

TIMING BELT TENSIONER FOR AFTERMARKET

979235 + 979237

(Revision date: 07/27/1998)

1. Allow the engine and tensioner to stabilize to the same relative ambient temperature before installing a tensioner for proper belt tension adjustment. Do not attempt to install a cool tensioner onto a hot engine or vice versa.
2. Rotate both the crankshaft and camshaft CLOCKWISE to TDC (Top Dead Center) position (i.e. #1 cylinder firing position) and remove the timing belt. This defined position is to be the position where there is no action (positive or negative) from the camshaft or other sprockets. One should find no sudden movement or abrupt action from either of the sprockets. Generally cam & crankshaft sprockets have to line up with equivalent markings on the engine block to indicate TDC.

Initial Setup of the TBT (Timing Belt Tensioner)

3. Place a new tensioner onto the mounting bracket. Tensioner's Anti-Rotation Slot should fit over the Anti-Rotation Pin on the bracket.
4. Slide the tensioner to the farthest right for easier routing of the timing belt and hand tighten the M8 Mounting Nut (See Figure 1).

Pre-Installation of the TBT

5. Install the timing belt being careful to engage the appropriate teeth of all the corresponding sprockets as per drive layout (See Figure 2a + 2b).
(Caution: Do not disturb the position of the crankshaft or camshaft sprockets during this procedure.)
6. Push the tensioner into the belt with the installation tool. The tensioner assembly will move against the belt and the Arm will eventually start to move COUNTERCLOCKWISE. Continue pushing the tensioner until its maximum travel position (See Figure 3).
7. Lock the tensioner in this position by tightening the Mounting Nut with **25 Nm** of torque.
8. Rotate the crankshaft two (2) complete revolutions manually for proper seating of the belt until the crankshaft is repositioned at the TDC position.

Note: Repositioning the crankshaft to the TDC position must be done only during the clockwise rotation.

Installation Adjustment

10. Using the installation tool to hold the tensioner position, loosen the tensioner Mounting Nut enough to allow movement. Watching the movement of the Arm Pointer, slowly retract the tensioner away from the belt until the Arm Pointer aligns with the Nominal Position Indicator on the front plate (See Figure 4).
(Caution: Do not allow the tensioner to snap free, otherwise steps 6~9 need to be repeated.)
11. Torque the Mounting Nut to **25 Nm** using a torque wrench.

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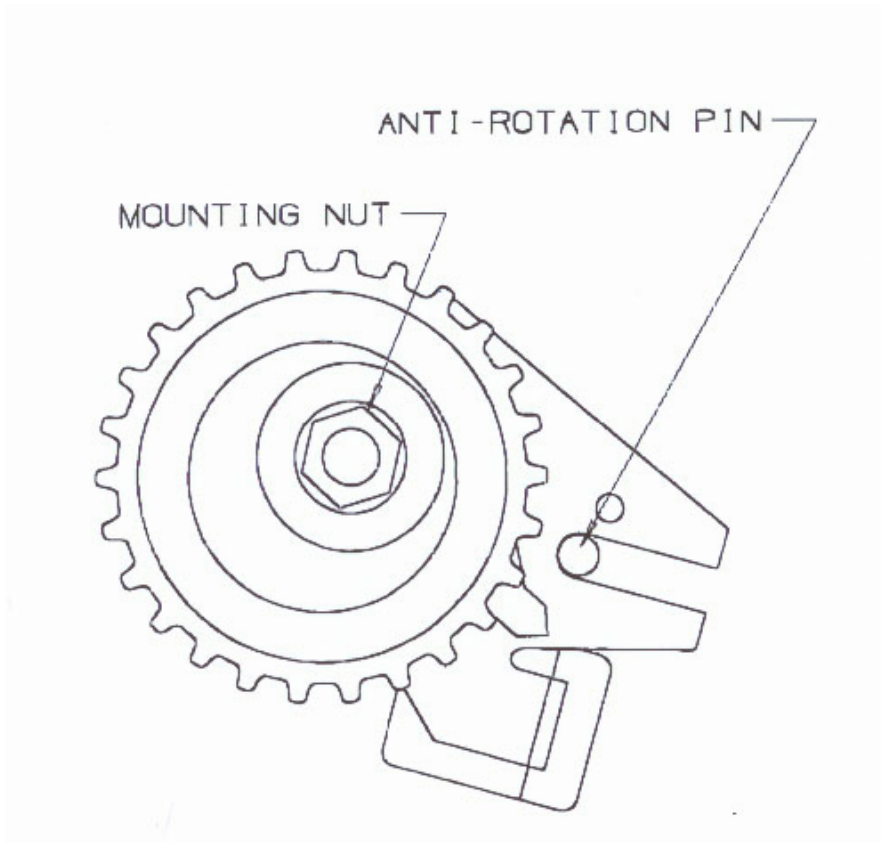


