

# **TECHNICAL SERVICE BULLETIN**

# **COOLING SYSTEM**

## ALL CHAIN DRIVEN WATER PUMPS

#### SYMPTOMS:

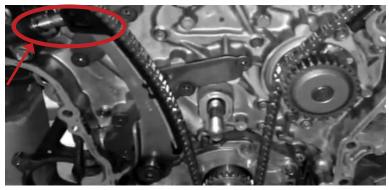
Water pump has missing or broken teeth, or sprocket falls off the shaft.

#### **PROBABLE CAUSE OF FAILURE:**

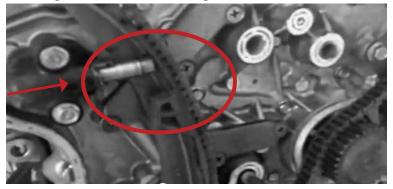
Misalignment or damage to the tensioner, guide or chain.

#### **CORRECTIVE ACTION:**

Visual inspection is required to verify the correct alignment of chain tensioner and guide. Inspect for broken, cracked or missing guide material as well. It is not advised to re-use misaligned components. Also, check the chain for any imperfections.

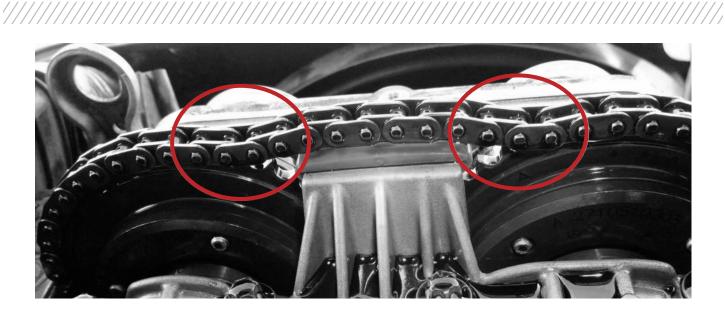


Correct alignment of tensioner and chain guide.

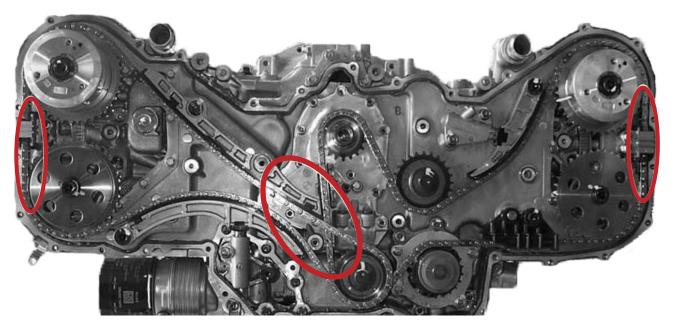


Incorrect aligment of tensioner and chain guide.

### BULLETIN TSB\_053\_US



If the chain looks like the above circled areas, it is time to replace the timing components. Notice how the chain sags. This should not occur in any location of the chain drive. If slack is present replace the chain, chain tensioner, and chain guides.



In the circles above there is no slack present. This is the optimal position for the chain.

WITH OVER 100 YEARS OF EXPERIENCE, GATES PRODUCTS ARE TRUSTED BY PROFESSIONAL TECHNICIANS AROUND THE WORLD.

FOLLOW @GATESAUTO

2