



Technical Service Bulletin

AUTOMOTIVE <> PASSENGER CAR
SYNCHRONOUS BELT DRIVE SYSTEM

BULLETIN PA009-11

› **PART NUMBER:**

All Applications
Using The Below
Timing Belts-
T277
T304
T307
T328

› **MAKE:**

Saab
Subaru

› **MODEL:**

All - With Manual
Transmission

› **YEAR:**

1997 - 2012

› **ENGINE:**

2.0L
2.2L
2.5L

TIMING BELT SETUP FOR 1999-2012 SAAB AND SUBARU 2.0L/2.2L/2.5L APPLICATIONS WITH MANUAL TRANSMISSION

Industry concern has been raised regarding the Subaru hydraulic tensioner [Gates T43138] applications listed within this bulletin. This issue has prompted the Gates Engineers to closely analyze these specific applications. The following information pertains to these findings as well as providing a solution.

Installation procedures are allowing the crankshaft belt shield to come into constant contact with the belt. OE service specifications call for .019" to .059" of clearance between belt and guide while in operation. Gates has produced an application specific tool for setting this clearance to ensure belt to cover contact does not occur.

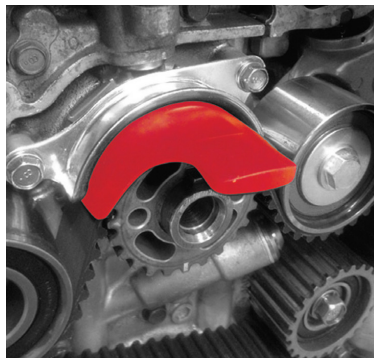


belt contact

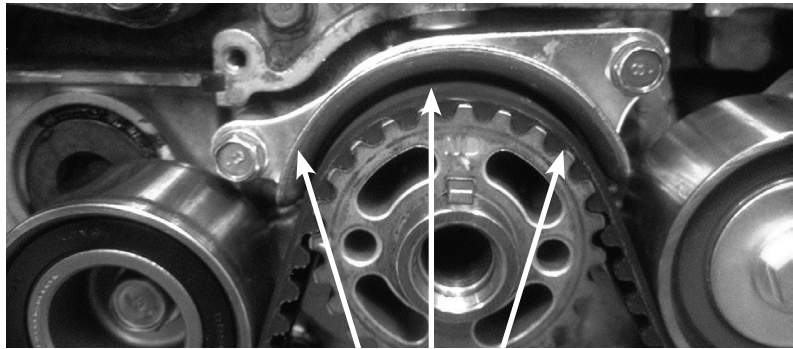
resulting damage to tensioner and belt



Tool No. 91052



Gates Spacer Tool Positioned below the guide plate.



Ideal clearance between the timing belt and the guide plate.

IT IS CRITICAL TO ENSURE THE CORRECT CLEARANCE SPECIFICATION IS ACHIEVED BETWEEN THE TIMING BELT GUIDE PLATE AND TIMING BELT, AS INCORRECT CLEARANCE CAN CAUSE EXTREME HEAT AND PREMATURE COMPONENT FAILURE LEADING TO CATASTROPHIC ENGINE FAILURE!

TOOL USE INSTRUCTIONS

The Gates Spacer Tool will create the appropriate amount of clearance between the timing belt and guide plate when used correctly.

1. Install the timing belt and associated components per recommended instructions included in the Gates Timing Component Kit.
2. When installing the timing belt guide, loosely tighten the guide plate by hand.
3. Insert the Gates Spacer Tool between the guide plate and timing belt.
4. Verify the Gates Spacer Tool is positioned correctly below the guide plate, while covering the entire width of the timing belt.
5. Tighten guide plate bolts to recommended specifications [78 – 95 in. lbs.].
6. Use caution while tightening the slotted side of the guide plate, as the guide plate will naturally rotate downwards due to bolt tightening rotation.
7. Remove Gates Spacer Tool before operation.

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