

## Safety Warnings - please read

- Wear eye and hand protection when using this tool kit. Be aware of the dangers of metal swarf and cuttings.
- Always carefully clean the tool components after each use, ensuring that there are no traces of metal swarf of cutting lubricant.
- Keep the tool components safe and tidy in the supplied case.
- Do not use the kit for any purpose other than for which it is designed.



**Safety First. Be Protected.**

Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by the Tool Connection for incorrect use of any of our products, and the Tool Connection cannot be held responsible for any damage to personnel, property or equipment when using the tools. Incorrect use will also invalidate the warranty.

If applicable, the applications database and any instructional information provided has been designed to offer general guidance for a particular tool's use and while all attention is given to the accuracy of the data no project should be attempted without referring first to the manufacturer's technical documentation (workshop or instruction manual) or the use of a recognised authority such as Autodata.

It is our policy to continually improve our products and thus we reserve the right to alter specifications and components without prior notice. It is the responsibility of the user to ensure the suitability of the tools and information prior to their use.



When you have finished with this folder please recycle it.

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**Guarantee**

This item contains consumable elements that are **NOT** covered by the Tool Connection Guarantee. For spares contact our service department direct on: +44 (0) 1926 818188.

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Part No. 5476

# LASER<sup>®</sup>

## Oxygen Sensor Thread Repair Kit

9pc

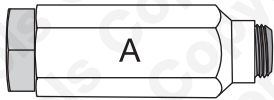


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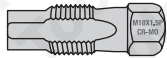
## Introduction

Designed for the repair of damaged lambda (oxygen) sensor threads. The kit includes tools and parts for replacing the damaged threads with a new threaded insert.

## Components



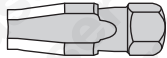
A



B



C



D



E  
(X 5)

Ref.	Description
A	Insertion tool
B	Tap: M18 x 1.5 pitch
C	Tap: M20 x 1.5 pitch
D	Reamer: 18.6mm
E	Threaded inserts (x 5)

Spare **threaded inserts** are available - **Part No. 0069** (5pc)

## Instructions

If the internal thread of the oxygen sensor housing is so badly damaged that it will not secure the new sensor, then use the following method to remove the damaged thread, and then cut a new thread to take the threaded insert. Read through the instructions and have a clear understanding of the steps involved before you start the repair operation.

## Instructions

1. Using the supplied reamer (**D**), turning clockwise with a 16mm socket or spanner, and assisted by a proprietary cutting lubricant, cut away the existing internal thread of the sensor housing to leave a 18.6mm diameter plain hole. This is the correct core size for the M20 X 1.5mm pitch thread of the new insert.
2. Carefully clean the newly reamed hole and remove any metal swarf and cutting lubricant.
3. Again using the 16mm socket or spanner, now use the M20 X 1.5mm tap (**C**) to cut the new thread in the sensor housing. Again use the cutting lubricant. The tap (**C**) has a tapered lead-in to assist with the cutting of the initial thread. Cut clockwise applying pressure to the tap; cut clockwise for half a turn, then clear the swarf by turning anticlockwise for a quarter of a turn. Continue this cutting process until the new thread is tapped to the required depth.
4. Carefully clean the newly threaded hole and remove any metal swarf and cutting lubricant.
5. Take a thread insert (**E**) from the kit and screw it onto the end of the two-piece insertion tool (**A**) with the collar end towards the insertion tool. Screw the insert on firmly finger-tight with the collar fitting flush against the main body of the insertion tool.
6. Using a small amount of proprietary thread-locking compound, carefully screw the insert into the newly threaded hole on the sensor housing. Screw in the full length of the insert until the collar is flush against the sensor housing. **Do not overtighten.**
7. Remove the insertion tool by first turning the main bolt hex head (27mm) anticlockwise, then withdraw the insertion tool.
8. Carefully clean the internal threads of the new insert and take care to remove any thread-locking compound if there is any present.
9. The last step is to carefully run the M18 X1.5mm tap (**B**) down the internal thread of the new insert to ensure that there are no interference spots on the threads. Clean the threads once more before screwing in the new oxygen sensor.