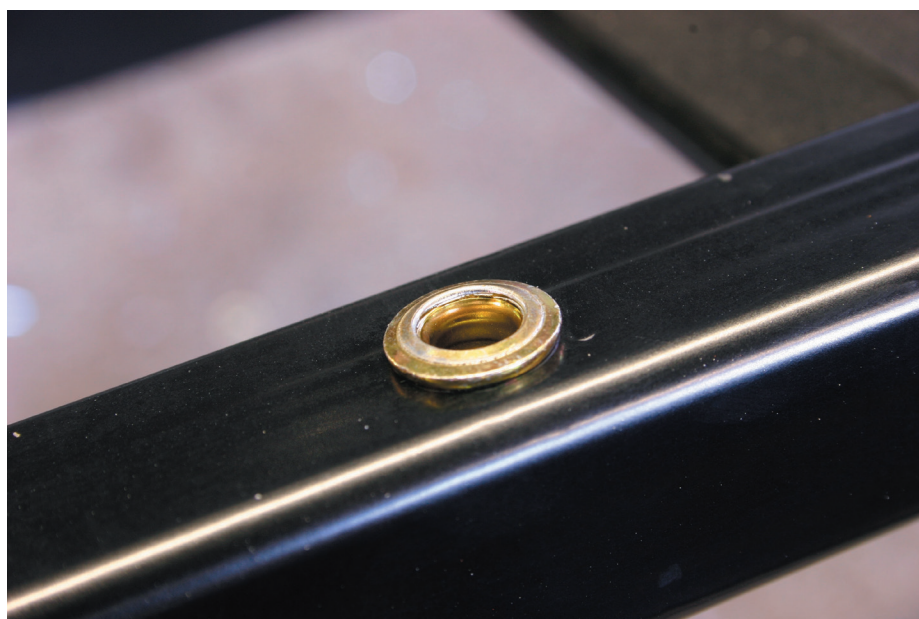


RNHT410 Product Review



The brand new RNHT410 Rivet Nut Tool from MEMFast.

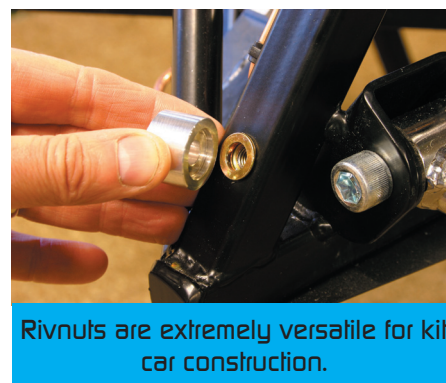
MEMFast (MEMFast Limited) is a well-established brand within the kit car industry. The company's claim to fame is the development of one of the simplest and highest quality rivet nut insertion devices on the market. This tool has been continually developed over a four year period, culminating in the very latest incarnation known as the RNHT48/410 Rivet Nut Tool. Nigel has been keen to follow the development of this product, having been so impressed during the build of his last project car. Over to Nigel for the lowdown on MEMFast's latest creation.



Rivet nut in situ. This variant sits proud of the chassis, but countersunk alternatives are also available.



This set contains M4, M5, M6, M8 and M10 mandrels.



Rivnuts are extremely versatile for kit car construction.

Most of you reading this feature will be fully aware of the versatility of using rivnuts during a kit car build. The ability to insert a thread into a thin component - be it a steel chassis tube or fibreglass panel - is incredibly useful. The fasteners are available in various thread sizes and formats, many of which I have used during some of my own builds. Of particular note was the construction of my Ultima and DAX Cobra, where I used the traditional scissor-action insertion tool on numerous occasions. This was fine but required superhuman strength, especially when inserting large threads. In addition, the cumbersome nature of its operation made working in tight spaces almost impossible. As you can imagine, I was delighted when MEMFast launched their revolutionary alternative (the RNHT07) which overcame all of these issues. Utilising a rotary action to compress the rivnut, controlled insertion was the result. The compact design was a delight, and the option to use a spanner for additional leverage negated the need to have weightlifter's forearms for operation. Used to great effect on my Raptor build, I have never looked back and the rivnut set has become an essential part of my tool arsenal.

MEMFast is not a company to stand still, however, and the concept saw continuous development, with the launch of the upgraded version (the RNHT48) in 2011. This was a significant evolution of

the product in numerous areas and was reviewed in the August 2011 issue of Kit Car magazine by yours truly. The review was nothing but glowing and reinforced the company's desire to develop the product further. The feature also gave me the opportunity to provide an insight into the world of thread insertion and how useful it is in many kit car applications (if you missed the issue it can be purchased through our back-issue department). As far as the tool itself was concerned, it came in a tough aluminium case with high-density foam inserts to neatly hold the following:

- *Driver with knurled knob*
- *Four individual mandrel bodies with M4, M5, M6 and M8 mandrels*
- *Handle*
- *10 mm high-quality ratchet spanner*
- *Full set of spare mandrels*
- *Allen key*
- *Full instructions*

The concept behind the new implement was to reduce the time it took to assemble the constituent components; the removal of sharp edges on the tool's nose (this could potentially leave pressure indentations during use); significantly strengthen the entire assembly; and modify the design so it could cope with the most demanding production environments. All these improvements resulted in a stunning piece of equipment that did not detract from the original but simply enhanced the concept.

