

RECOMMENDED INSTALLATION PROCEDURE

TIMING BELT TENSIONER 979433 FOR AFTERMARKET FIAT 1.4/1.6L FAMILY "B" GAS ENGINES

(Revision date: 09/20/2001)

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). 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.

Removal of Timing Belt (In the case of new engine build, skip step 3)

3. Using the installation tool, hold the tensioner position and loosen the tensioner mounting nut. Allow the tensioner to move right until the belt can be removed and then remove the belt.

Initial Setup of the TBT (Timing Belt Tensioner)

4. Place a new tensioner onto the mounting bracket. Tensioner's Anti-Rotation Slot should fit over the Anti-Rotation Pin on the bracket (See Figure 1).
5. Slide the tensioner to the farthest right for easier routing of the timing belt and hand tighten the M8 Mounting Nut (See Figure 2).

Pre-Installation of the TBT

6. Install the timing belt being careful to engage the appropriate teeth of all the corresponding sprockets as per drive layout (See Figure 3).
(**Caution:** Do not disturb the position of the crankshaft or camshaft sprockets during this procedure.)
7. Push the tensioner into the belt using 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 is reached (See Figure 4).
8. Lock the tensioner in this position by tightening the Mounting Nut with 25 Nm of torque.
9. 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.

Verify that all timing indicators on camshaft sprockets, crankshaft sprocket and water pump sprocket align with corresponding indicators.

RECOMMENDED INSTALLATION PROCEDURE

TIMING BELT TENSIONER 979433 FOR AFTERMARKET FIAT 1.4/1.6L FAMILY "B" GAS ENGINES

(Revision date: 09/20/2001)

Installation Adjustment

10. Using the installation tool to hold the tensioner position, loosen the tensioner Mounting Nut enough to allow movement.

Caution: Do not allow the tensioner to snap free, otherwise steps (7, 8, 9) need to be repeated.

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 base plate (See Figure 5).

11. Torque the Mounting Nut to **25 Nm** using a torque wrench. Engine should then be rotated as in step 9 to confirm tensioner position is correct. If not loosen the mounting nut and repeat steps (7, 8, 9, 10).
12. Tensioner should have small oscillations about the nominal position with the engine running at idle.

Disclaimer

Every step of this installation **MUST** be properly performed or engine damage can occur.

RECOMMENDED INSTALLATION PROCEDURE

TIMING BELT TENSIONER 979433 FOR AFTERMARKET FIAT 1.4/1.6L FAMILY "B" GAS ENGINES

(Revision date: 09/20/2001)

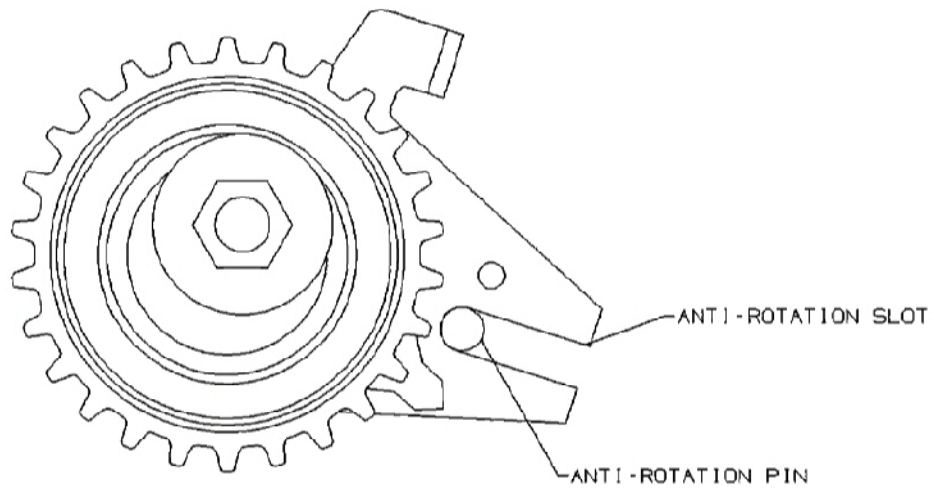


Figure 1: Tensioner shown at Free-Arm position placed on the mounting bracket.

