

NEW BROTHER TN450 DEVELOPER ROLLER

By Mike Josiah and the Technical Staff at UniNet



New OEM Brother TN420 and TN450 toner cartridges are now coming with a new style developer roller.

This figure shows the **old style** OEM roller (top) next to the **new one** (bottom).



The new roller has a black conductive plastic shaft instead of a metal one, as shown here.



The developer roller consists of a plastic core with a conductive plastic sleeve fitted over it.

Left photo is a close up of the **new roller**.

Right photo is a close up of the **old style**.

The new rollers are 100 grams lighter than the old style. So when you pick up a new style cartridge, the weight difference is immediately apparent. It was at first thought these cartridges might be very good clones, but we purchased a few cartridges directly from Brother and they now have these rollers so they are legitimate OEM Brother cartridges.

UNINET X-GENERATION® TONER AND DEDICATED DEVELOPER ROLLER CLEANER ARE APPROVED FOR USE WITH THESE NEW ROLLERS...

This new roller raised some concern on compatibility with our toner for these cartridges, so multiple life tests were run using the rollers.

When running a new OEM cartridge or when using [UniNet X Generation® Toner](#), this new roller is a definite improvement over the old rubber style roller. The black and grayscale pages are even, with no banding at all and no ghosting or backgrounding was seen at all in any of the tests. The stated yield for the TN450 is 2,600 pages and in all our life tests we yielded within 15 pages of the stated yield. Density averaged 1.51 throughout all the tests.

We also cleaned the new developer roller with our [UniNet Dedicated Developer Roller Cleaner \(part #18105\)](#) and it worked perfectly. The normal toner residue was removed and the cleaner did not harm the new sleeve in any way. Life tests run after cleaning the developer roller were the same as those run on virgin rollers. Great density, even graphic pages, excellent yield and no backgrounding or ghosting.

While this new roller has only been seen so far in the TN420/450 cartridges, it is our guess that Brother will be rolling them out in their other cartridges as well. We will continue to be vigilant and watch for these changes and will continue testing, but for now you should not have any hesitation in using these cartridges with the new rollers.