As with most new products there is often the need for a few tweaks to optimise the design after initial launch, and the RNHT48 was no exception. The new updated version has been re-launched in two variants: the RNHT48 (obviously retaining its predecessor's product code) and the RNHT410. The difference between these two products is the former will insert M4, M5, M6 and M8 rivnuts (with provisional cut out to allow for M10 inclusion at a later date), whereas the latter includes the M10 assembly as standard. MEMFast are extremely confident that these products are the most well-developed rivnut tools money can buy.

Having followed the development of this product throughout the years, I was fortunate enough to receive one of the very first examples from the production line. On first inspection the RNHT48 kit looks almost identical to its predecessor, but this should be of no surprise: 99.99% of the design was spot-on straight out of the box.

The key changes which have been incorporated in the RNHT410 are as follows:

1. *The internal drive mechanism has been redesigned to include a hardened screwdriver hex bit, replacing the machined and hardened hex drive. The*



The three basic parts of the RNHT410.

- new design gives much higher torque drive performance and a more cost-effective replacement in the unusual event of damage.
2. *The screwdriver bit is also locked in with a grub screw so loss of the bit is minimised if the mandrel is disassembled.*
3. *The threaded section holding the rivnut is a 12.9 grade socket cap screw. Spares are provided in the kit and are readily available from other sources if further screws are required.*
4. *The drive face on the mandrel body is now diamond knurled before being case hardened (rather than being grit blasted). This provides increased friction to ensure the rivnut does not rotate on insertion.*
5. *The set comes with five individual mandrel bodies with M4, M5, M6, M8 and M10 as standard.*
6. *The finish has been improved*

by using CR3 chrome free zinc plating.

7. *The internal drive assembly (cassette) uses a friction fit "O" ring to hold the internal drive assembly together as one unit. This will make changeover from metric to unified, for example, quick and easy and minimise loss of components.*

The RNHT410 in detail

As with the previous example, model presentation cannot be faulted, thanks to the small carry case and foam inserts. This has remained unchanged and not only provides protective storage but also ensures all the constituent components are returned to their rightful homes after use. Compared to alternative products which are simply sold in shrink-wrap packaging, this attention to detail clearly demonstrates the care and time invested in this product. The instructions are clear and concise.

Simply holding the driver body in your hand demonstrates the quality of the



To assemble, slide main driver into mandrel of choice.



Once the main driver is inserted, screw in handle.

materials used. Weight is one thing, but the finish is impressive and promises not to deteriorate over time when stored in the bottom of your tool box. The knurling is of superb quality on both the main driver and handle. This may sound an insignificant point, but adequate purchase during operation is a real challenge, especially when you have oily hands. Lifting the gargantuan M10 insertion assembly from its foam recess leaves me in no doubt it is man enough for the job.

Moving on to the enhancements designed in the latest model, it is clear to see the improved bright finish. This is not only easier to clean after operation, but gives the product an air of sophistication. The deep diamond knurling on the nose of each mandrel body offers considerably more friction (note picture), key to optimum operation since it must grip the flange of the rivnut to avoid rotation during insertion.

Dismantling one of the mandrel bodies also uncovers a significant design enhancement. Experience has shown

the most vulnerable link in the tool's construction to be the mandrel drive itself. This has been significantly redesigned to incorporate a high-grade screwdriver hex bit (hard as nails), held in situ by a small grub screw. The new design means that the only component needing to be replaced due to wear or damage will be the socket cap screw (consumable part and readily available).

Operation is just as simple as with its predecessor. The five easy steps are as follows:

Step 1: Decide on the type of rivet nut required for the job.

Step 2: Screw the selected rivet nut onto the mandrel by hand until the shoulder presses against the body.

Step 3: Refer to the website (www.memfast.co.uk) for the correct hole

diameter for the rivet nut, and drill the work accordingly. All MEMFast rivet nut packs provide thread type, material/finish, hole size and material thickness to guide users on installation.

Step 4: Press the rivet nut through the component ensuring the tool is perpendicular to the surface. Rotate the large knurled knob by hand until the nut's outer is compacted and clamps the panel. If required, the ratchet spanner provided in the kit can provide additional leverage - this would be required for M10 rivnut insertion.

Step 5: Unscrew the tool. Job done.

Unified Imperial available soon

The item reviewed here is obviously metric, but by the time you read these words an imperial version will be imminent. Supplied as a conversion kit, you simply need to take the appropriate body, remove the internal component "cassette" assembly, transfer the bearing set to the unified equivalent and re-insert into the body. Supplied in a dedicated plastic box, the kit comprises of #8 to 5/16" (and 3/8" where required) in both UNC and UNF. Metric Rivet Stud Conversion Kits

Soon to be available, changeover from rivet nuts to rivet studs will be just as quick and simple as converting to from metric to



Ready for use.



