**Marc Zeitlin, Tehachapi, CA: ON MATCO Nordlocks coming loose.**

*“So a few years ago, getting sick and tired of how long it took to change brake pads on my Matco brakes, I upgraded to the new system with socket button head screws and Nordlock washers to hold the disk to the wheel, rather than the original socket head cap screws that got safety wired to the rim of the disc. I also upgraded the 5 bolts that hold the two caliper halves together to also use Nordlocks (per Matco's specification) to eliminate THAT safety wiring as well.*

*A few days ago, I took a 7 minute flight from Tehachapi to Mojave. Everything was completely nominal on takeoff. When I landed at Mojave and taxied off the runway, I started hearing some clicking noise, that I quickly determined was associated with my GS, not RPM. I parked, did my business, took a walk around the plane to see what was going on and saw nothing. I started up to leave on the 5 minute flight to Rosamond, but when I started to taxi, the plane did not want to go straight or turn left easily - obviously something was going on with the right wheel/tire/brake.*

*I removed the wheel pant and quickly discovered that one of the three disc attachment screws had backed out (overcoming whatever the Nordlock was supposed to be doing) and was hitting the brake pistons, causing a slight amount of cosmetic damage. I was able to re-tighten the screw, re-install the wheel pants, and go on my way. After a bit of difficulty with the brake dragging on taxi, after one takeoff and one landing, everything was back to normal.*

*I called Matco today and talked to George (the owner) about this issue, and he mentioned three things:*

1. *Be sure that the screw isn't bottoming out in the tapped hole in the wheel - although it is a through hole, he stated there have been instances where something munged up the bottom threads and the screw couldn't be tightened against the nordlock due to bottoming out*
2. *Be sure to tighten the disc screws to 100 in-lb, as stated in the instructions*
3. *Check the INTERNAL steps of the Nordlock for reasonably sharp edges. George stated that Nordlock indicates that their washers are SINGLE USE ONLY. He said that Matco uses them a small number of multiple times, but only after verifying the internal step geometry*

*I'm guessing that my washers are a bit worn and needed to be replaced.*

*I just ordered 30 sets of Nordlocks - I figure for $0.95 each, it's a small price to pay for the peace of mind for every time I remove the brakes/wheels/tires.*

*Just thought I'd let folks know about another consumable and maintenance item for your checklists. Probably be a good idea to have extras for the 5/16" caliper bolt nordlocks as well...*

*I REALLY wish that Grove made a brake that had 20% more energy capacity than their largest 5.00 x 5 brake - Groves are a LOT easier to deal with (as are Clevelands) from a maintenance perspective... I do not have any experience with the high energy Beringers to say whether or not they're easier or harder from a maintenance standpoint.*