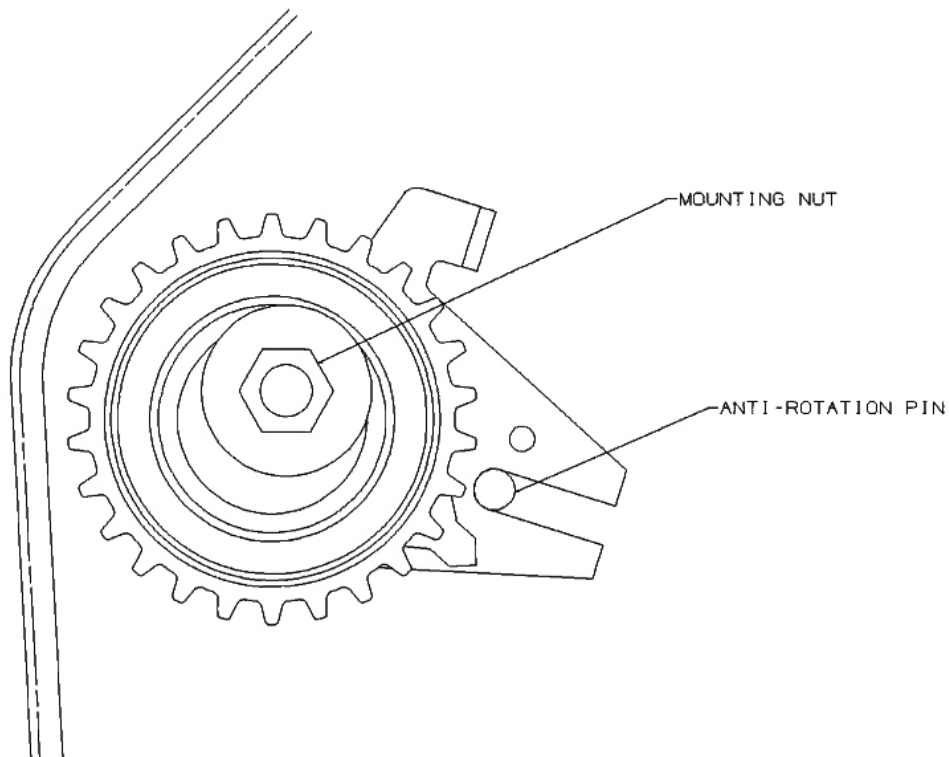


Figure 2: Belt Installation Position

RECOMMENDED INSTALLATION PROCEDURE

TIMING BELT TENSIONER 979433 FOR AFTERMARKET FIAT 1.4/1.6L FAMILY "B" GAS ENGINES

(Revision date: 09/20/2001)