Here you can see the diamond-cut knurling on the RNHT410 (left) compared to its predecessor on the right.

unified rivet nuts. Supplied in a dedicated plastic box, the kit comprises M4 to M8 rivet stud drives.

What if I have already purchased the older version of the RNHT48?

MEMFast are so impressed with the performance of the new tool they are offering a free replacement scheme

for any customers who purchased the first release of the RNHT48. Simply send an e-mail to info@memfast.co.uk (advising order number if applicable or Kit Car Show where purchased) and they will explain the returns procedure.

How much then?

The cost of the RNHT410 is £85, whereas the RNHT48 is just £60. If you opt for the



The internals of the mandrel have been modified for increased strength. The RNHT410 is shown at the top of the picture, with its predecessor underneath.

latter, it can be upgraded with an M10 insertion tool at a later date for £25. MEMFast has decided to discontinue the 07 tool due to the far superior design, performance and packaging of the 48/410 but will continue to stock and supply spare parts for the 07.

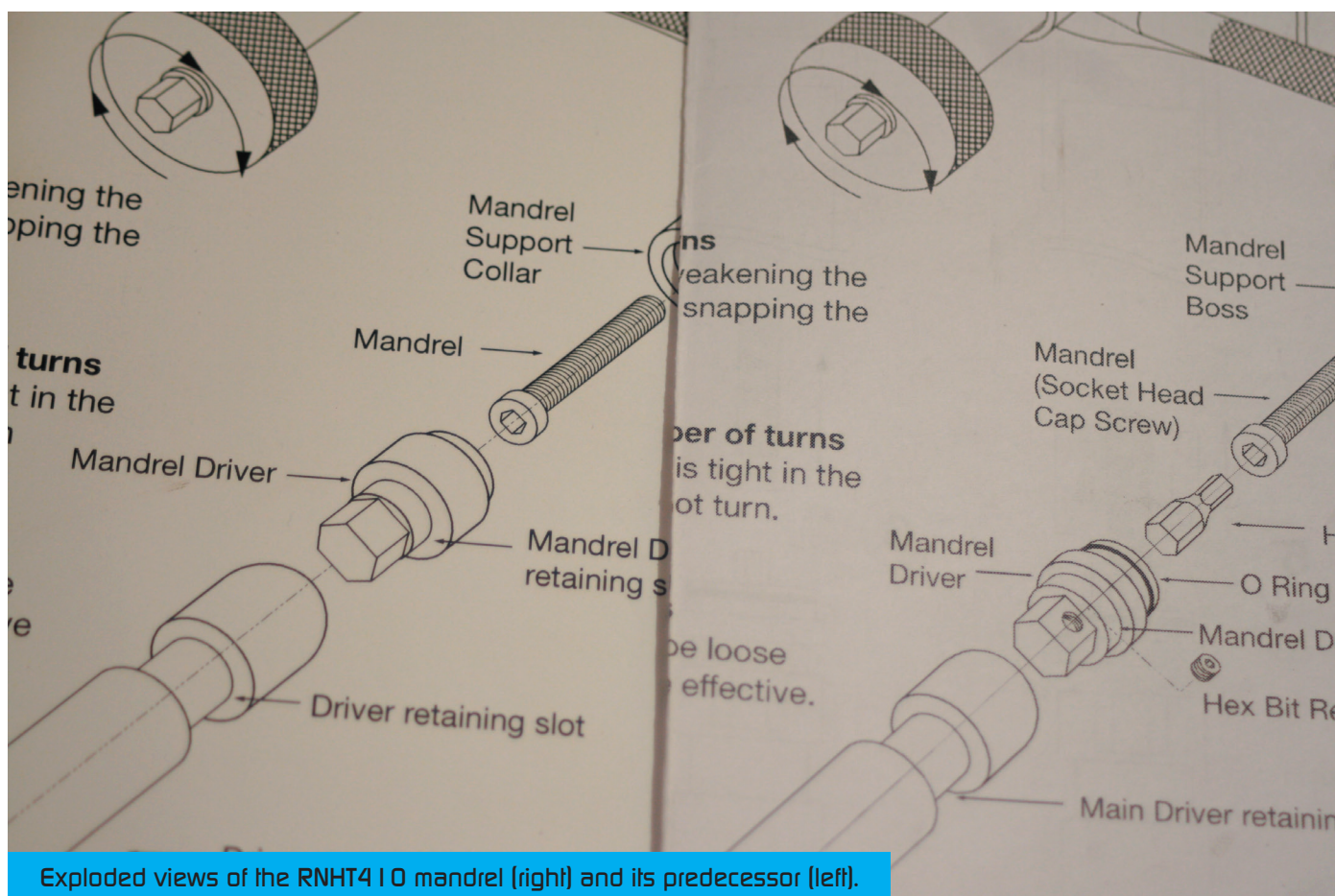
Note: all prices include VAT.

For more information, please contact the company on:

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Exploded views of the RNHT410 mandrel (right) and its predecessor (left).