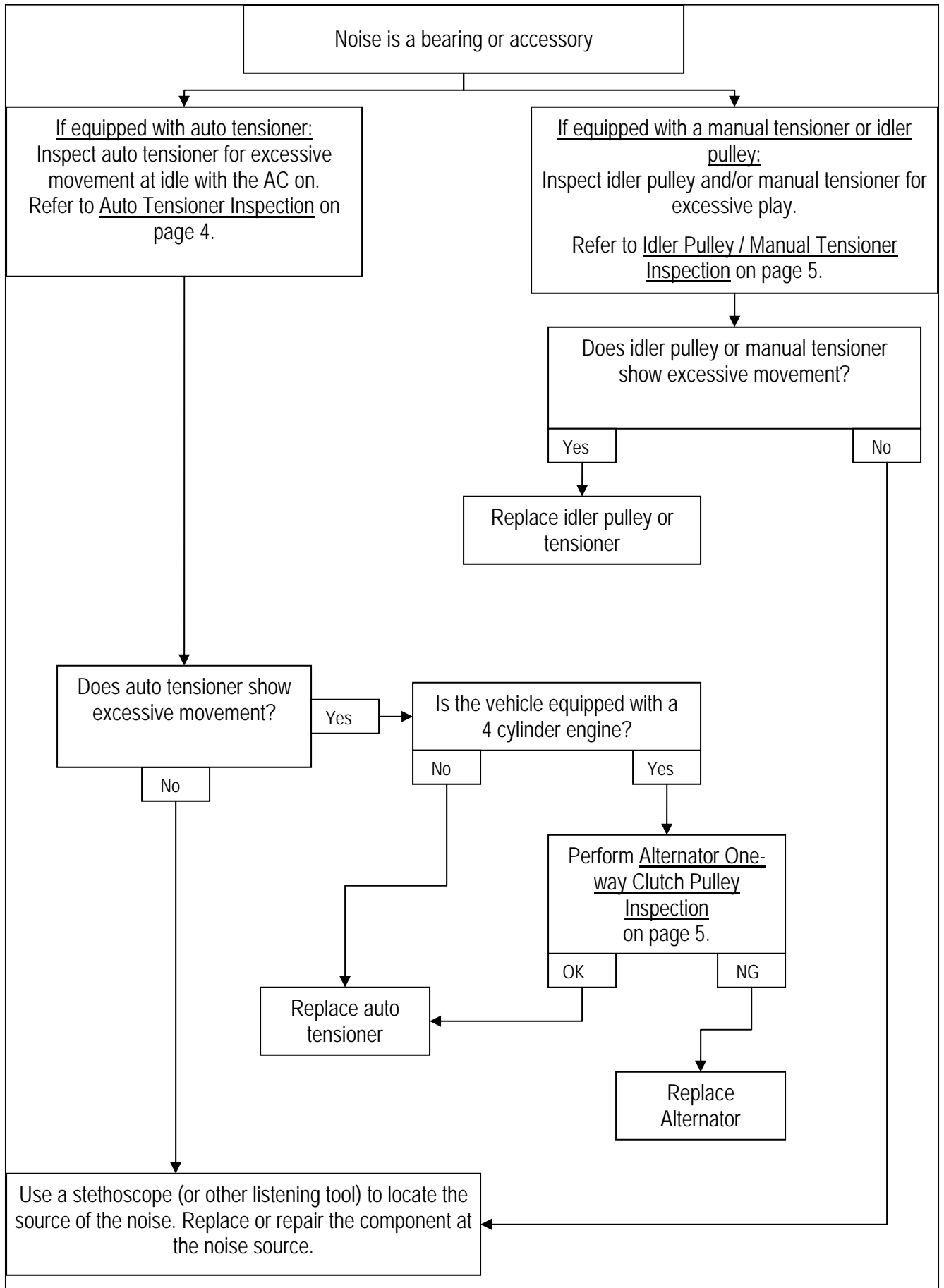
Refer to the current Infiniti Warranty Flat Rate Manual and use the indicated claims coding for any repairs performed.

Infiniti Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Infiniti dealer to determine if this applies to your vehicle.

# DRIVE BELT / PULLEY NOISE DIAGNOSIS FLOW CHART



# DRIVE BELT / PULLEY NOISE DIAGNOSIS FLOW CHART continued



## Auto Tensioner Inspection (if equipped)

Example 1: Max angular pulley movement (mm)		
FX45 (S50)	VK45 (Alt)	7
M45 (Y50)		
FX45 (S50)	VK45 (P/S)	13
M45 (Y50)		
FX50 (S51)	VK50 (Alt)	7
FX50 (S51)	VK50 (P/S)	13
QX56 (JA60)	VK56	7

Example 1: Max angular pulley movement (mm)		
EX35 (J50)	VQ35HR	16
FX35 (S51)		
G35 (V36)		
M35 (Y50)		
G37 Coupe (CV36)	VQ37	16
G37 (V36)		

- With the engine running at idle and the AC turned ON, observe the pulley angular (side to side) movement (see Example 1):
  - See above table for maximum movement specification.
  - Visual comparison of movement with a known good vehicle is recommended.

