

MODERN NUT DRIVERS

This presentation documented by a vintage train hoarder collector who is also a serial train abuser.

Your results may vary?

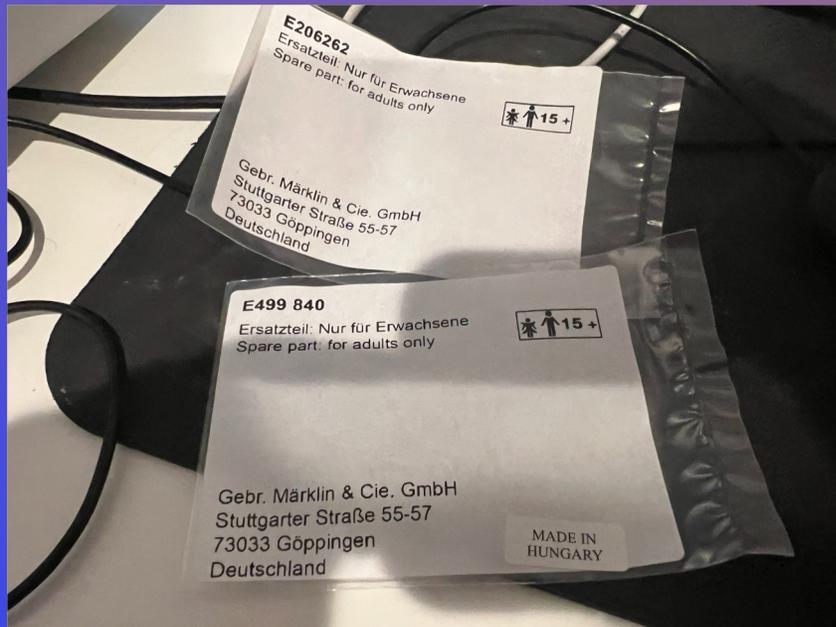
The problem:

Lost bolts on a steam locomotive valve gear and needed to replace the micro bolt and washer.

Needed to change a traction tire on another steam locomotive that necessitated removing a small bolt to access the wheel to change the tire.

Neither the classic Marklin tool kit #7090 or any of my miscellaneous tools were the correct size.

THESE ARE THE MICRO NUTS AND WASHERS THAT NEED TO BE REPLACED =TINY



SO I REVIEWED MY CURRENT
TOOL INVENTORY AND NOTHING
APPEARED TO BE THE CORRECT
SIZE?



