TECHSIDE
BY **DAVE HAGEN** WITH **PHILIP GEORGE**

Innovative Tools for Deutz Diesel Engines

Over the past few years, Foley Engines has developed some innovative tools for the industrial, off-highway engine market. More specifically, these tools are designed for use on Deutz diesel engines. Deutz engines can be tricky to work on for the simple reason that they are under supported by the factory. Foley Engines is making a big push to change that.

They have developed, manufactured and now stock the following specialty tools for Deutz engines:

• **Deutz Compression Test Kits:** Custom made compression test adaptors for the 912, 913, 914, 1011, 2011, 1012 and 2012 series engines. These test kits include three different adaptors, the fluid filled test gauge and quick disconnect.

• **Deutz Injector Pop Test Machine:** This pop test (pressure tester) is a bench top mounted unit that reads injector pop off pressures from 0-8000 psi or 0-600 bar. For the 912, 913, 914, 1011, 2011, 1012 and 2012.

• **Deutz Timing Pin Sets for 1011F/2011 Series:** These pin sets are necessary to align the camshaft and crankshaft during assembly.

• **Deutz Timing Belt Tensioning Tools for 1011F/2011:** These tools are offered by the OE, however, Deutz list price for the tool is $997 and they are difficult to find available anywhere. Foley Engines solved this problem by stocking and selling an OTC belt tensioning tool. They've researched and found the correct way to use this OTC gauge to set the correct tension on the rubber cogged timing belt. They sell the OTC gauge for $200 which is less than OTC list price.

• **Deutz 2011 Timing Cover Safety Bit:** This tool is a five-star safety bit and it seems to be almost impossible to find. Foley Egnines stocks this bit, which is also included in their timing belt kits.

To support the installing mechanic, they even created multiple Tech Tip videos which illustrate step-by-step how to do the job right. Go to **https://www. youtube.com/foleyengines** and look for the video, **"Deutz 1011 & 2011 Timing Belt Installation Tutorial"**.

This Fuel Injector Removal Tool, custom-made by Foley Engines, works on Deutz 1011F, 2011, 912, 913, 1012, 1013, 2012 series engines. It also fits many CAV, Delphi and Stanadyne injectors which are seen in Caterpillar, Perkins, Cummins and many other engines.

Timing Pin Set for Deutz 1011F/2011 series

• **Fuel Injector Removal Tool:** Foley Engines recently developed and manufactured a custom-made diesel fuel injector removal tool. This tool is designed to thread onto the feed line of the fuel injector. The user then knocks the injector loose using the slide hammer. In many cases, this is the only way to remove a stuck injector. Deutz doesn't offer anything like this. As a result of the Deutz OE network not offering a tool like this, the engine owner is often left with having to replace a very expensive cylinder head.

In addition, this fuel injector removal tool works on Deutz 1011F, 2011, 912, 913, 1012, 1013, 2012 series engines. It also fits many CAV, Delphi and Stanadyne injectors which are seen in Caterpillar, Perkins, Cummins and many other engines. This removal kit includes two different threaded adaptor fittings.

Foley Engines also made a Tech Tip video to illustrate the operation of this tool. Go to **https://www.youtube.com/ foleyengines** and look for the video, **"Deutz Injector Removal Tool – Foley Hytork™ Tools"**.

This year marks the 100th year of Foley Engines as a leading distributor of industrial engine and power train components — including power take off clutches, diesel exhaust scrubbers, and engine overhaul parts kits. For more information about all of their products, go to **FoleyEngines.com**.■

AERA Technical Specialist Dave Hagen has over 44 years of experience in our industry. As an ASE-certified Master Machinist, Dave specialized in cylinder head work and complete engine assembly for the first 17 years of his career.

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