

Young Manufacturing, Inc.

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11/22/2009

Staking the Gas Key on the AR-15 and M-16 Carrier.

There has been a lot of talk about the pros and cons of staking the gas key on the carrier. Here is our opinion and why Young Manufacturing will not stake keys. We have been making carriers since 1991. The US Mil Spec. assembly drawing requires the carrier key to be staked. Contrary to some popular opinions staking does not "SEAL" the gas key. Staking keeps the screws from backing out. Period. If you do not properly torque the screws to 56 inch pounds you will be staking a screw that is loose or one that is over torqued and prone to breakage. We have seen plenty of staked screws that are loose or broken. The Mil Spec. also calls for the gas key bottom surface to be "SEALED" with Permatex gasket sealer. Something no one does to our knowledge. Here is our procedure for installing a gas key. First clean the oil from the gas key and the mating surface on the carrier. Then clean the oil from the screw threads. We use brake cleaner for this. Next use a very light coating of Permatex high strength thread locker gel on the bottom of the key. PN 27010. This is much easier to use than the Permatex gasket sealer. It comes in a plastic twist dispenser and can be purchased at ACE Hardware. Make sure you don't use so much that it squishes into the gas port hole. The cure rate is 60 minutes. Next coat the screw threads with the same gel. Install the key and torque the screws to 56 inch pounds. Should you decide to remove the key for some reason don't use the old screws when you put the key back on! You will most likely break them during installation or when you fire the rifle. Go to the local hardware store and buy new 8-32 x ¹/₄" SHCS. If you feel the need to stake the screws spend the money and get one of the staking tools from Brownell that uses a screw type system to swedge the material into the top of the screw. Don't use a hammer and a punch! You can stretch the thread on the screw or crack it. Now you have a loose screw that will eventually break if the gun even fires. You could also swedge the material out so far that it drags in the upper receiver. We will not warrantee a carrier with a staked key no matter who staked it. You will be charged for a new key and any labor required to remove broken screws.

Good Shooting!

Daniel H Young President