There are many methods used to repair a worn out diesel fuel injector. The primary ways are refurbishing, repairing and remanufacturing. While these terms are often used interchangeably, the actual processes and end results are very different. Let’s review what each term actually means for the diesel specialist and their customers before getting into DTech remanufacturing:

**Refurbishing**
This is a very basic process of externally cleaning a used injector. External o-rings and seals are often replaced. In some instances, the injector may be disassembled and internal parts cleaned. The injector may be tested to see if it has acceptable operation and is normally sold without a warranty.

Refurbishing is a very inexpensive repair process and difficult to determine the reliability of the injector. The reliability risk to the repair specialist and, ultimately, to their customers is high as the parts do not need to meet a stated standard and part failure can happen at any time.

**Repair**
In the repair process injectors are inspected and tested to determine their current performance characteristics and to provide an idea of what may be wrong with the injector. Injectors are disassembled with certain parts replaced or repaired in order to address the performance issue. The injector is then re-assembled and usually retested, the extent of which depends on the vendor’s standards.

While this is a good process with improved reliability, one shortcoming is service dealers often only focus on fixing the specific problem with each specific injector and do not address the overall service life of the injector.

According to Bosch(1), there probably will not be consistency of part replacement or inspection standards, even among Bosch authorized dealers. For the diesel truck specialist and their customers, a repaired injector is higher quality and more reliable than a “refurbished” one but “repair” is not the highest level of consistent product quality and dependability that can be had.

**DTech Remanufacturing**
Remanufacturing involves a larger scale manufacturing process that delivers a consistent quality injector. Injectors are updated with design improvements resulting in better engine performance and increased durability.

At DTech, our goal is build remanufactured injectors that will equal or exceed the service life of the original injector. A typical diesel fuel injector should last 140,000 to 170,000 miles under normal operating conditions absent external factors such as fuel system contamination.

*(Continued on next page.)*
Here is the general outline of the DTech documented and verified remanufacturing process:
1. Using a batch process, all injectors are completely disassembled and each individual part separated.
2. Specific, pre-defined parts are immediately discarded while others are sorted.
3. Sorted parts are cleaned and inspected. Each sorted part has its own inspection process and acceptability standard.
4. Parts determined to be reusable go through part-specific testing and repair protocol to make sure they meet DTech standards and are usable in the final injector assembly.
5. Injectors are reassembled in stages using a combination of new aftermarket and OE parts as well as reconditioned OE parts. Continuous testing occurs through each assembly process.
6. Final injector testing occurs on industry proven engine simulation equipment. Test specifications are reverse engineered by extensive testing of new OE injectors as well as testing of injectors on OE test equipment.

What Is The DTech Difference?
- All DTech products come with a two year, unlimited mileage warranty.
- All DTech remanufactured injectors are guaranteed to pass state smog tests.
- All DTech remanufactured injectors must pass our own rigorous processes before we tamper-proof them and put our name on them.
- DTech is the remanufacturing brand of DIPACO. DIPACO has been providing parts to the diesel repair market since 1948; we know parts and have a trusted track record.
- Since 2008, our DTech brand has provided new and remanufactured diesel fuel system components. All DTech products are remanufactured in the United States.

(1) http://www.choosetherightinjector.com/en
(2) Visit dipacodtech.com/warranty for full warranty details.