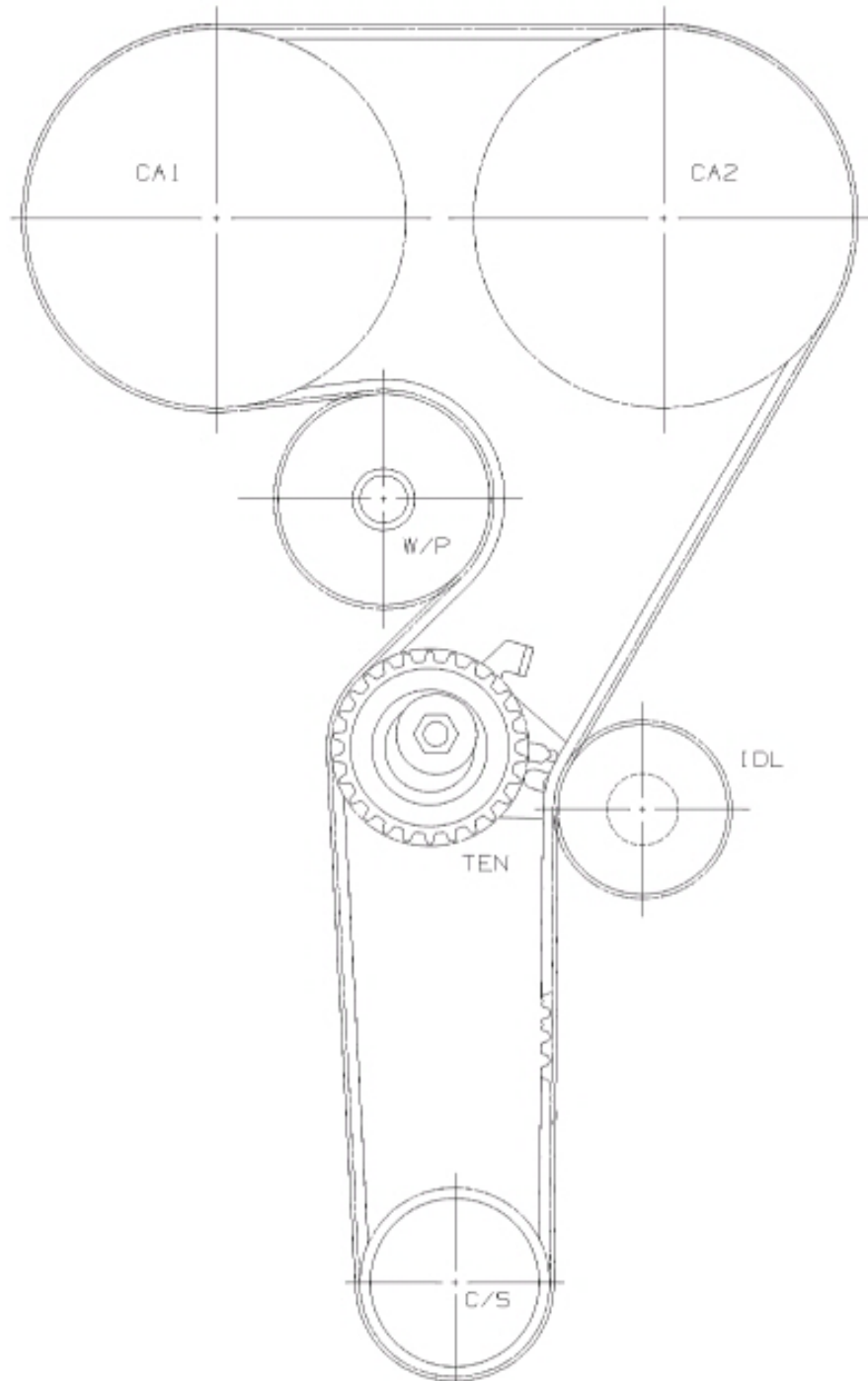


Figure 3: Belt Layout (1.4/1.6L DOHC, GAS)

RECOMMENDED INSTALLATION PROCEDURE

TIMING BELT TENSIONER 979433 FOR AFTERMARKET FIAT 1.4/1.6L FAMILY "B" GAS ENGINES

(Revision date: 09/20/2001)

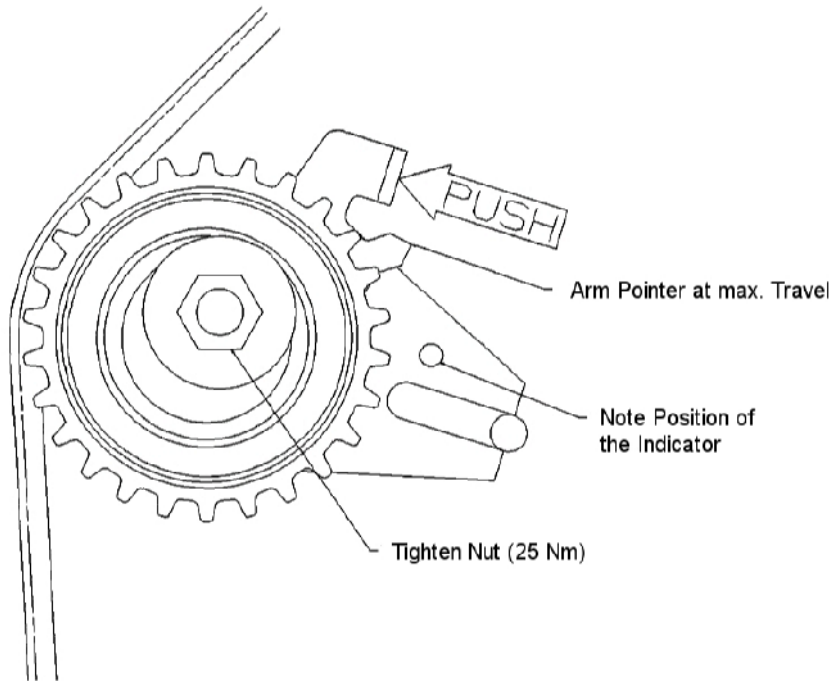


Figure 4: Proper Initial Setup of Tensioner.

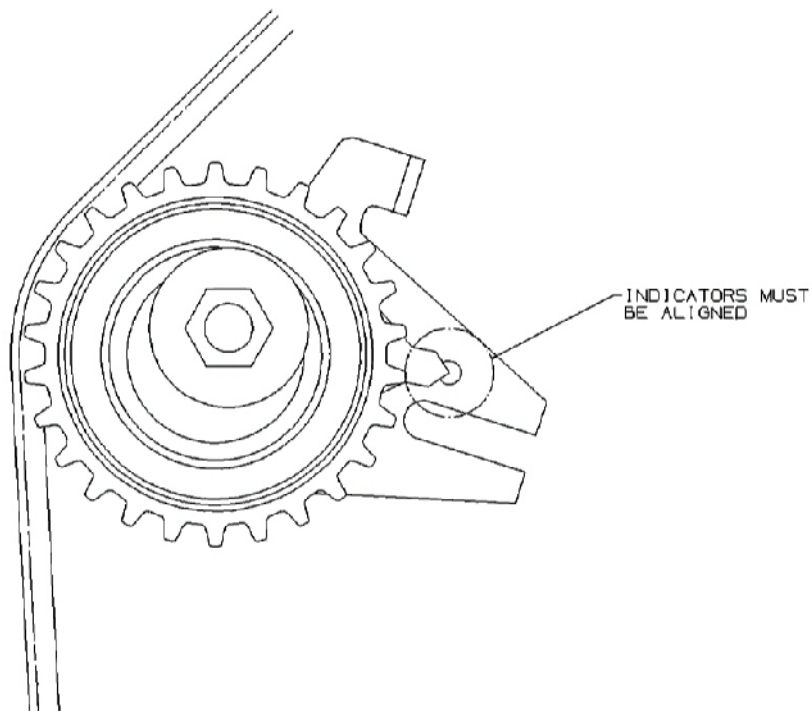


Figure 5: Verification of Tensioner Installation.