SO I PANICKED WENT FOR SOME NEW TOOLS



Kraftform Micro 2069/6

Code Nr.: 05 118158 001



2069 Micro

1× 2.0x60; 1× TX 2.5x60;
1× 3.5x60; 1× 3.5x60;
1× 4.0x60; 1× 5.0x60



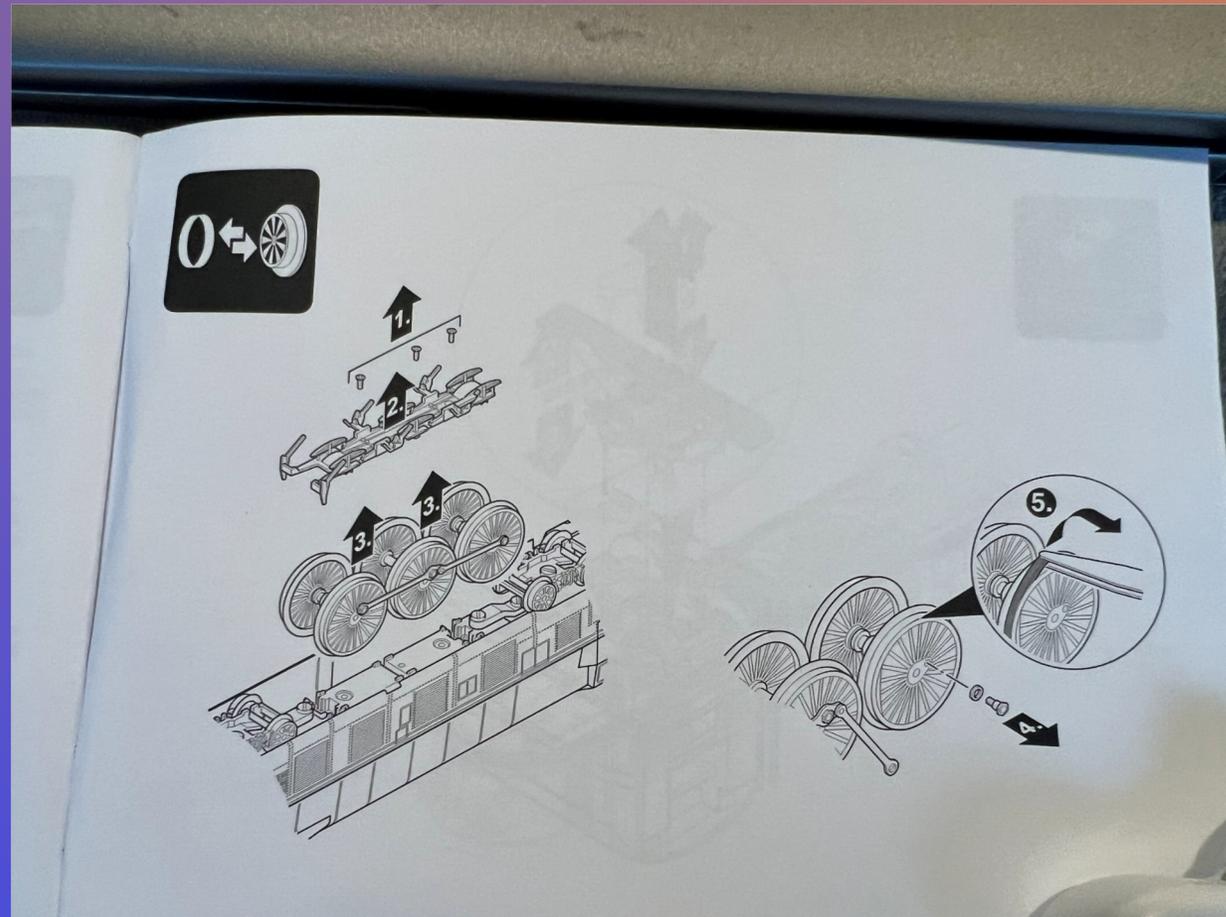
4013288032447

WERA 6 PIECE SET \$49.67
AT AMAZON

THE VICTIM



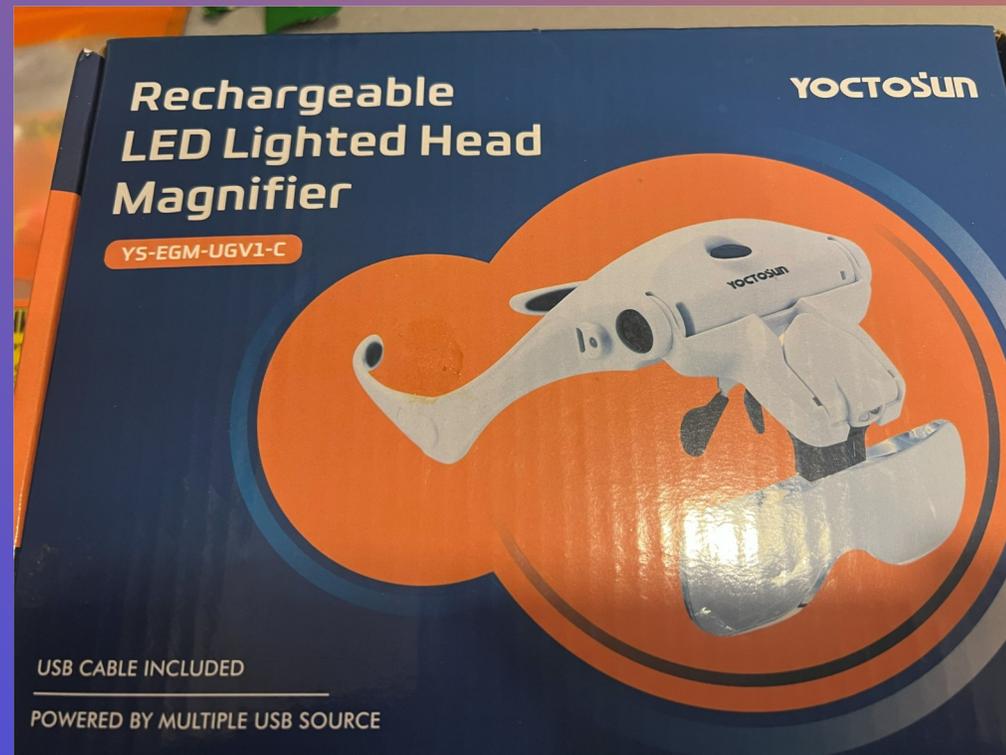
DIAGRAM FROM LOK MANUAL



WHAT WE ARE WORKING WITH?



OUT COME THE MAGNIFIERS AND OPERATION COMPLETE!





PRO TIP

BALL UP A SMALL PIECE OF BLUE MASKING TAPE AND STUFF IT INTO THE SHAFT OF THE NUT DRIVER TO HOLD THE WASHER OR BOLT BY ADHESION



CONCLUSION

HINDSIGHT BEING 20/20, I DIDN'T NEED THE NEW NUT DRIVERS BECAUSE THE MARKLIN TOOL KIT NUT DRIVER ACTUALLY FIT THE BOLT JUST PERFECTLY 😊. BUT THE WERA HAVE MUCH BETTER ERGONOMICS AND HAVE MORE TORQUE. MANY OTHER MODERN LOKS HAVE SIZES FOR PARTS THAT DO NOT SYNCH WITH THE MARKLIN TOOL KIT, THINK PIKO.

Thank You Thom Keyes

IF YOU ENJOYED THIS CONSIDER JOINING THE NMRA AND SUSCRIBING TO THE NMRA MAGAZINE AND READING THE MONTHLY TOOL CAR ARTICLES WRITTEN BY JACK HAMILTON, A FELLOW 4D MEMBER

TOOL CAR

Article and photographs by Jack Hamilton, NMRA®

IS THE END IN SIGHT?

HI, my name is Jack, and I am a tool junkie. This batch of tools brings me to the end of the initial stack in the inbox. Fortunately, while procrastinating and then trying to recover, several new items have been added to my collection. The probability of finding the same item remains low.

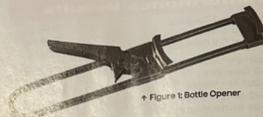
When purchasing a better jar, I found out to the detriment of my current collection. In keeping with the theme of continuing to add a new tool to my collection, the jar I purchased has a fixed jaw and a jaw that slides on two parallel rods (forming the tool handle). The sliding jaw features a clamp lever to secure the jar cap in place (Figure 1). With a simple set, slide, clamp, and twist, the jar cap rotates, and the jar is opened. Well, maybe. As with most of the jar screw tops we work with, we have managed to glue them tightly to the top of the jar. Moving the clamp around the top of the lid and clamping down will tend to loosen the glue-like hold on the cap, allowing the jar to open. It does not replace my favorite (OXO Good Grips), but it works well, and the price is right.