Figure 1: Tensioner shown at Free-Arm position placed on the mounting bracket.

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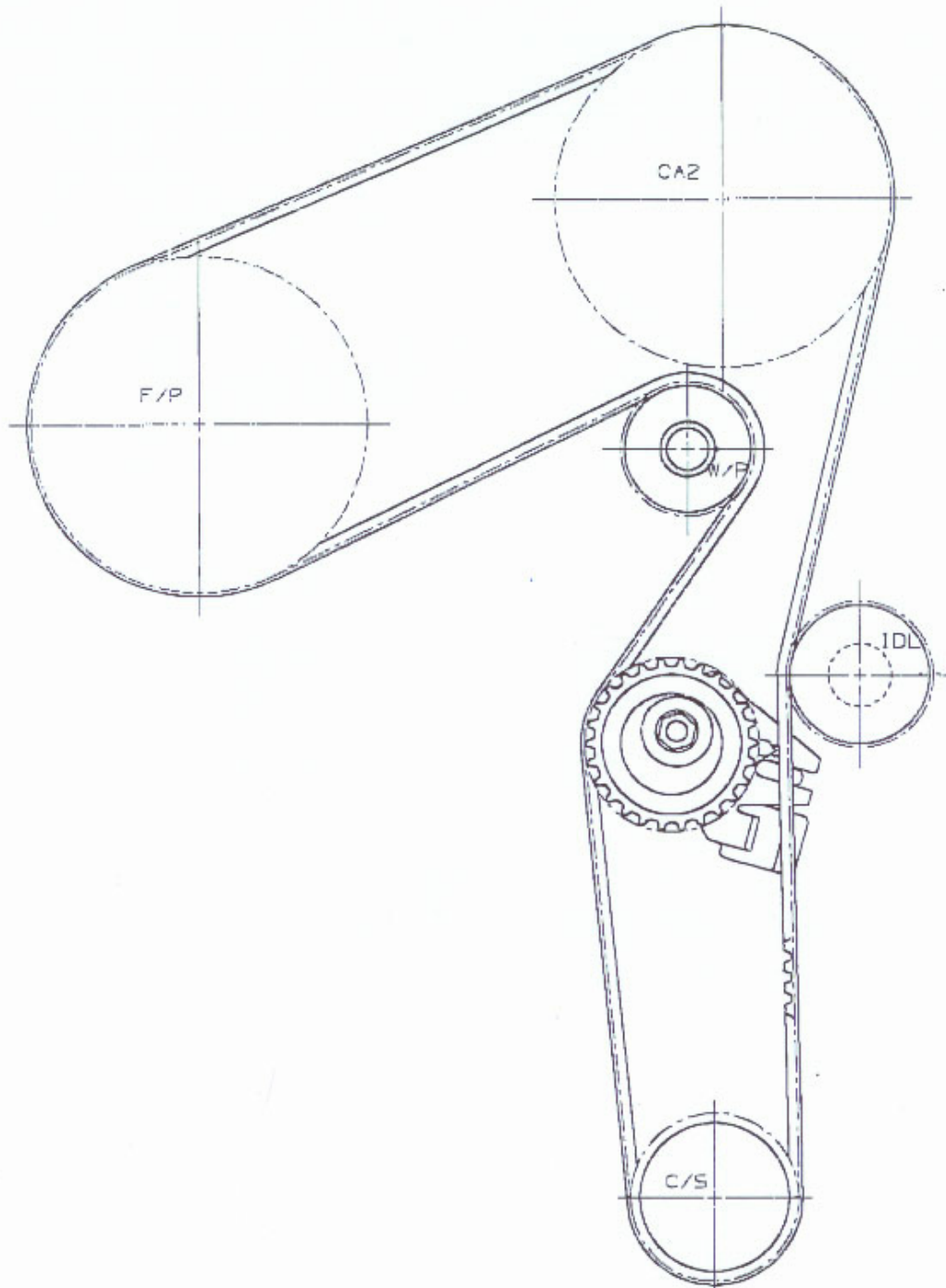


