



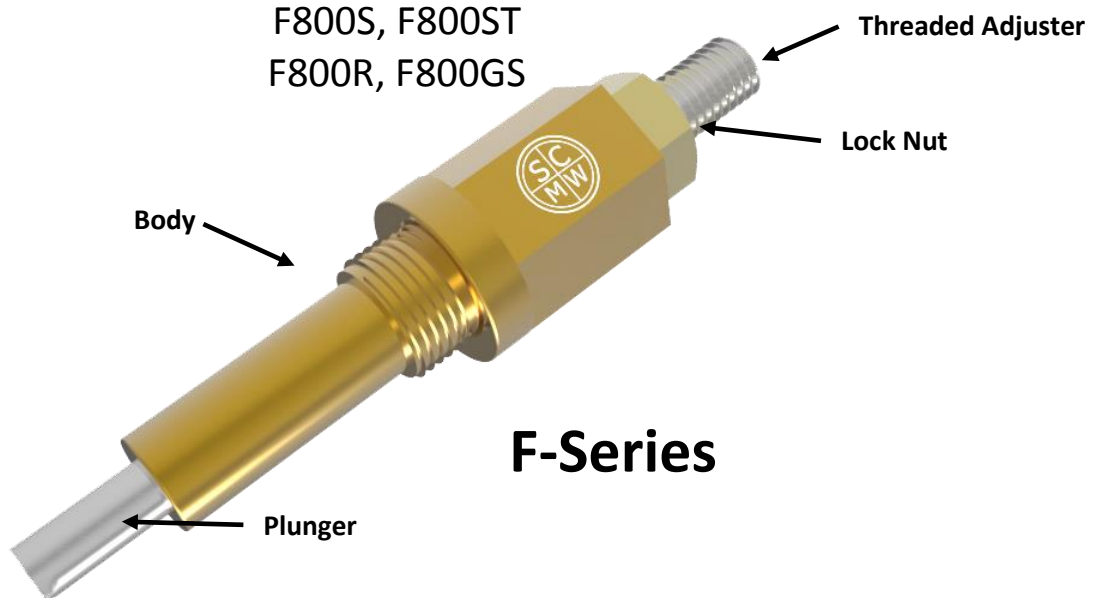
Southern California
MotoWerks

CAM CHAIN MECHANICAL TENSIONERS INSTALLATION GUIDE FOR BMW F-SERIES



Models

F650GS, F700GS
F800S, F800ST
F800R, F800GS



F-Series

WARNING: INCORRECT INSTALLATION OF A MANUAL CAM CHAIN TENSIONER MAY RESULT IN SEVERE ENGINE DAMAGE. IF YOU ARE NOT CERTAIN HOW TO INSTALL THE CAM CHAIN TENSIONER THEN IT IS ADVISED THAT IT BE INSTALLED BY A SHOP WHO IS FAMILIAR WITH THIS PROCESS.

Step 1. Raise the bike onto a center stand so that the rear tire is off the ground.

Step 2. Remove the factory installed tensioner using a 22mm wrench. (Fig 1) (Fig 2) and (Fig. 3)



(Fig. 1)



(Fig. 2)



(Fig. 3)

Step 3. Remove all factory chain tensioner parts from the cylinder head. (Fig 4) and (Fig 5)



(Fig. 4)

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(Fig. 5)



(Fig. 7)

Step 4. Remove the Threaded Adjuster from the back side of the MotoWerks tensioner. (Fig. 6) and (Fig. 7)



(Fig. 6)

Step 5. Reuse and install the OEM crush washer onto the tensioner and install it into the cylinder head and tighten. **IMPORTANT! TORQUE TO 40 NM.** (Fig. 8) (Fig. 9) and (Fig. 10).



(Fig. 8)

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(Fig. 9)

Step 6. Install the Threaded Adjuster into the tensioner and thread it in by hand (using a 5mm allen wrench) until it begins to get tight. (Fig.11) (Fig. 12) and (Fig. 13)



(Fig. 11)

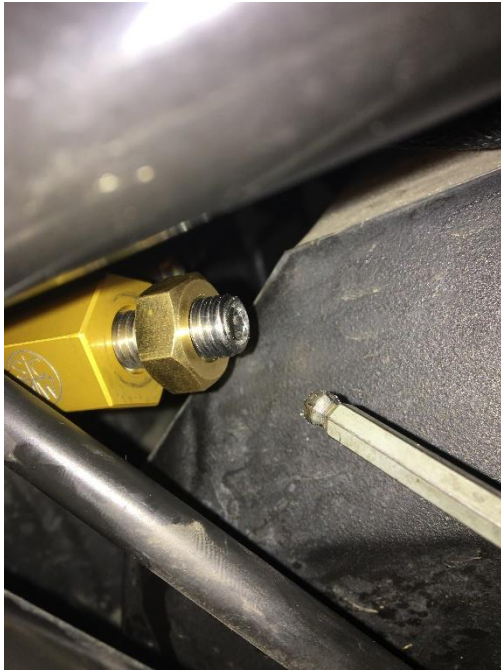


(Fig. 10)



(Fig. 12)

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(Fig. 13)



(Fig. 15)

Step 7. After the tensioner gets snug, put the motorcycle in 6th gear (Do not start the engine) and using your hand, rotate the rear wheel in the direction of the motorcycle's forward rotation (counter clockwise facing the bike from the left side) at least a quarter turn. (Fig. 14) and (Fig. 15)

Step 8. Turn the threaded adjuster in until it is snug. Install the lock nut and tighten. (Fig. 16) and (Fig. 17)



(Fig. 14)



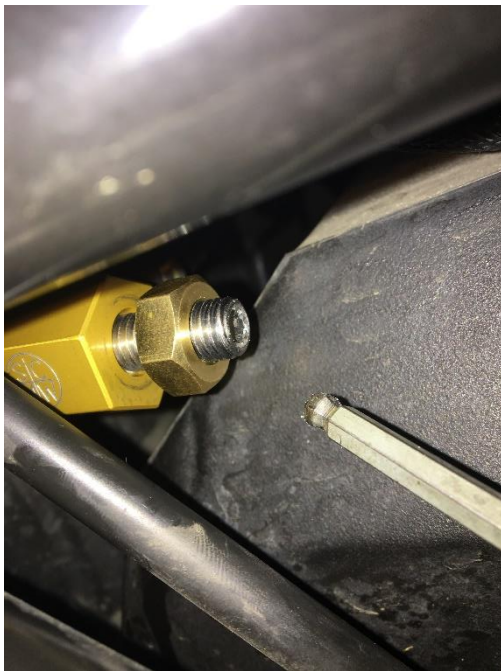
(Fig. 16)

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(Fig. 18)

Step 9. Start the engine and let it idle. Loosen the lock nut and slowly loosen the Threaded Adjuster out until you hear the cam chain begin to rattle. Once it begins to rattle, turn it back just enough until the noise goes away. (Fig. 17)



(Fig. 17)

Step 10. Thread the lock nut down and tighten.

ADJUSTMENT

Adjustment is done by sound. Listen to the engine and adjust the tensioner based on the engine's chain noise. If adjustment isn't making a change in the noise of the chain, then further problems may need attention.

WARNING: OVER TIGHTENING THE TENSIONER WILL CAUSE ENGINE DAMAGE!