



November 25, 2001

Technical Note 47: Increased Carrier Key Torque

For years, veteran ArmaLite assemblers have tightened carrier keys using a simple Allen wrench. This process has been successful.

As we added employees we decided to use calibrated torque wrenches to assure that we secure the key screws to the proper level. The government standard for carrier key torque is 35 to 40 inch pounds, and we secured torque wrenches set to that value. We then noticed an INCREASE in loose carrier keys. It turns out that we had tightened carrier key screws better *without* the wrench than *with* it.

We have therefore examined the engineering data related to the screw itself, and have increased torque to 55 inch pounds to improve carrier key tightness. We recommend that all AR owners make sure that their carrier key screws are secured to this level.

If your AR "short strokes," clean the underside of the carrier key and tighten both screws to 55 to 60 inch pounds. Tighten the front screw first. If your rifle isn't short stroking, just make sure that the screws are tight and re-stake if needed.

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