Figure 2a: Belt layout for 979235 (FIAT 2.4L DOHC, 5 Cyl.)

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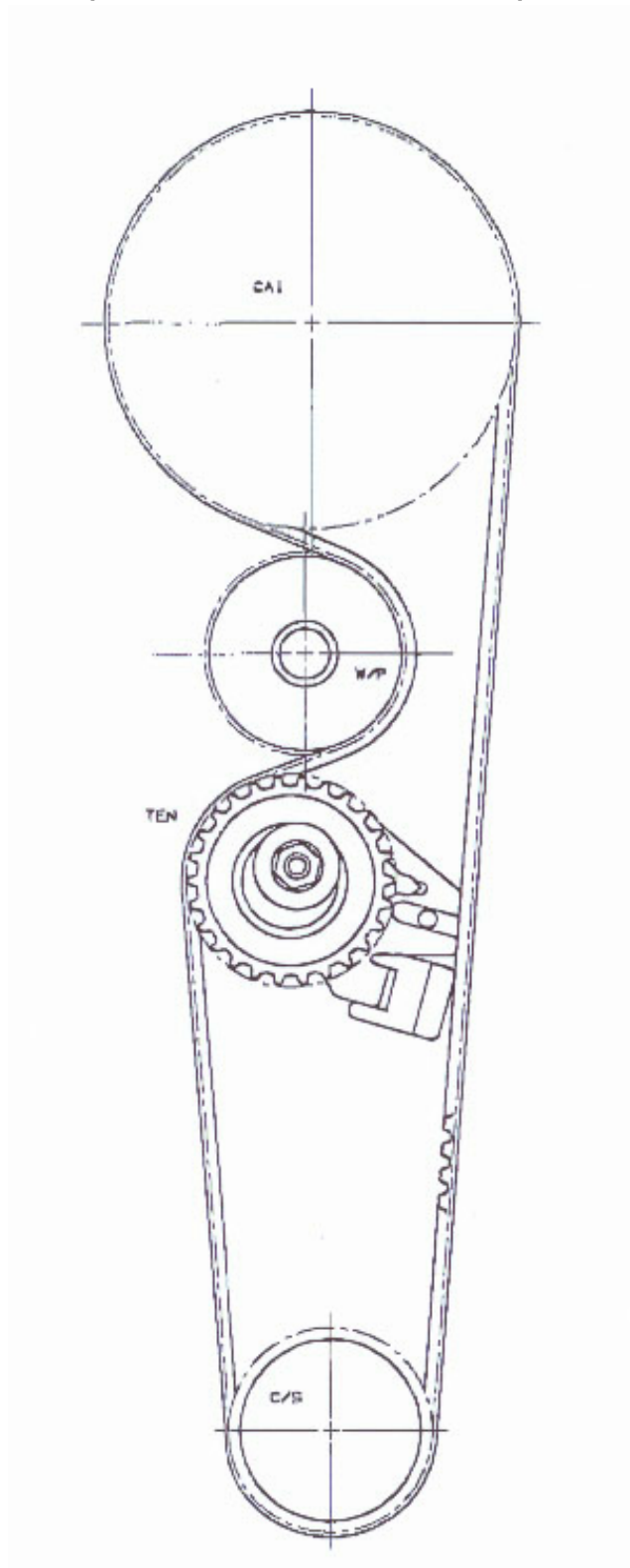


Figure 2b: Belt layout for 979237 (FIAT 1.4L 12V SOHC, 4 Cyl.)

