

Potential Problem Cutting Toyota Factory Original Keys

We are aware of possible issues that might be encountered when cutting some newer Toyota factory original key blanks. Apparently, some Toyota nickel silver OEM key blanks, sourced from Japan, are being fabricated from an unusually tough nickel silver alloy. This is creating several problems for dealerships or locksmiths using the key blanks involved.

Cutter Wear: Obviously this material is harder to cut, and as a result, key machine cutters will degrade more rapidly. We do not have enough data to project “how much faster” a cutter used to cut these keys will become dull. Even with a “fresh” cutter, noticeably greater noise is generated when cutting these keys and a more pronounced burr is produced on the edge of the cut surfaces.

Cutting Pressure: Users of manual style key machines may observe that they must “press harder” against their key machine’s carriage when cutting these keys compared to other types. Owners of semi-automatic and automatic models, which rely upon the machine to provide the cutting pressure, may observe that the machine may “skip over” a cut, or require more than one pass to complete the cuts on a given key. This will become more evident as cutter wear compounds the problem.

Ultracode Issue: The Ultracode normally cuts most double-sided automotive keys using its “electrical contact” feature by default (when cutting by code). The nickel silver alloy at issue tends to allow chips to stick to the leading edge of the cutter. This potentially creates a situation in that the first side of a key may be cut properly, but when attempting to cut the second side, a “stuck chip”, rather than the leading edge of the cutter, may contact the edge of the key blank being cut. This will fool the machine, and the resulting cuts on that side of the key could be cut too shallow... resulting in a mis-cut key.

To work around this, the operator can press and hold the “SHIFT” button and then press “START”, when at the point they would normally press the START button alone to begin the cutting process. This will deactivate the electrical contact feature for the key being cut, thus negating the effect of any chips that might have adhered to the cutter when cutting the first side of the key. The * symbol, which appears in the vise jaw position section of the Ultracode screen display, will change to “A”, indicating the electrical contact feature was successfully shut off. When in this mode, the operator **MUST** use vise position A to cut the key.

Operation of the machine in duplicating mode is unaffected by this issue.... It’s ok to duplicate keys using the normal procedures because the electrical contact feature isn’t active when duplicating keys.

Finally: We are investigating the effectiveness of coating cutters with titanium nitride to see if it provides a benefit when cutting this harder key material, and will advise as other solutions are developed.

