# Ribbed V-belts Service and repair tips

Damaged and abnormally worn V-belts are an indication of another problem that needs to be identified and corrected. If the underlying fault that destroyed the V-Belt is not corrected, the replacement belt is likely to suffer the same fate, and it's service life will be shortened. In this pictorial guide, Bosch shows some common damage patterns, their causes, and solutions.

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## Cause

- Excessive tension
- Belt kinked prior to or during fitting
- Drive components or rollers stiff or blocked

## Solution

- Ensure proper fitting and set correct tension
- Ensure proper belt handling
- Replace belt, tensioner and idler, and if necessary, water pump

## Damage to belt backing



## Cause

- Surface of the tensioning or idler pulley damaged
- Foreign particles influence
- Belt ageing

## Solution

- Replace belt, tensioner and idler, and if necessary, water pump
- Eliminate foreign particles, check cover and install correctly
- Replace belt

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## Contamination



## Cause

• Influence of operating fluids, for instance oil, anti-freeze or brake fluid

## Solution

- Eliminate cause, for instance leakage at engine
- Replace belt

## Abnormal rib profile wear



## Cause

- Insufficient tension
- Influence from foreign particles or operating fluids
- Misalignment
- Belt pulley defective

## Solution

- Ensure proper fitting and set correct tension
- · Identify and eliminate cause
- Check axial position and axial parallelism of drive and bearing clearance of rollers and replace if necessary
- Check belt pulleys and replace if necessary



## Cause

- Misalignment or roller bearing damage
- Severe belt vibration

## Solution

- Replace belt, tensioner and idler, and if necessary, water pump
- Ensure proper fitting and set correct tension

## Cracking/rupturing of base material



#### Cause

- Temperature too high due to insufficient tension or defective bearing
- Belt worn
- Foreign particles influence

## Solution

- Ensure proper fitting and set correct tension
- Replace belt
- Eliminate foreign particles, check cover and install correctly

## Noise



## Cause

• Influence of operating fluids, for instance oil, anti-freeze or brake fluid

## Solution

- Eliminate cause, for instance leakage at engine
- Replace belt