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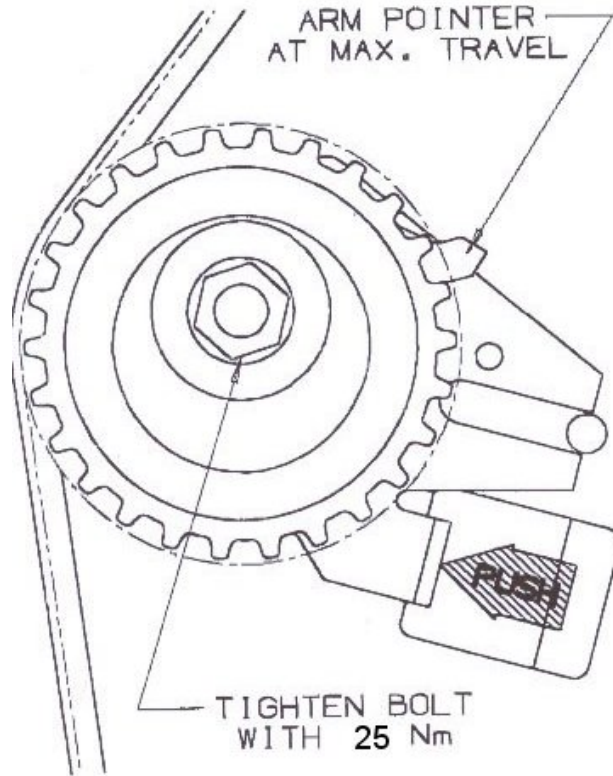


Figure 3: Proper initial setup of tensioner installed at room temperature (20°C)

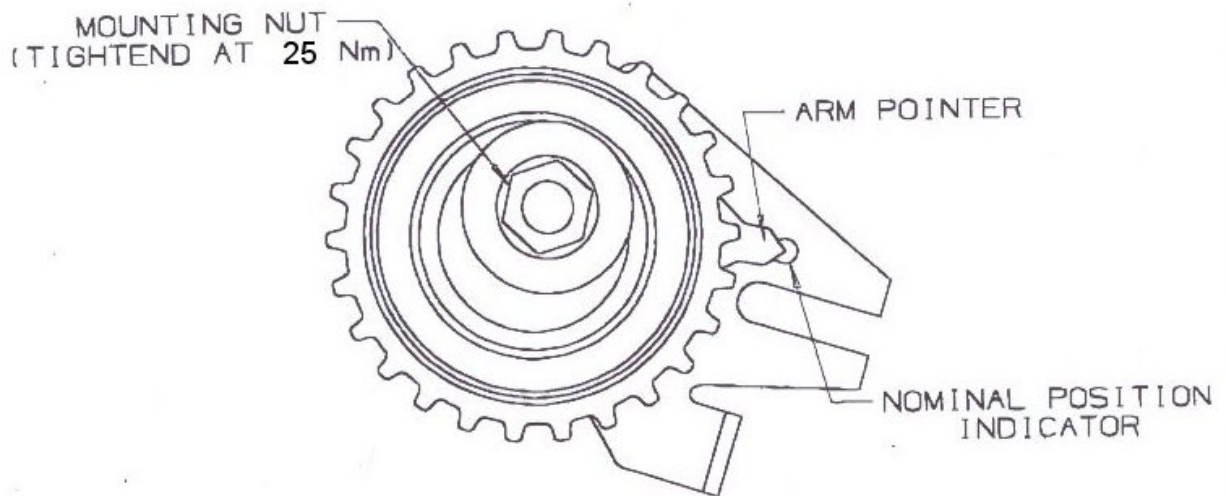


Figure 4: Tensioner installed properly at room temperature (20°C)