

Congratulations on your purchase of the popular M6 Chain Tensioner for Big Twins. The *M6 Chain Tensioner* when installed in your primary engine case, automatically self-adjusts the tension on the primary chain to provide constant and even tension which improves your transition in gear shifting, reduces shifting noise, and makes for a much smoother ride—a true performance product that performs! ☐

STEP 1

Put your bike in neutral. Drain your oil and remove the primary engine cover.



STEP 2

Remove the factory chain tensioner, but DO NOT remove the inner slotted adjustment bracket that is held in place with two flush screws. Then slip the GUIDE PLATE (with the large steel block on the end) over the carriage bolt and slide it back against the factory slotted adjustment bracket with the block facing you. In some cases, the length of the guide plate may need to be shortened to fit your primary case. This can be accomplished by grinding the end as required.



STEP 3

Place the smaller SPRING inside the larger SPRING and place them in the hole in the bottom of the SHOE. With the smooth surface facing up on the SHOE, slip it under the lower primary chain and fit it against the "L" shaped guideplate.

NOTE: Never use washers in the SHOE or for any other use in installing the M6 Chain Tensioner.

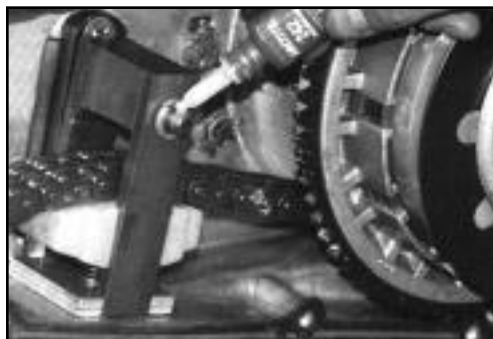
STEP 4

Place the SHIMS under the springs until you reach a measurement of 5/8" from the bottom of the SHOE to the top of the SHIM pack. If you need more than 5 SHIMS, this may indicate that your primary chain is worn and should be replaced. If you are installing the M6 on a stroker or in conjunction with a Fisher Damper, you will need additional spring pressure, so we recommend the distance be set to 1/2". '94 & Up models use the 'L' SHIMS as shown above at the bottom of the stack to accommodate uneven design in the engine case, installing the thick 'L' SHIM at the bottom. Always use a "U" shim on top to give a full surface for the springs to sit on.



STEP 5

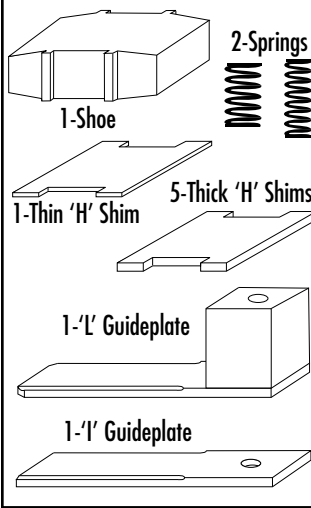
Place the other GUIDE PLATE with the bevel-cut edges facing inwards (towards the SHOE). Keeping the M6 held at a 90° (right angle) to the lower primary chain, torque the nut to 33 ft. pounds. Add a touch of loctite and you're done.



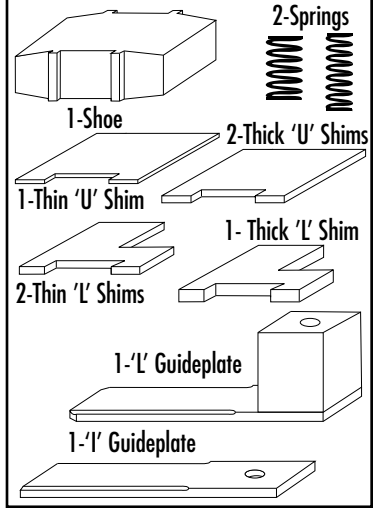
STEP 6

Oil and re-assemble the primary engine case. We recommend that you replace the gaskets. Check the unit for wear every 20,000 miles...and always keep clean oil. At some point in time you will have chain 'stretch' and will need to add an additional shim. Save your extra shims and instructions sheet for future use.

FOR '65 -'93 MODELS

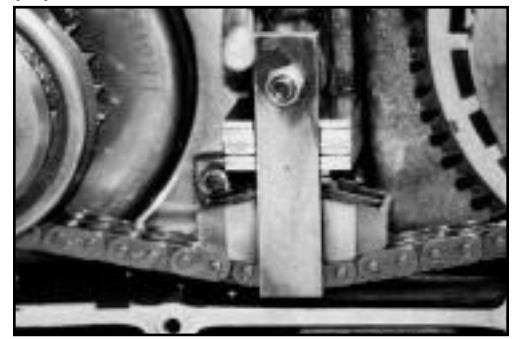


FOR '94 -'00 MODELS

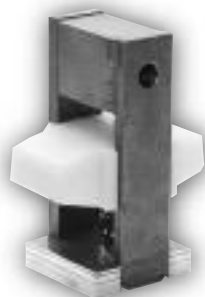


NOTES & EXCEPTIONS

- ☐ Some bikes have an adjustment screw that controls oil going onto the primary chain. Set it for more oil flow with a 1/4 or 1/2 turn. See your owners manual for directions.
- ☐ For '70-'84 models, use a new bolt that is 1/8" longer, as the *M6 Chain Tensioner* is thicker than the factory unit.
- ☐ On '84 models, you need to form a 3/8" copper (soft metal) pipe to re-route the oil from the spigot for better performance. Our best solution is to secure the copper pipe with a piece of pliable tin (to be used as a wrap-around bracket) and then secured by a 3/8" bolt that holds the M6 in place. Then bend the copper pipe to aim at the chain in center of plastic block.
- ☐ On '85 models...If the top part of the primary engine case has a 'web' that interferes with the upper part of chain, grind it down enough to clear this area. Clean the case with solvent afterwards.
- ☐ On some models, you may need to bend the ears on the bottom shim to help correct for slope design in the engine case. We have provided a very thin 'H' shim for that purpose.



- ☐ '85 and later rubber mounted engine option: If the lower chain when pressed down in the center clears the lower primary case by a minimum of 1/8", the SHOE can be installed upside down pressing the lower chain down. This would mean that the SHIMS would be on top with the springs underneath, then the SHOE. Use same spring compression measurements.



**"Feel the
difference!"**