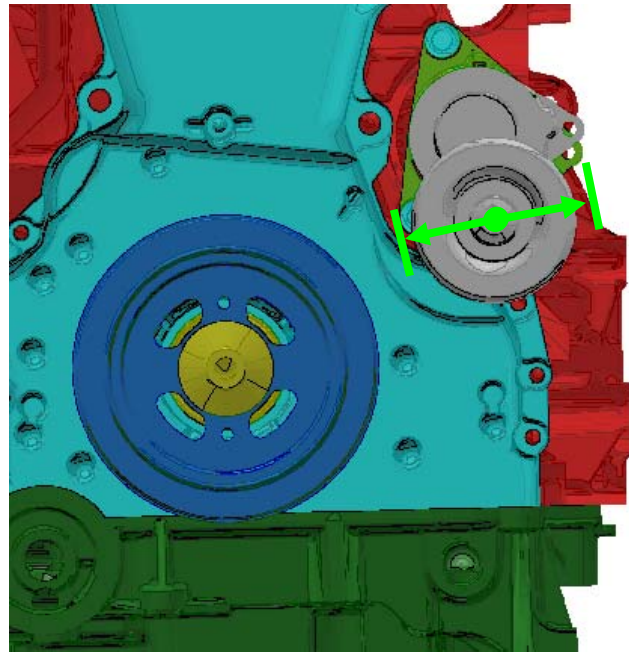


Illustration Example 1

- With the engine running at idle and the AC turned ON, observe the pulley **axial/lateral** (back and forth) movement (see Example 2):
  - Maximum movement specification is 1 mm.
  - Visual comparison of movement with a known good vehicle is recommended.

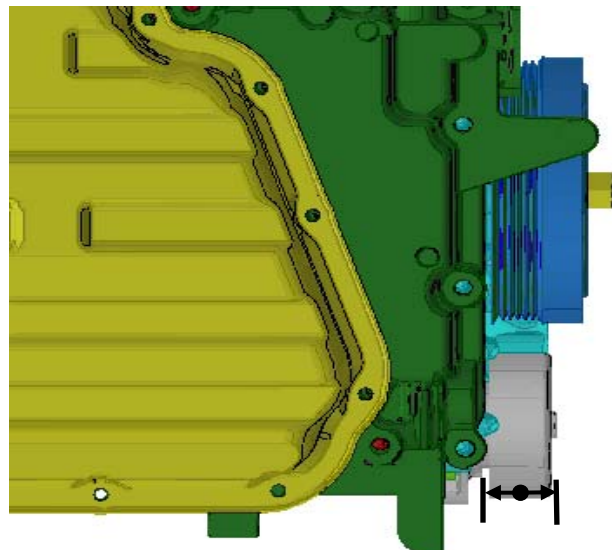


Illustration Example 2

## Idler Pulley / Manual Tensioner Inspection (if equipped)

No more than 1 mm of pulley rock should be visible.

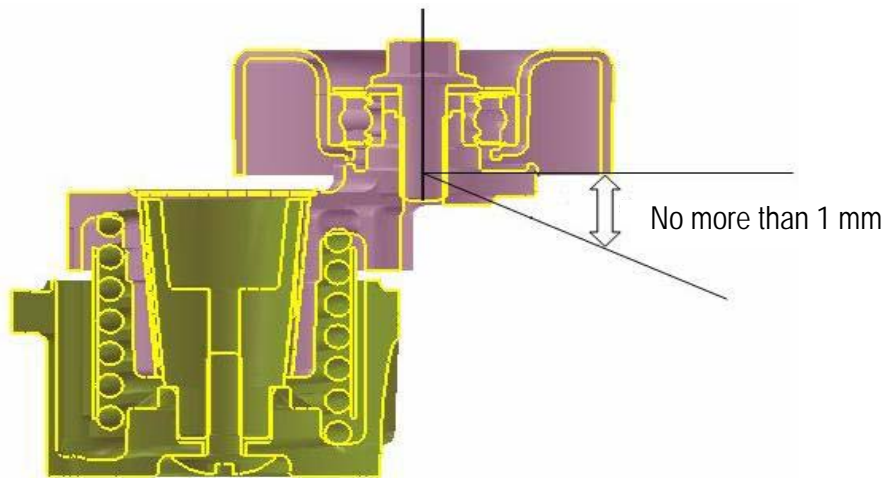


Illustration Example 3

## Alternator One-way Clutch Pulley Inspection

**CAUTION:** Be careful not to damage the rotor.

**NOTE:** The following steps can be done while the alternator is installed on the vehicle if the drive belt is removed and the alternator electrical connectors are disconnected.

1. Secure the rotor using a medium size screwdriver and a rolled shop towel.
2. Turn the pulley clockwise when viewed from the front.
  - Pulley should be locked.
  - If it rotates in both directions, replace the alternator.
3. Turn the pulley counterclockwise when viewed from the front.
  - Pulley should turn with some dragging
  - If it locks or has unusual resistance, replace the alternator.

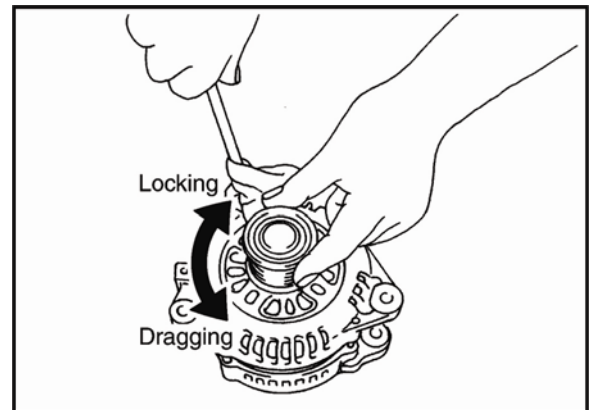


Figure 1