

## Squeaking noises from the belt drive

Topic number	LI13.20-P-049041
Version	3
Design group	13.20 Belt drive, general
Date	12-13-2013
Validity	Belt drive, engine 272 and engine 273.
Reason for change	Modified poly-V-belt
Reason for block	

### Complaint:

Squeaking noises from the belt drive.

### Cause:

Axial shifting (temperature-related) of the individual belt pulleys and guide pulleys can lead to squeaking noises in isolated cases.

### Remedy:

If squeaking noises are reproducible, check the entire drive belt system and replace the poly -V-belt with the new belt as per parts information provided.

#### Procedure:

- 1) Check the system for any obvious damages, check belt tensioner, idler pulleys and other drive belt component pulleys
- 2) If all correct, replace the poly-V-belt as per parts information
- 3) Run the engine with a new belt for a short time for the belt to set itself properly and then switch engine off
- 4) Check the belt alignment on tensioner and idler pulleys in the following way:
  - Measure the distance from the front edge of the belt to the front edge of the belt tensioner pulley (refer to attachments). The width of the belt tensioner pulley is 26 mm, the width of the poly-V-belt is 20.5 mm. The measured distance should be close to 2.75 mm. If the belt runs too close to the front edge of the belt tensioner pulley and the poly-V belt runs up against the front inner edge of the lower guide pulley, it will be required to install one of the shims (either 1 mm or 0.5 mm thick) behind the lower idler pulley (just above the belt tensioner) to align the belt properly. Refer to parts table for shims.

#### Note:

Only one shim can be installed.

#### Note:

If after installing shim the belt is still not properly aligned, the belt tensioner might be worn. Observe proper alignment of the drive belt system. Check system after completing all repairs.

Attachments	
File	Designation
Checking belt alignment on tensioner .jpg	Illustration measurement of distance of the edge of the poly-V belt to the front edge of the belt tensioner pulley
Belt drive system M272 M273.pdf	Illustration of the belt drive system

Symptoms
----------

Power generation / Engine noise / Tweeting

Power generation / Engine noise / Squeaking

## Parts

Part number	ES1	ES2	Designation	Quantity	Note	EPC	Other make part
A 003 993 72 96			Poly-V-Belt	1	Narrow belt (2397 mm) replaces A 001 993 18 96 (2398 mm)	X	
A 003 993 73 96			Polly-V-belt	1	Narrow belt (2390 mm) replaces A 002 993 30 96 (2392 mm)	X	
N 000988 010025			Shim	1	as required 10mmx16mmx0.5mm shim	X	
N 000988 010016			Shim	1	as required 10mmx16mmx1mm shim	X	

## Validity

Vehicle	Engine	Transmission
*	272	*
*	273	*

## Attachments

Checking belt alignment  
on tensioner .jpg:



# Riementrieb M272 / M273

