

NEWS

Water pump failure causes

Application

For all models Vehicles

Causes of water pump failure

1. Leakage

Cause I: Limescale

Cause	Tap water containing lime
Affected area	Scratches the surfaces of the mechanical seal
Picture	

Cause II: Rust

Cause	<ul style="list-style-type: none"> External agents trapped between the seal faces Incorrect system cleaning Bad coolant liquid
Affected area	Damaged mechanical seal
Picture	

Cause III: Cavitation

Cause	<ul style="list-style-type: none"> Poor condition of coolant (low boiling point) Air inside the coolant causing corrosion
Affected area	Surface corrosion
Picture	

Cause IV: Burnt aspect

Cause	<ul style="list-style-type: none"> Lack of coolant Blocked coolant circuit
Affected area	Overheating marks on surface
Picture	



1. Leakage

Cause V: Silicon seal on mechanical seal	
Cause	<ul style="list-style-type: none"> • Overheating • Application of sealant where is not needed • Excessive amount of sealant
Affected area	Mechanical seal area
Picture	

2. Damaged bearing

Cause I : Belt on pulley	
Cause	<ul style="list-style-type: none"> • Excessive tension • Non uniform friction
Affected area	Bearing surface
Picture	

Cause II : Wear belt	
Cause	Misalignment of one of the belt components (idler, tensioner)
Affected area	Belt surface area
Picture	



Webiste
valeoservice.us/en-us




Technical Assistance
 1-888-718-2536


valeoservice.us

2. Damaged bearing


Cause III: Belt wear

Cause	<ul style="list-style-type: none"> • Low belt tension • Penetration of foreign matter
Affected area	Cut and wear in belt contact area
Picture	

Cause IV: Damaged tensioner

Cause	Wrong fitting
Affected area	Damaged in belt tensioner
Picture	

Cause V: Pitting on bearing shaft

Cause	<ul style="list-style-type: none"> • Excessive tension on bearing • Sudden overload due to external causes • Bad assembly/performance of some belt idler
Affected area	On bearing shaft
Picture	

Cause VI: Shaft breakage

Cause	<ul style="list-style-type: none"> • Sudden overload • Imbalance
Affected area	Breakage of shaft
Picture	