



DRIVEN BY POSSIBILITY™

GATES SPACER TOOL

Gates have identified a common cause of premature timing system failures in popular vehicle applications and have consequently developed a tool to prevent these failures.

A large number of Subaru applications (manual transmissions) are fitted with a timing belt guide plate which is located directly above the crank shaft pulley. The guide plate's purpose is to prevent tooth jump and as such is required to be positioned very close to the timing belt.

If the guide plate is installed too close to the belt or if the bolts on the guide plate aren't tightened correctly the plate can make contact with the timing belt cover. Any contact between the plate and belt will cause friction and generate excessive heat.

Usually the first component to fail is the timing belt tensioner unit, as the tensioner is positioned very close to the guide plate. The extreme heat that is generated will compromise the bearings lubricant leading to bearing seizure/failure.

When installing the guide plate the natural rotation of the bolts that secure the guide plate will force the plate down towards the belt and if it goes unnoticed premature failure will be imminent.

Gates have seen cases where the heat generated by the friction of the plate rubbing on the belt has been so severe that bearings have disintegrated with less the 50 kilometres travelled.

APPLICATIONS					
MAKE	MODEL	ENGINE	YEAR	TIMING BELT	PART NUMBER
SUBARU	FORESTER	2.0L 4 Cyl. (EJ20) DOHC Turbo - Man. Trans.	1998-00	T277	TCKHT277B
SUBARU	FORESTER	2.0L 4 Cyl. (EJ20) DOHC Turbo - Man. Trans.	2000-02	T277 T277R	TCKHT277 TCKHRT277
SUBARU	FORESTER	2.0L 4 Cyl. (EJ20) SOHC - Man. Trans.	1997-8/98	T172	TCKHT172
SUBARU	FORESTER	2.0L 4 Cyl. (EJ20) SOHC - Man. Trans.	8/98-02	T304	TCKHT304
SUBARU	FORESTER	2.5L 4 Cyl. (EJ25) SOHC - Man. Trans.	2002-On	T304 T304R	TCKHT304 TCKHRT304
SUBARU	FORESTER	2.5L 4 Cyl. (EJ25) DOHC - Man. Trans.	2002-On	T277 T277R	TCKHT277 TCKHRT277
SUBARU	IMPREZA	1.6L 4 Cyl. (EJ16) - Man. Trans.	1993-98	T254	TCKT254 TCKHT254 TCKWPT254
SUBARU	IMPREZA	1.8L 4 Cyl. (EJ18) - Man. Trans.	1993-98	T254	TCKT254 TCKHT254 TCKWPT254
SUBARU	IMPREZA	2.0L 4 Cyl. (EJ20) SOHC - Man. Trans.	1996-12/96	T254	TCKT254 TCKHT254
SUBARU	IMPREZA	2.0L 4 Cyl. (EJ20) SOHC - Man. Trans.	1997-09/98	T172	TCKHT172



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			8/98-On	T304	TCKHT304
SUBARU	IMPREZA	2.0L 4 Cyl. (EJ20) DOHC Inc Turbo - Man. Trans.	1994-02/98	T277	TCKT277C
			03/98-00	T277	TCKHT277C
			2000-On	T277	TCKHT277B
				T277	TCKHT277
SUBARU	IMPREZA	2.5L 4 Cyl. (EJ25) SOHC - Man. Trans.	2001-09/05	T304	TCKHT304
				T304R	TCKHRT304
SUBARU	IMPREZA	2.5L 4 Cyl. (EJ25) DOHC - Man. Trans.	2004-On	T277	TCKHT277
				T277R	TCKHRT277
SUBARU	LEGACY	*2.0L 4 Cyl. (EJ20) SOHC - Man. Trans.	1998-00	T172	TCKHT172
SUBARU	LEGACY	*2.0L 4 Cyl. (EJ20) SOHC - Man. Trans.	2003-09	T304	TCKHT304
SUBARU	LEGACY	*2.0L 4 Cyl. (EJ20) DOHC - Man. Trans.	1995-3/98	T277	TCKT277C
					TCKHT277C
		*2.5L 4 Cyl. (EJ25) SOHC - Man. Trans.	1996-00	T254	TCKT254
					TCKHT254
					TCKWPT254
		*2.5L 4 Cyl. (EJ25) SOHC - Man. Trans.	2000-On	T304	TCKHT304
SUBARU	LEGACY	*2.5L 4 Cyl. (EJ25) DOHC Inc. Turbo - Man. Trans.	1994-96	T277	TCKT277C
					TCKHT277C
SUBARU	LEGACY	*2.5L 4 Cyl. (EJ25) DOHC Inc. Turbo - Man. Trans.		T277	TCKHT277B
SUBARU	LIBERTY (1st Gen)	2.0L 4 Cyl. (EJ20) DOHC Turbo - Man. Trans.	1991-94	T277	TCKT277C
					TCKHT277C
SUBARU	LIBERTY (1st & 2nd Gen)	2.2L 4 Cyl. (EJ22) SOHC Turbo - Man. Trans.	1989-98	T254	TCKT254
					TCKWPT254
					TCKHT254
SUBARU	LIBERTY (2nd Gen)	2.5L 4 Cyl. (EJ25) DOHC - Man. Trans.	1997-98	T277	TCKT277C
					TCKHT277C
SUBARU	LIBERTY (3rd Gen)	2.0L 4 Cyl. (EJ20) SOHC 92kw - Man. Trans.	1998-03	T304	TCKHT304
					TCKHRT304
SUBARU	LIBERTY (3rd Gen)	2.0L 4 Cyl. (EJ20) DOHC Turbo - Man. Trans.	1998-00		TCKHT277B
SUBARU	LIBERTY (3rd Gen)	2.0L 4 Cyl. (EJ20) DOHC Turbo - Man. Trans.	2000-03	T277	TCKHT277
				T277R	TCKHRT277
SUBARU	LIBERTY (3rd Gen)	2.5L 4 Cyl. (EJ25) SOHC - Man. Trans.	1998-03	T304	TCKHT304
				T304R	TCKHRT304
SUBARU	LIBERTY (4th Gen)	2.0L 4 Cyl. (EJ20) SOHC - Man. Trans.	2003-09	T304	TCKHT304



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				T304R	TCKHRT304
SUBARU	LIBERTY (4th Gen)	2.0L 4 Cyl. (EJ20) DOHC Turbo - Man. Trans.	2003-09	T277 T277R	TCKHT277 TCKHRT277
SUBARU	LIBERTY (4th Gen)	2.5L 4 Cyl. (EJ25) VVTL SOHC - Man. Trans.	2003-09	T304 T304R	TCKHT304 TCKHRT304
SUBARU	LIBERTY (4th Gen)	2.5L 4 Cyl. (EJ25) DOHC Turbo - Man. Trans.	2003-09	T277 T277R	TCKHT277 TCKHRT277
SUBARU	LIBERTY (5th Gen)	2.5L 4 Cyl. (EJ25) SOHC - Man. Trans.	2009-On	T304 T304R	TCKHT304 TCKHRT304
SUBARU	OUTBACK	2.5L 4 Cyl. (EJ25) SOHC - Man. Trans.	1998-07	T304 T304R	TCKHT304 TCKHRT304
SUBARU	OUTBACK (2nd Gen)	2.5L 4 Cyl. (EJ25) DOHC - Man. Trans.	1996-97	T277	TCKT277C TCKHT277C
SUBARU	OUTBACK	2.5L 4 Cyl. (EJ25) DOHC - Man. Trans.	1997-10/98	T277 T277R	TCKHT277 TCKHRT277