

Replacement of the Timing Belt



BOSCH
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Damage pattern	Cause	Remedy
Cracking of timing belt 	<ul style="list-style-type: none"> ▶ Foreign matter ▶ Excessive tension ▶ Timing belt kinked prior to/ during fitting 	<ul style="list-style-type: none"> ▶ Eliminate foreign matter, check cover and fit correctly ▶ Ensure proper fitting and set correct tension ▶ Ensure proper belt handling 
Tooth shearing and tooth flank wear 	<ul style="list-style-type: none"> ▶ Excessive/insufficient tension ▶ Foreign matter ▶ Seized pulley, tensioner or idler ▶ Worn pulley 	<ul style="list-style-type: none"> ▶ Ensure proper fitting and set correct tension ▶ Eliminate foreign matter, check cover and fit correctly ▶ Check and if necessary replace rollers and bearings ▶ Check and if necessary replace pulleys 
Detachment of teeth and fabric 	<ul style="list-style-type: none"> ▶ Effect of substances (e.g. oil, anti-freeze or brake fluid) 	<ul style="list-style-type: none"> ▶ Determine and eliminate cause (e.g. leakage at engine) 
Edge wear 	<ul style="list-style-type: none"> ▶ Misalignment: Belt cannot run straight or rubs against flanged wheel ▶ Drive component or roller defective ▶ Cover catching on timing belt 	<ul style="list-style-type: none"> ▶ Check axial position and axial parallelism of drive and bearing clearance of rollers and pulleys and align or replace if necessary ▶ Check and if necessary replace pulleys, tensioners and idlers ▶ Check cover and fit correctly 
Fabric wear in web 	<ul style="list-style-type: none"> ▶ Excessive tension ▶ Pulley defective ▶ Excessive heat generation at belt 	<ul style="list-style-type: none"> ▶ Ensure proper fitting and set correct tension ▶ Check and if necessary replace pulleys ▶ Determine and eliminate cause 
Running marks on teeth 	<ul style="list-style-type: none"> ▶ Damage to pulley caused by foreign matter or tools ▶ Foreign matter ▶ Timing belt damaged prior to/on fitting 	<ul style="list-style-type: none"> ▶ Check and if necessary replace pulleys; ensure proper fitting ▶ Eliminate foreign matter, check cover and fit correctly ▶ Ensure proper belt handling 
Cracks on belt backing 	<ul style="list-style-type: none"> ▶ Temperature too high/low ▶ Tensioner or idler worn or stiff ▶ Belt ageing ▶ Foreign media 	<ul style="list-style-type: none"> ▶ Determine and eliminate cause ▶ Check and if necessary replace tensioner or idler ▶ Replace belt ▶ Determine and eliminate cause (e.g. leakage at engine) 
Noise 	<ul style="list-style-type: none"> ▶ Excessive tension: Howling/whistling ▶ Insufficient tension: Belt hits cover ▶ Misalignment ▶ Bearings of rollers defective 	<ul style="list-style-type: none"> ▶ Ensure proper fitting and set correct tension ▶ Ensure proper fitting and set correct tension ▶ Check axial position and axial parallelism of drive and bearing clearance of rollers and pulleys and align or replace if necessary ▶ Check and if necessary replace tensioners and idlers 

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