

Fuel Line Fittings and Ferrules



M35A2 Multifuel

Fuel Line Fittings and Ferrules

A quick discussion on the fuel line compression fittings and ferrules used on the M35 2-1/2 ton multifuel engines

First a quick description of the factory fittings. The fuel line compression nuts used on the multifuel engines by the manufacturer are a unique design. The ferrule (or compression sleeve) is actually attached to the end of the compression nut by a thin area of material and is shaped differently from a standard ferrule. The ferrule that is attached to the end of the factory compression nut is standard taper on one side but the end connected to the compression nut creates a matching mating surface when it breaks free of the compression nut.



New Factory Fitting



Factory Fitting after Tightening

In use the ferrule on the factory fitting is designed to snap off of the end of the compression nut when the fitting is tightened. This break line gives the nut a matching surface to press against on the ferrule and keeps the ferrule from turning sideways and making a poor seal. This poor seal is what we encounter when trying to reuse the factory nut with new generic ferrules.

There are a few types of generic ferrules that you might try to use. Below are the two most common that we see.



Basic Plain Ferrule



Self-Centering Ferrule

The basic ferrule is the most common and can be found at any home improvement or hardware store. While they are the cheapest of the group they have a few issues. The positive is that they are short enough to work with the factory nut if you are reusing it. The negative is that they tend to turn sideways when tightened causing minor leaks. Unfortunately there is no way to correct this. Tightening the fitting more just makes the problem worse.

As you can see in the picture the ferrule has rotated while being tightened and is just barely contacting the compression nut and matching fitting in two areas.



The second option is the self-centering style of ferrule but as they come they are too long to work with the factory fittings. Due to the length they nut will just barely allow one full thread of the nut to engage the fitting. Trying to tighten the nut will result in a stripped nut and possible damage to the mating fitting. We have seen reports of owners sanding down one side of the ferrule to gain enough thread engagement but haven't used this method ourselves.

The final (and best overall) option is to use the factory matched nut/ferrule combo fitting that we use. These fitting are a 100% match to the factory supplied pieces and give a perfect seal with the chance of the ferrule turning sideways and causing leaks. Yes, they do cost a bit more but the fuel lines aren't something that you will be replacing over and over again.

We recommend using the factory match fittings whenever possible. Do it once. Do it right.

Hopefully this has shed some light on your options for fuel line fittings. If you have any questions please feel free to contact us.

Richard Martin

Rattlin' Truck & Tractor
sales@rattlintruck.com
<https://www.rattlintruck.com/>