Many modelers (if you are old enough) remember the days of browsing through the list of tools offered by the salesperson who was the source for motors, gear sets, and various associated components. Owning a gear puller has always attracted me. I don't know why, because I wasn't interested in rebuilding motive power

units. It was a neat-looking tool. Anyway, I never bought one. To stoke my thirst for the tool not purchased, a less expensive opportunity appeared, and I leaped. The tool includes three different diameter shafts (Figure 2). Now that I have the tool, it will take up residence in the rolling toolbox and be quickly forgotten. I may remember I own one if I ever need a gear puller.

I work with PanPastels, and occasionally, my enthusiasm overpowers my artistic ability. Unlike paint, PanPastels provide a simple and effective means for correcting errors that will not be mistaken for "weathering." It is possible to remove pastels from most surfaces easily. The tool is what was once known as a typewriter eraser and is now commonly referred to as a rubber eraser (Figure 3). The eraser is a multipurpose tool because it serves to erase pencil marks. An alternative eraser is available from the artists supply store, but it is larger and does not work well for removing small errors. Like most new tools, there is a learning curve, and it's a good idea to practice on scrap materials.

No toolbox is complete without a selection of picks and probes. They are used to punch holes, move small things around, or hold objects in place. Picks are used to apply adhesive, roll pieces away from double-sided tape, and scribe styrene or wood. In reality, there is not much you can't do with a handy pick. Here is a set



↑ Figure 1: Bottle Opener



↑ Figure 2: Gear Puller



↑ Figure 3: Eraser Pencils

of four with aluminum handles and steel blades (Figure 4). They are light, easy to hold, and sharp. Each comes with a protective cap to keep the protectors sharp. Keep the protectors sharp.

Weathering N-scale structures generally requires a variety of brushes and applicators. A set



↑ Figure 4: Metal Picks

same is true of any other scale, but for smaller scales, a slightly smaller applicator size is critical. The same principle applies to dry-brushing small items or small areas. A new set of 14 brushes, each with different sizes and bristle shapes, provides the necessary tools (Figure 5). There is nothing special about the brushes, but they do have some appeal. They are all-white, so they are easily recognized and isolated for single use. The multiple tip sizes and shapes provided a wider range of choices in selecting the right tool for the job. I have used several from the set for weathering work with PanPastels and am pleased with the results.

I now have a set of very nice liner brushes. The set includes five brushes with bristle lengths ranging from 4 mm to 25 mm (Figure 6). Each brush features a cap that covers the entire brush end, providing complete protection for the bristles. The brushes are comfortable in the hand and hold their shape well in use. To provide greater stability to my hand when using the brushes, I rest the heel of my hand on a bean bag. The four-inch carpenter square may not be the tool of choice for working on Z-scale or N-scale projects, but it does have a use. This three-axis square has 4-inch, 6-inch, and 2½-inch legs. Some assembly is required (Figure 7). In addition, the tool features a movable pin that supports marking angles for more common roof slopes (from 22.1 to 75 degrees). The 6-inch leg is drilled out with holes spaced 1 mm apart to help mark and draw parallel lines — a nice

Item	Source	Est. Cost
Bottle Opener	TEMU	\$3.76
Gear Puller	TEMU	\$4.10
Rubber Eraser	TEMU	\$3.09
Metal Picks	TEMU	\$2.41
Dry Brush Set	TEMU	\$6.64
Liner Brushes	TEMU	\$6.79
4-Inch Carpenter Square	Amazon	\$12.15

TOOLS

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Figure 5: Dry Brush Set



↑ Figure 6: Liner Brushes



↑ Figure 7: Box Square

tool for benchwork, model construction, and perhaps even large-scale modeling.

SOURCE INFORMATION
In past columns, I have identified sources such as craft stores or local hardware stores only to find that the items are no longer sold or unavailable in specific locations. I have cited more universally available outlets to assist in finding the things. These items may be available at a lower cost through alternate vendors.

Please check the NMRA Partners on the "members only" page of the website before purchasing any item listed below to see if a discount is available. Taking advantage of a discount that benefits you also helps the vendor and the association. ♦